“Using Scalar to Deep-map Modern East Asian History” : NEH Digital Humanities Advancement Grant (Level II), 2019–2021 Final White Paper

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1. Project Summary

*Bodies and Structures 2.0* ([http://bodiesandstructures.org](http://bodiesandstructures.org)) is a digital platform for researching and teaching spatial histories of modern East Asia and the worlds of which it has been a part. The project brings together the various engagements with critical human geography that are taking place in our fields – history, literature, and art history in general, and East Asian studies in particular. It consists of 17 individually authored modules, which examine a diverse range of topics, such as histories of disease and vaccination; narcotics trafficking; colonialism; migration; and urban life. These modules feature cutting-edge research on Japan (including Okinawa), Taiwan, China, Vietnam and Mongolia. (See Appendix for a complete list.) On top of this, the site uses tags, annotations, links, and visualizations to connect and cut across the modules, giving contributors and users the opportunity to think comparatively about space, place and power.

*Bodies and Structures 2.0* is built on the open-source Scalar platform ([https://scalar.me/anvc/](https://scalar.me/anvc/)). The basic units of the site are pages with unique URLs and customized metadata. Each page contains multimedia content, including text, audio, and still and moving images, all of which can be annotated. The content modules also include translations of key primary sources (as well as in many cases the original sources), which can be used for further research and teaching. Module builders create relationships between pages in multiple ways: by linking pages together into linear “pathways”; by hyperlinking to other pages within the site or to external URLs; by joining pages into conceptual groups with tags; or by sharing spatial, temporal, or other
metadata categories. While the modules are individually authored, the shared conceptual frameworks represent the collaborative analytical work of the site’s contributors and editors. The site uses Scalar’s visualization tools – including tools that we helped to design – to represent the conceptual and geographic spaces of the site’s modules. The result is a media-rich environment that can be read linearly or nonlinearly, and explored conceptually or geographically.

Directed by David R. Ambaras (Professor of History, NC State University) (https://chass.ncsu.edu/people/dambaras/) and Kate McDonald (Associate Professor of History, UC Santa Barbara) (https://www.history.ucsb.edu/faculty/kate-mcdonald/), the Bodies and Structures team includes 15 scholars of modern East Asia as module authors and framework collaborators; 6 prominent area and digital history experts as our Advisory Board; and the Scalar development team at the Alliance for Networking Visual Culture, led by Erik Loyer and Craig Dietrich.

We launched Bodies and Structures 1.0 in January 2019. The NEH Digital Humanities Advancement Grant (Level II) permitted us to develop version 2.0 of the website. During the grant period (2019–2021), we completed Bodies and Structures 2.0 by

1. building ten new content modules;
2. redesigning the conceptual tag map that integrates the modules;
3. enhancing the existing Scalar visualization tools; and
4. developing a new Scalar tool, Lenses, that gives site users the ability to sort and visualize content in ways not defined by the site’s overall conceptual maps or module pathways.

2. Project Origins and Goals

The fundamental intervention of spatial humanistic scholarship is the notion that space is multi-vocal – that places are made up of layers of meaning and history; that layers of place produce distinct geographic footprints and sets of spatial relationships; that one’s social-historical positionality or “body” shapes how one encounters particular spatial “structures”; and, that the cartographic map visualizes only a small fraction of these complex historical relationships and experiences.

It has been difficult to incorporate this intervention into historical scholarship, however. The discipline of history relies on the single authorship model, offering few incentives for the kind of collaboration that would enable a truly multi-vocal spatial history. Meanwhile, digital spatial history projects (e.g., gazetteers or databases), many of which rely on GIS, often reify the shortcomings of conventional mapping by reducing space to a cartographic representation.
From our first workshop in 2016, we have developed *Bodies and Structures* as an attempt to address these challenges. We use “deep mapping” and “thick mapping” as our approaches. Deep mapping explores places in all of their aspects, over time, using a variety of media to evoke different histories and meanings or senses of place, and the connections of particular places to other places and processes. (See, e.g., Bodenhamer, Corrigan, and Harris 2015.) Thick mapping, as the authors of *Hypercities: Thick Mapping in the Digital Humanities* (2014) have described it, is an approach to cognitive mapping that rejects a single, absolute viewpoint, looks for all kinds of connections across space and time, can branch infinitely, and is always open to new voices and participants.

Deep and thick mapping entail “liberating the map” from a singular dependence on cartographic representation and the ways of thinking that have informed it. While we don’t reject the use of cartographic maps, we see them as but one of a number of possible ways of making one’s way through space and across places. We also treat them as objects of historical study and as elements of deep or thick maps in themselves. The Scalar platform provides a valuable resource for producing media-rich deep and thick maps that can be read linearly or nonlinearly.

We released *Bodies and Structures 1.0* ([https://scalar.chass.ncsu.edu/bodies-and-structures](https://scalar.chass.ncsu.edu/bodies-and-structures)) in January 2019. This version, which featured seven individually-authored modules, served as our proof of concept, based on which we applied to the NEH for funding to pursue two aspects of the project. First, having started with a primary focus on histories of the Japanese empire, we sought to expand the project’s content to address other aspects of modern East Asian (including Southeast Asian) history, and to do so from a more multidisciplinary perspective by including scholars of literature and art history. Second, in addition to seeing the need for some tweaks to Scalar’s existing visualization tools, we wanted to enhance Scalar’s toolkit to permit more interactive, user-driven curation of the site’s contents. For this, we proposed to work with Scalar’s developers to create a new search and visualization tool, called Lenses.

Our intended audience consists of scholars of Asian history/humanities and of spatial history/humanities; students in undergraduate (and possibly high school) classes; and the general public. As we discovered (see below), we have acquired an additional audience among people interested in alternative modes of digital writing and publishing.

3. Project Activities, Team, and Participants

3.1 New module development

In developing *Bodies and Structures 2.0*, we built on the experiences of collaborative work and project management that we had gained while creating version 1.0. We drew on our scholarly networks to identify other scholars working in relevant areas of 19th–20th century East and Southeast Asian history, and began meeting with them to plan module contents and a project outline well before we received notification that our NEH application had been approved. (Recruiting participants was not a problem; in fact, as our project became known, we received
Our new module builders were:

- Michitake Aso (University of Albany)
- Emily Chapman (School of Oriental and African Studies, UK)
- Sakura Christmas (Bowdoin College)
- Evan Dawley (Goucher College)
- Maren Ehlers (University of North Carolina, Charlotte)
- Weiting Guo (Aix-Marseille Université, France)
- Nathaniel Isaacson (North Carolina State University)
- Magdalena Kolodziej (Toyo Eiwa University, Japan)
- Hiroko Matsuda (Kobe Gakuin University, Japan)
- Peter D. Thilly (University of Mississippi)

The first workshop for Bodies and Structures 2.0 took place at the Association for Asian Studies Annual Conference in Denver, Colorado, in March 2019. Hence, once the grant period began in September 2019, the process of module construction was already under way. We had also developed a relationship with the Scalar developers Erik Loyer and Craig Dietrich during our work on Bodies and Structures 1.0, and we drew on their input as we prepared the NEH grant application for version 2.0.

Our work during the grant period consisted of the following tasks.

First, our ten new module builders drafted and then completed their individual modules, including translations of primary sources as appropriate, and secured permissions for images as needed. David Ambaras and Kate McDonald edited and gave multiple rounds of feedback on module design and content. The module authors and the co-directors, assisted by UC Santa Barbara graduate student Kandra Polatis, also ensured that each Scalar page includes all necessary metadata based on our custom metadata profile (see Project Outcomes, below).

Along the way, we conducted workshops to present and discuss module drafts, redesign the conceptual tag structure that connects the modules, and introduce enhancements to the Scalar visualization tools. We conducted an asynchronous virtual workshop using Slack and Google Apps in September 2019. We planned to hold a three-day in-person workshop at NCSU in July 2020, but the outbreak of Covid–19 required us to shift to an all-virtual format. For this multi-day event, we were able to combine Zoom, Slack, Google Apps, Youtube, and email to create an effective synchronous (spanning six times zones across the US, Europe, and Asia) and
asynchronous collaborative environment. The July 2020 workshop site may be accessed at https://sites.google.com/ncsu.edu/builders-workshop–2020. We believe that our approach offers a useful model for others scholars seeking to host collaborative, virtual workshops.

On two separate occasions (May 2020 and June 2021), we asked our Advisory Board to provide peer reviews of the modules; on the second occasion, we also asked the board to comment on the overall site design and user experience. We drew on our own scholarly networks to modify the composition of the Advisory Board as needed due to members’ changing circumstances. Our Advisory Board members for version 2.0 are:

- Paul D. Barclay (Lafayette College)
- Frederico Freitas (North Carolina State University)
- Laura Hein (Northwestern University)
- Chistian C. Lentz (University of North Carolina, Chapel Hill)
- Micah Muscolino (University of California, San Diego)
- Shellen X. Wu (University of Tennessee, Knoxville)

### 3.2 Scalar development

While the module builders proceeded with their work, Erik Loyer, Craig Dietrich, and their associate Michael Morgan implemented the planned enhancements to existing Scalar visualization tools. They:

- Performed back-end enhancements to enhance speed and stability and ease of use;
- Created a new List visualization;
- Created a new Word Cloud visualization;
- Enhanced the Google Maps visualization to allow pages with multiple lat/lng data to be expressed with multiple pins, and to enable the display of pathways of pages containing geospatial metadata;
- Added the ability to visualize the current page/media in context;
- Created the Inspector tool, which displays metadata for pages called up in visualizations, providing users a quick overview of a selected page’s contents;
- Added CSV export functionality (technically part of Lenses, discussed below).
Meanwhile, Loyer and Dietrich also designed and implemented the new Lenses tool. As they describe it in the Scalar blog,

*Lenses allow you to **dynamically search and visualize Scalar content** in a wide variety of ways. For example, a lens can map all pages that are geo-tagged to within 100 miles of Tokyo, diagram all of the media items tagged “post-structuralism”, or draw a word cloud of the contents of every page the reader visited in the last week. Lenses can be embedded in a page using the Lens widget, and the content they return can be exported as CSV files. Any user can create new private lenses in any Scalar book, opening up new possibilities for research in Scalar publications.* ("Announcing Scalar 2.6 — and Lenses!" The Alliance for Networking Visual Culture Blog, September 7, 2021, https://scalar.me/anvc/announcing-scalar–2–6-and-lenses/)

Ambaras and McDonald tested the new tools and provided feedback in biweekly meetings with the developers between October 2019 and April 2021. Lenses was released as part of the standard Scalar code in September 2021. Scalar documentation for Lenses can be found at https://scalar.usc.edu/works/guide2/lenses.

In addition to coordinating all of the above activities, Ambaras and McDonald redesigned the site’s organization, wrote a new conceptual overview of the project (https://scalar.chass.ncsu.edu/bodies-and-structures–2/get-to-know-the-site), and produced new documentation and screencasts to facilitate site use (see below). Ambaras and McDonald also presented the project at interdisciplinary meetings, invited lectures, and national and international conferences (see Project Outcomes, below, and Appendix). Ambaras also ran the Bodies and Structures Twitter account (http://twitter.com/bodiesandstruct), and McDonald produced a Bodies and Structures 2.0 trailer video, available on our dedicated Youtube channel (https://www.youtube.com/watch?v=q4HmJTCPnuk&t=3s).

While we were largely able to keep to our original timeline, Covid–19-related issues did lead us to experience some delays with the final revisions and in securing permissions for all images. We requested an extension of the grant period to address these issues. (We also had to cancel our planned presentation at the annual conference of the American Association of Geographers in 2020 due to Covid–19.) Whereas we had originally intended to release Bodies and Structures 2.0 in September 2021, we ultimately released the site on November 10, 2021.
4. Project Outcomes

4.1 Final Products and Data

The final products of our NEH-funded project were

1. the *Bodies and Structures 2.0: Deep-mapping Modern East Asian History* website ([http://bodiesandstructures.org](http://bodiesandstructures.org)), and

2. the updated open-source Scalar code, including the Lenses tool ([https://github.com/anvc/scalar](https://github.com/anvc/scalar))

The website is built on a local install of Scalar at NCSU ([http://scalar.chass.ncsu.edu](http://scalar.chass.ncsu.edu)). We use the standard Scalar code, with no customizations. Scalar is fully ARIA compliant, so we encountered no issues related to accessibility.

The site currently contains **1,545 content pages and 1,000 media objects** (still images, video clips, audio files, and original and translated documents). Our contributors have secured the necessary permissions for all images under copyright. All pages and media objects contain metadata prepared according to our custom Metadata Profile, available at [https://tinyurl.com/bs2-metadata-profile](https://tinyurl.com/bs2-metadata-profile). We developed this metadata profile in 2018 during the production of *Bodies and Structures 1.0*, in consultation with Jacob Shelby, who was at the time the Metadata Technologies Librarian at NCSU Libraries. We revised the profile for *Bodies and Structures 2.0*. We adopted contents, with permission, from the University of Louisville Libraries’ CONTENTdm Cookbook ([https://library.louisville.edu/archives/cookbook/toc](https://library.louisville.edu/archives/cookbook/toc)).

The original content of this site is licensed under a Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License ([http://creativecommons.org/licenses/by-nc-nd/4.0/](http://creativecommons.org/licenses/by-nc-nd/4.0/)). Three of the site’s modules, which are based on published books (remixed with the publishers’ permission), are not covered by this CC license. The images included in the site should be considered in-text citations that are not covered by the site’s license. We have made every effort to clarify the rights status of images in the image metadata and, where appropriate, in the captions. We provide all necessary information on the site’s “Licensing and Images” page ([https://bodiesandstructures.org/bodies-and-structures–2/licensing-and-images?path=about](https://bodiesandstructures.org/bodies-and-structures–2/licensing-and-images?path=about)).

Based on feedback from colleagues who experimented with the site in progress, we recognized the need for new documentation to facilitate user engagement. This detailed documentation can be found on the page titled “Show Me How” ([https://bodiesandstructures.org/bodies-and-structures–2/show-me-how](https://bodiesandstructures.org/bodies-and-structures–2/show-me-how)). In addition, we updated our documentation regarding different potential uses of *Bodies and Structures 2.0*. This can be found at “Using Bodies and Structures as a Researcher, Teacher, or Student” ([https://bodiesandstructures.org/bodies-and-structures–2/using-bodies-and-structures-as-a-researcher-teacher-or-student?path=doing-multivocal-spatial-history](https://bodiesandstructures.org/bodies-and-structures–2/using-bodies-and-structures-as-a-researcher-teacher-or-student?path=doing-multivocal-spatial-history)).
The project’s **Data Management Plan** can be found at [https://tinyurl.com/bs2-datamanagement](https://tinyurl.com/bs2-datamanagement). Project data is maintained across the following locations:

- The Scalar code is available on Github ([https://github.com/anvc/scalar](https://github.com/anvc/scalar))
- *Bodies and Structures 2.0* site contents are stored on our local install of Scalar at NCSU, with regular backups conducted by Daniel Henninger, Operations & Systems Specialist in the Department of Information Technology of the College of Humanities and Social Sciences (CHASS) at NC State University.
- We have also compiled a spreadsheet of all media objects, including principal metadata, and have downloaded the media objects into a Google Drive folder in the Bodies and Structures Google Account. These are available at [https://tinyurl.com/BS2-MediaObjects](https://tinyurl.com/BS2-MediaObjects).
- Slides from presentations by David Ambaras and Kate McDonald during the grant period are available on H-Commons CORE ([https://tinyurl.com/BS2-HCommons](https://tinyurl.com/BS2-HCommons)) and on Zenodo ([https://zenodo.org/communities/bodiesandstructures2/](https://zenodo.org/communities/bodiesandstructures2/)). We chose these repositories because they work well with Humanities products. Zenodo also assigns each uploaded file a DOI, which is very convenient.

The Lenses tool is already being used in a number of Scalar projects. For one example, see [https://twitter.com/AhmansonLab/status/1420464111096266755?s=20&t=yhZLVjyuwEMOCeEQj4btQQ](https://twitter.com/AhmansonLab/status/1420464111096266755?s=20&t=yhZLVjyuwEMOCeEQj4btQQ).

### 4.2 Audience Outreach

To reach our intended audiences, we have, as noted, presented our work at several scholarly events, including annual conferences of the American Historical Association (in 2020 and 2021) and the Sixth European Congress on World and Global History (in 2021). (For a full list and links to archived slide presentations, see Appendix 8.2.) Since releasing the site, we have also given invited presentations to universities in the US and Europe. We are also writing blog posts, responding to interview requests, and using social media (Twitter) to cultivate an audience. **For up-to-date information about our project and future plans, readers should visit our Twitter account:** [http://twitter.com/bodiesandstruct](http://twitter.com/bodiesandstruct).

### 4.3 Personal/Professional Outcomes

Project collaborators report that their participation in *Bodies and Structures* has led to a range of professional and personal outcomes. These include:

- Listing their modules on their CVs and in grant application materials;
- Being invited to present on their modules at national and international venues;
● Having their modules counted as peer-reviewed publications for the purposes of tenure and promotion;

● Contributing to their success in securing an advance book contract;

● Contributing to their success in obtaining a residential fellowship in Japan;

● Helping their department to revise its rules for reappointment, promotion, and tenure to better include digital scholarship;

● Learning how to use various apps to foster and sustain an intellectual community online, and then applying this experience when courses went remote during the pandemic.

5. Project Evaluation and Impact

5.1 Evaluation during production

At the beginning of the grant period, we asked colleagues we encountered in an interdisciplinary Japanese studies workshop to use the Bodies and Structures 1.0 site and complete a Qualtrix survey that we used to think about how to revise the site for version 2.0; we subsequently asked selected colleagues to provide narrative feedback on their experiences with the site. We used iterative peer review by our Advisory Board to help evaluate the content and user experience prior to launch. Based on this feedback, we redesigned the entry page for the site, redesigned the table of contents, added detailed “how to” documentation, and increased the visibility of how-to documents and the overview of the site’s intellectual aims (see Project Outcomes: Final Product and Data, above).

5.2 Evaluation of the results

Evaluation of the results of our project is still forthcoming, but so far the response has been overwhelmingly positive. In a review in The Digital Orientalist, Duke University Japanese Studies Librarian Matthew Hayes writes:

Bodies and Structures does not simply display information, but rather invites an exploratory, user-driven interactivity. This interactivity enhances teaching and learning experiences and challenges users to think through spatial relationships on terms conceived by users in the moment. From my experience, maneuvering through and between the modules, grid visualizations, and tactile mapping tools only reinforces the feeling of omnidirectional and interconnected spatial histories, and it is rare to see concept and content so intimately enjoined in a digital project like this, especially at this scale. (Matthew Hayes, “(Re)Mapping Spatial History: An Overview of the Bodies and Structures Platform,” The Digital Orientalist, February 2022, https://digitalorientalist.com/2022/01/14/remapping-spatial-history-an-overview-of-the-bodies-and-structures-platform/)
According to Google Analytics, since its release on November 10, 2021, *Bodies and Structures 2.0* has attracted 16,764 unique page views from over 2,000 unique users from 57 different countries. The largest number are from the USA (1,242), Japan (185), the United Kingdom (101), Germany (74), China (51), Singapore (51), Canada (46), South Korea (35), France (34), and the Netherlands (30). Moving forward, we will endeavor not only to increase the number of users globally, but also to increase the degree of engagement with the site (e.g., page views, active time on site, file downloads, etc.)

![Users by Country](image)

**Figure 2: Google Analytics: Users by country, November 10, 2021-April 28, 2022 (mapped)**

<table>
<thead>
<tr>
<th>Country</th>
<th>Users</th>
<th>New users</th>
<th>Engaged sessions</th>
<th>Engagement rate</th>
<th>Engaged sessions per user</th>
<th>Average engagement time</th>
<th>Event count</th>
<th>100% of total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Totals</strong></td>
<td>2,061</td>
<td>2,031</td>
<td>1,839</td>
<td>46.66%</td>
<td>0.89</td>
<td>50.67</td>
<td>6,834</td>
<td></td>
</tr>
<tr>
<td>1 United States</td>
<td>1,362</td>
<td>1,322</td>
<td>1,322</td>
<td>47.15%</td>
<td>0.98</td>
<td>6m 08s</td>
<td>35,773</td>
<td></td>
</tr>
<tr>
<td>2 Japan</td>
<td>188</td>
<td>185</td>
<td>181</td>
<td>55.86%</td>
<td>0.96</td>
<td>3m 21s</td>
<td>3,498</td>
<td></td>
</tr>
<tr>
<td>3 United Kingdom</td>
<td>101</td>
<td>100</td>
<td>76</td>
<td>50.67%</td>
<td>0.75</td>
<td>1m 53s</td>
<td>1,571</td>
<td></td>
</tr>
<tr>
<td>4 Germany</td>
<td>74</td>
<td>71</td>
<td>25</td>
<td>24.27%</td>
<td>0.34</td>
<td>1m 02s</td>
<td>823</td>
<td></td>
</tr>
<tr>
<td>5 China</td>
<td>51</td>
<td>25</td>
<td>3</td>
<td>5.45%</td>
<td>0.06</td>
<td>0m 10s</td>
<td>172</td>
<td></td>
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<tr>
<td>6 Singapore</td>
<td>51</td>
<td>48</td>
<td>76</td>
<td>57.14%</td>
<td>1.49</td>
<td>14m 27s</td>
<td>2,163</td>
<td></td>
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<tr>
<td>7 Canada</td>
<td>46</td>
<td>44</td>
<td>30</td>
<td>50%</td>
<td>0.65</td>
<td>0m 48s</td>
<td>532</td>
<td></td>
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<tr>
<td>8 South Korea</td>
<td>35</td>
<td>35</td>
<td>22</td>
<td>38.6%</td>
<td>0.63</td>
<td>2m 03s</td>
<td>625</td>
<td></td>
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<tr>
<td>9 France</td>
<td>34</td>
<td>33</td>
<td>28</td>
<td>47.46%</td>
<td>0.82</td>
<td>2m 30s</td>
<td>760</td>
<td></td>
</tr>
<tr>
<td>10 Netherlands</td>
<td>30</td>
<td>30</td>
<td>28</td>
<td>56%</td>
<td>0.93</td>
<td>8m 30s</td>
<td>1,000</td>
<td></td>
</tr>
</tbody>
</table>

**Figure 3: A section of the *Bodies and Structures 2.0* Google Analytics report, November 10, 2021-April 28, 2022, showing users, sessions, and engagement data. (Data for the top 10 countries are shown.)
The audiences for our website are still evolving. Clearly, professional scholars are engaging with the site. A number report using the site in their classes – hence, students are also engaging (though we cannot yet disaggregate this information from our overall analytics). We also have anecdotal evidence of high school students having discovered and engaged with the website while conducting research projects. Our outreach strategies (conference and invited presentations, social media, blog posts and digital essays) appear to have generated interest in the project and invitations to present, write about, or discuss the project. Our promotion of individual modules via Twitter appears to have encouraged some instructors to incorporate them into their curriculum. Individual module authors have also given presentations based on their own work, while calling attention to the larger project.

We are also working to connect Bodies and Structures 2.0 to major research and teaching infrastructures. Currently, a number of major university library websites include links to Bodies and Structures 2.0 in their study guides for East Asian, Japanese, Chinese, or Taiwanese studies (University of Washington, University of California Berkeley, UCLA, University of Wisconsin Madison, NYU, and University of Edinburgh). We are working with librarians to have the site listed as a resource on other library websites. Our recent post to the blog of the North American Coordinating Council on Japanese Library Resources is part of this strategy (https://guides.nccjapan.org/homepage/news/news/Japanese-Studies-Spotlight-Bodies-and-Structures).

Bodies and Structures 2.0 has also been recognized for its distinctive approach to content management and digital writing. For example, it has been included in courses on digital humanities and digital archives (e.g., https://amsucf.github.io/Digital-Archives/syllabus); we hope to open dialogues with other instructors in this and related fields. As important, Bodies and Structures 2.0 has been introduced as a key example of writing with Scalar in the latest version of “Books Contain Multitudes: Exploring Experimental Publishing,” a report published in April 2022 by COPIM, Community-led Open Publication Infrastructures for Monographs (https://copim.pubpub.org/books-contain-multitudes-exploring-experimental-publishing–2022-update).

As the co-directors of Bodies and Structures, we came somewhat accidentally to this endeavor after careers in traditional Humanities research and writing. Ultimately, our experiences during the grant period and since the release of Bodies and Structures 2.0 have confirmed for us that digital work is crucial to the work of humanists in this moment. As David Ambaras noted in a recent interview:

> Digital work is important – not just for “big data” projects (because while our site itself contains a lot of data and metadata, we are each and collectively still rather “small data” scholars who do close reading of limited amounts of sources). Digital work can evolve in ways that the traditional monograph (book, book chapter or journal article) can’t. It can be linked immediately to other work as it appears; it can
develop rhizomatically – one can add new branches, for example, or update work while making clear that this is a living, breathing process rather than a set-in-stone product. . . .

This in turn asks for new ways of writing and designing projects. While we’re still working within the general paradigm of “the book” (Scalar was designed as a new stage in the evolution of the book), we are pushing it to its limits in terms of the experience of “reading” – getting lost, making connections, and encountering “the page” as more than just flat text and image but as part of various relationships.

And here, too, collaboration with digital developers has led us to ask new questions about what is possible, what we might want to see in a platform for our scholarship and for humanities or multidisciplinary scholarship moving forward. In other words, we have traditionally written without giving much thought to the final medium through which our work will be disseminated. We’ve been grateful that publishers (mainly academic publishers) will accept our manuscripts, and we’ve left the design (such as it is) to them. A platform like Scalar gives us much more control over how our work looks and feels, and we should be willing to ask publishers to work with us to develop new kinds of organization methods for the work we send them. (Matt Shipman, “The Future of History: How New Tools Tap Into Diverse Perspectives on the Past,” NC State News, January 18, 2022, https://news.ncsu.edu/2022/01/the-future-of-history/)

6. Project Continuation and Long-Term Impact

Moving forward, we are planning to (1) continue to draw on our network of collaborators to promote the use of Bodies and Structures 2.0 as a research and teaching resource and as a general source of information on modern East Asian and spatial history; and (2) develop Bodies and Structures 3.0.

While we believe it is essential to add coverage to the Bodies and Structures contents (for example, we currently lack any modules on Korea and would like to expand our coverage of Southeast Asia as well as include transpacific histories), we are still thinking about the form that an expanded version might take, given that version 2.0 already has tested the limits of Scalar’s capacity to hold such a large project. One possible approach might be to position Bodies and Structures as part of a networked “archipelago” of spatial humanities sites among which users can navigate, and to which they can contribute content. We thus hope that Bodies and Structures 2.0 can serve as a model or source of inspiration for other digital humanists and as the starting point for multiple conversations and experiments in conceptual and practical cross-fertilization. In the coming months, the co-directors will reconvene to deliberate on the next steps as they relate to both content and technical development. As we make our plans concrete, we intend to seek funding from sources such as the NEH and the Andrew H. Mellon Foundation.
7. Sources cited


- Hayes, Matthew. “(Re)Mapping Spatial History: An Overview of the Bodies and Structures Platform,” The Digital Orientalist, February 2022, 
  https://digitalorientalist.com/2022/01/14/remapping-spatial-history-an-overview-of-the-bodies-and-structures-platform/

  https://escholarship.org/uc/item/3mh5t455.

  https://news.ncsu.edu/2022/01/the-future-of-history/

- NOTE: Portions of this white paper draw on our NEH application narrative, and on David Ambaras’s discussion in Shipman, “The Future of History.” We have not cited each use of these sources in the text.
8. Appendices

8.1 List of modules in *Bodies and Structures 2.0*

- David R. Ambaras, “Border Controls, Migrant Networks, and People out of Place between Japan and China”
- Michitake Aso, “Mapping Invasion: Vietnamese Responses to Biological Warfare during the First Indochina War”
- Noriko Aso, “Mitsukoshi: Consuming Places”
- Emily Chapman, “One Family’s Photographs (1941–66)”
- Sakura Christmas, “Imperial Japan up in the Air”
- Evan Dawley, “Sacred Geographies of Urban Colonial Taiwan: Jilong’s Geography in Transformation”
- Maren Ehlers, “Bodies, Society, and Smallpox Vaccinations in Echizen Province”
- David Fedman, “Place Annihilation”
- Weiting Guo, “Constructing a Water Town: The River, the Sea, and the Communities in Wenzhou”
- Nathaniel Isaacson, “Trains in Late Qing Print Culture”
- Hiroko Matsuda, “Borders and the Liminality of the Japanese Empire”
- Kate McDonald, “Cai Peihuo’s Inner Territory”
- Peter D. Thilly, “The Coastal Opium Trade in 1830s Fujian”
- Dustin Wright, “The Okinawa Memories Initiative”
- Shellen X. Wu, “Xing An: A Contested Borderland”
- Timothy Yang, “The Drugstore as Contact Zone”
8.2 Bodies and Structures 2.0 Examples of pages and visualizations

Figure 8.2.1. A Scalar page that combines primary source text and images. Left: A first-person account of travel on the Nihon Yūsen Kaisha ship Nagasaki-maru from Japan to Shanghai is juxtaposed to a postcard of the ship at the Shanghai wharf, and the space referred to in the text is connected to an annotation showing its location on the ship’s deck plan. Right: Users can mouse over the image to see other media-rich annotations. This example is from David Ambaras’s module.
Figure 8.2.2. Example of the Tag Map, a force-directed graph visualization.

Figure 8.2.3. A section of the Complete Grid Visualization.
Figure 8.2.4. A lens query that produces a list of all pages tagged by “Native.”
Figure 8.2.5. A lens query that maps all pages containing the tag “Native.” Clicking on the pins opens information about each page.
Figure 8.2.6. A lens query that produces a word cloud of the top words from pages tagged by “Native.”
8.3 Bodies and Structures 2.0 Presentations by David Ambaras and Kate McDonald

Slides from presentations made during the grant period (September 2019-December 2021) are available (with DOIs) at [https://zenodo.org/communities/bodiesandstructures2](https://zenodo.org/communities/bodiesandstructures2)


- “Bodies and Structures: Deep-Mapping Modern East Asian History - An Introduction.” Annual Meeting of the American Historical Association (virtual), April 2021. (With presentations by module authors Sakura Christmas, Maren Ehlers, and Peter Thilly.)


8.4 Bodies and Structures 2.0 on Social Media

Figure 8.4.1. The Association for Asian Studies: “Clear some time in your schedule to explore @bodiesandstruct 2.0 … this is a valuable new digital resource in #AsianStudies” (12:22 PM, Nov. 10, 2021)

Figure 8.4.2. COPIMproject: “Bodies and Structures 2.0 (@bodiesandstruct), led by Kate McDonald and @dambaras, has used @anvcs scalar to develop a fascinating project and digital collection mapping seventeen (!) spatial histories of modern East Asia.” (9:19 AM, Jan. 15, 2022)
Digital scholarship has never been more exciting! Today's #NCCSpotlight features "Bodies and Structures" by @dambaras & @profkatemcd. This innovative site offers spatial histories of modern East Asia through multimodal learning modules. Read more at: https://guides.nccjapan.org/homepage/news/news/Japanese-Studies-Spotlight-Bodies-and-Structures” (12:21 PM, Mar. 16, 2022)
Figure 8.4.4. Matthew Hayes: “I am so excited to showcase what is happening over at @bodiesandstruct! @profkatemcd and @dambaras are doing some of the sharpest work in EA digital scholarship, and this platform is a model for future platforms in the field. Read more here: [https://digitalorientalist.com/2022/01/14/remapping-spatial-history-an-overview-of-the-bodies-and-structures-platform/](https://digitalorientalist.com/2022/01/14/remapping-spatial-history-an-overview-of-the-bodies-and-structures-platform/)” (8:39 AM, Jan. 14, 2022)
A terrific interview with the project director from a recently completed @NEHgov-funded Digital Humanities Advancement Grant about the challenges and opportunities of new forms for digital humanities and spatial scholarship.

https://news.ncsu.edu/2022/01/the-future-of-history/ (12:16 PM, Jan. 20, 2022)