Bodies in Space: Mapping Embodiment and Affect
through Stratford-upon-Avon's Early Modern Cultural Heritage

Enhancing the Humanities

The project team is requesting funding in the form of a Level II Digital Humanities Advancement Grant in order to develop a multimedia deep map of Stratford-upon-Avon linked with archival materials related to the theatrical history of the town as examples of the production of space through embodied performance. This will be the first step in a larger mapping project that will trace affective atmospheres and cultural memory through the performance of early modern drama in England. This visualization will start with the early modern period and represent Stratford-upon-Avon when Shakespeare and his family lived there, move to the Victorian period in which David Garrick hosted the Shakespeare Jubilee in the town with performances about the playwright that cemented it as the key site of English cultural heritage, then finish with the town today and its many indoor and outdoor performance spaces that have been developed over the past century.

As a scholar of early modern drama and performance, my work interrogates the ways in which affect is produced and maintained at theatre cultural heritage sites. I am interested in performance spaces; with the moving elements being artists and audiences not just enacting everyday life, but a curated performance of texts important to cultural memory that adds a new layer to spatial practice. In *The Production of Space*, Henri Lefebvre theorizes the various ways different kinds of space are constructed socially, which influences how they are perceived. Lefebvre examines how the abstract nature of time and affect can work together to create meaningful space: "Within time, the investment of affect, of energy, of 'creativity' opposes a mere passive apprehension of signs and signifiers. Such an investment, the desire to 'do' something, and hence to 'create,' can only occur in a space--and through the production of a space" (393). In theatre, these creative energies move affectively through time and are ultimately what transform it from a place to a space; the bodies in the place are ultimately what determine its spatial make-up.

Affective atmospheres are commonly evoked by places of cultural heritage, as these temporal layers accumulate and compound on one another as more and more people pass through them. According to Divya P. Tolia-Kelly in her essay "Race and affect at the museum: The museum as a *theatre of pain*:"

> Affective atmospheres are everywhere and inevitably are felt, and coalesce in the spaces of heritage…It could be argued that heritage spaces are present at the consolidation of affective economies of the past. They are consolidated contours of how memory, affective charges, and matter consolidate on the ground. Heritage spaces are material precipitates of affective memories at scales of nation and world. (35)

While Tolia-Kelly's work is concerned with the museum as a cultural heritage space, theatre spaces can also work as an amplifier and generator of affect among actors, production staff, and audience members. For example, people are drawn to the reconstructed Globe theatre in London to somehow embody and experience the memory of early modern theatrical productions and works across generations, shifting audiences, and demographics. Despite the fact that the Royal Shakespeare Theatre did not exist until quite recently, its location in Stratford-upon-Avon and reliance on the cultural currency of the town's heritage is similarly used to invoke Shakespeare's memory.

Stratford-upon-Avon has become a popular site of performance and a space of cultural memory by reimagining the town as Shakespeare's childhood home and how that would impact his writing, despite the fact he never wrote in Stratford. The famous cultural heritage industry that has fueled the town for over a century is not necessarily a perfect recreation or representation of Shakespeare's childhood in the town, but rather a construction of how the Victorians (and many people since) have imagined Shakespeare. Thus, the town has been transformed into a space of shared cultural memory through people's interaction with the place. As properties were bought in Stratford-upon-Avon and restored in Tudor styles, Shakespeare's relationship with the town was cemented beyond the fact that he was born and raised there, and it created more opportunities to further develop the connection: "without the acquisition and growing significance of the Birthplace, it is unlikely that the scheme to bring a world-class theatre to Stratford would ever have been proposed, much less come to fruition" (Thomas 165). The place Stratford-upon-Avon, despite its efforts, is not a perfect representation of Shakespeare's childhood and retirement home; rather, it is a produced space developed through the affective response of the people who pass through both the cultural heritage properties and through the town's theatre.

The case of Stratford-upon-Avon is representative of the wider landscape of theatrical heritage in England. The public is invested in the theatrical attachments to these historic spaces, even if their physical locations are no longer the same historic site. For instance, the recreated Globe Theatre in London is not built at its original location, and despite claims to historical accuracy there is no question that the site tends to lean more into the cultural imagination than consistently following historical practices. It is the combination of these sites and the performances of both actors and tourists that produces both the space and a shared memory of their cultural importance.

The ultimate goal of this project is to find ways to develop a "data visceralization" that will convey the affective atmospheres of these locations rather than merely provide artifacts that can be experienced visually. By layering affect onto visualizations, those who interact with them also take in the information as it is mediated by the emotions and also in physiological ways outside of seeing. While this tradition of data visceralization is primarily linked to art, it has also started to be incorporated into other digital humanities projects that are open to feminist praxis (D'Ignazio and Klein 84-85). In mediating the history of these places digitally, this project will represent the changes in the affective atmospheres throughout times as different bodies--including a multitude of gender identities, BIPOC, and disabled bodies--are allowed access to these spaces in ways that were historically unthinkable. The shared stories, memories, and heritage of these spaces are much more than their physical locations, and this project will demonstrate how these elements are constructed. By developing a deep map of the affective atmospheres of these places, users will be able to see how these sites all connect across space and time to develop a complex and nuanced narrative of the theatrical cultural heritage of Renaissance England.

This project will involve the collection of data to develop a multimedia deep map in Omeka S that represents the importance of the interaction of embodied performance and place to create affective atmospheres rooted in cultural heritage and memory. There will be georectified layers of historical maps representing significant moments in the town history, and pins will indicate the location of important performance sites. These pins will be linked to archival material in the form of images, video clips, and other ephemera related to the performances that occurred there and form a

narrative regarding the importance of bodies occupying these sites in giving these spaces meaning. During the grant period, the project team will investigate potential methods for representing the affective atmospheres of these places. This deep map will not only provide information on theatres and cultural heritage sites as spaces, but how the different places that act as sites of performance in a town such as Stratford-upon-Avon can operate as a collective space of memory.

Environmental Scan

Early modern drama has been the source of many digital humanities projects, particularly ones dealing with text analysis and distant reading. Fewer projects have dealt with performance or theatre spaces, and this project will combine the two to demonstrate the layering of past and present along with bodies and space to produce cultural heritage, memory, and meaning. The use of the multimedia deep map produced during the project period will contribute to a conversation among existing projects dealing with the representation of space and performance. While this project will be collecting data related to Stratford-upon-Avon, so far much of the digital humanities work engaging with space and performance has been centered around London theatres and a broad spectrum of performance.

The Map of Early Modern London out of the University of Victoria is the most high-profile mapping project of London during the early modern period. Users can navigate the map through its search function or by checking boxes to view locations by category. Clicking a specific landmark pulls up a list of early modern textual works that reference this place. This digital project includes not only a version of the famed Agas map, but also an encyclopedia, a library, and an edition of John Stow's survey of London that contextualizes the content of the map.

The idea of attempting to visualize space and embodiment concurrently for this project is in many ways inspired by the virtual reality project Dr. Faustus and the Rose Theatre created by the University of Queensland through Ortelia. While Ortelia has also produced a reproduction of the Rose Playhouse before, this project attempts to recreate how Christopher Marlowe's *Dr. Faustus* would have been performed in the 16th century by layering actor performances onto the reconstruction and incorporating representations of early modern special effects. This project is related to ongoing attempts at recreating elements of original performance practice in modern reconstructed theatres and stagings.

The University of California Berkeley's Shakespeare's Staging project is a compilation of multimedia resources related to performances of Shakespeare's plays. Users can navigate through the website by the plays, periods of stagings, or topics in performance. Additionally, the website points to archival materials related to performance housed at the Victoria and Albert Theatre Museum, the Royal Shakespeare Company Archives, and the Folger Shakespeare Library.

The Henslowe-Alleyn Digitisation Project is one of the most extensive online archives of materials relating to early modern performance. Henslowe and Alleyn owned several of the playhouses in London during the early modern period, and their papers include details regarding original performances of plays by many prominent playwrights of the time, including Shakespeare, Marlowe, Jonson, and Middleton among others.

While the final version of this proposed mapping project will build on the work of these projects by incorporating data on performance and theatre spaces in London during the early modern period through today. The scope of work for this grant project will be in gathering data related specifically to Stratford-upon-Avon to demonstrate how, despite the town's lack of theatre during the early modern period, has had a significant impact on modern understanding of the production of affects in space for early modern drama.

History of the Project

This project is part of PI Katherine Knowles's dissertation "Bodies in Space: England's Early Modern Cultural Heritage and the Contagion of Affective Atmospheres." This book length project examines the production of theatre spaces through the bodies that move through them and the resulting affective atmospheres fueled by shared cultural memory. The dissertation not only addresses London's theatre spaces, but also the places transformed into theatre spaces due to travelling productions during the plague years and Shakespeare's highly curated hometown, which now includes its own theatre modeled on early modern playhouses. This digital project will serve as a component of the dissertation, and the methodology will be outlined in one of the chapters.

As of the time of the submissions of this proposal, Knowles has submitted applications to both the Immersive Visualization Institute (IVI) and the Cultural Heritage Informatics (CHI) Fellowship at Michigan State University in order to further my preparation for undertaking this project. Through the IVI in Summer 2021, she will be working with the 360 Degree Panoramic Room in the Library's Digital Scholarship Lab. She would be investigating approaches to highlighting the affective element of this mapping project by exploring the various ways people might be impacted by being completely immersed in the visualization. As part of the program, Knowles would then incorporate the product of IVI into my curriculum during the 2021-2022 academic year to investigate its effectiveness as a teaching tool as well as receive feedback on its ability to represent affect.

If accepted to the CHI program, Knowles would spend each Friday throughout the 2021-2022 academic year working in The Lab for the Education and Advancement in Digital Research (LEADR) to develop a pilot version of this mapping project. She would participate in training activities on a variety of digital tools and methods and work collaboratively with a team of other graduate students to troubleshoot any technical issues. The pilot produced for this fellowship would provide the wireframe for what would eventually become the multimedia map outlined in this grant application.

Activities and Project Team

The project will be completed over the course of two years broken up into quarterly phases. The first year will involve compiling geographical data and existing maps of Stratford-upon-Avon during the early modern period, the Victorian period, and today to create a set of geo-rectified maps in an Omeka S instance. These maps would be layered in order to represent the significance of performance sites across historical periods.

During year one the project team will compile archival materials related to cultural heritage and performance in the town during these periods. This will involve travel to Stratford-upon-Avon in order to examine both performance materials and visitor accounts of their visit to the town. The primary sites of research will be the Shakespeare Institute Library and the Shakespeare Birthplace Trust library, both of which contain materials related to the town's history from the early modern period through today as well as the Royal Shakespeare Library's performance archive. In addition to performance materials, the project team will collect information related to audience response to performances at sites throughout the town, including the Birthplace, New Place, Mary Arden's Farm, Hall's Croft, and Holy Trinity Church among other places.

The project team will also spend the first year of the grant investigating different ways to incorporate representations of affect into the visualization. They will meet with project directors of other digital humanities projects attempting to create affective visualizations to discuss methodologies and compile a list of effective "data visceralizations." This may be another element of the map, or perhaps a paired visualization that exists on the website. During this time, the project team will chart their progress by developing bi-weekly blog posts discussing their findings and progress. Eventually, this information will help form the basis of a conference presentation that will be given at the end of the project period.

The focus of the final quarter of year one is on making data web ready to populate the map. All archival materials that will be pinned to the map will follow Dublin Core metadata standards and be linked to their original source. Any newly scanned material will be done so at 600 dpi and a digital version will be given to the archive of origin. Everything will be made available under the appropriate level Creative Commons license. Any originally produced CSV data to create pins for specific places will also be uploaded to the website for public use. Primarily, this data will include the locations of significant sites pinned on the modern and Victorian maps of Stratford-upon-Avon. Throughout this phase, the project team will continue to post updates on the blog regarding the project's process.

Year two of the project will begin with populating the map. Although this will continue throughout the year, this period in particular will be used to configure the public facing aspects of the website. The project team will make sure the map is accessible and cohesive. They will conduct usability tests to ensure that the various layers of the map are functional and that the linked archival material is clearly labeled. Everything will be configured so the site is responsive and can be used on a desktop computer, laptop, or mobile device.

Once the bulk of the map is developed, the project team will begin to develop lesson plans that will also be housed on the website. Aimed at undergraduates, these lessons will encourage students to consider the ways literary cultural heritage is shaped and how it changes over time. The map will not only provide geo-spatial context for the location of performance sites, but will also allow users to view videos, images, and ephemera related to the performances that occur there. These lessons will be somewhat interdisciplinary, and will consider the potential significance of this project in a variety of fields including literature, theatre, history, and museum studies.

In year two, the project team will also revise their research questions based on their findings as they finalize the map. Additionally, they will develop a wireframe for the representation of affect in the visualization. As the project draws to a close, the project team will determine the feasibility of developing this prototype into a larger, more comprehensive project that captures the culture heritage sites linked to early modern drama across England and create a white paper outlining the steps to be taken to implement the next stage of the project that will serve as the basis for a Level III Digital Humanities Advancement Grant application.

Final Products and Dissemination

By the end of the grant period, the project team will have completed: 1) collecting the data to produce and populate the map Stratford-upon-Avon; 2) developing a prototype for representing affective atmospheres at the locations pinned on this map; 3) creating sample lesson plans for undergraduate instructors who wish to utilize the visualization in their curriculum; and 4) writing a white paper outlining a proposed project based on this prototype that will serve as the basis for Level III Digital Humanities Advancement Grant proposal.

The project team will present the project and their findings at the annual Shakespeare Association of America conference in 2023. Although the map will not be completed at this stage, the project webpage will still be published to document the project team's progress and share any original data as it becomes available. Future iterations of this project will expand to incorporate sites of performance that were not necessarily linked to specific theatres or playwrights. For instance, the map will eventually include the locations of performances during plague times--ranging from University of Oxford to inns throughout the provinces--in order to provide a more comprehensive examination of what it means to create theatre through the embodiment of particular sites and how that shapes the affect of that place. The Level III proposal will request funds to expand this map to include more of England and implement the representation of affect in the project.

<div align="center">**Work Plan**</div>

<u>Year 1</u>

Quarter 1: January 2022 - March 2022

The project team will compile data to create three maps of Stratford-upon-Avon: one representing the town during the early modern period, one representing the Victorian period, and one that represents the town as it is today. For the older maps, project team members may need to travel to the Folger Shakespeare Library or the Shakespeare Birthplace Trust archives to collect data that will more accurately represent the town before the massive changes it underwent to become the massive tourist destination it is currently.

Quarter 2: April 2022 - June 2022

The project team will set up the website and begin blogging about their progress. They will begin researching various methods of incorporating affective elements into the visualization. This will include compiling information on a variety of projects that already do this work and reaching out to project directors to discuss their methodologies. By the end of this quarter, the project team will have narrowed down their options for adding an affective element to the deep map and begin to formulate how it would operate in conjunction with the existing materials. This will eventually be incorporated into a proposal for a Level III Digital Humanities Advancement Grant for implementation.

Quarter 3: July 2022 - September 2022

Project team members will travel to Stratford-upon-Avon to work with performance archives for the Royal Shakespeare Company as well as smaller theatres that operate out of town or travelling companies that have worked in the town to develop site-specific performances drawing on the cultural heritage of the place. They will also work with archival materials at the Shakespeare Institute Library and the Shakespeare Birthplace Trust to find audience responses to performance events. At this time, the project team will negotiate any necessary permissions and carefully determine and record how to credit all of the data that will eventually be incorporated into the multimedia map.

Quarter 4: October 2022 - December 2022

The project team will primarily work on cleaning up the collected data and applying Dublin Core metadata to the archival materials. Mapping data will be converted into CSV files that will be used to render the pins for the three maps of Stratford-upon-Avon on the website. These files will also be shared on the project website for reuse. The project team will comply with Library of Congress

Recommended Formats Statements in both deciding on file formats and developing metadata standards for digitized archival materials. Data will be organized and stored on MSU owned servers via SharePoint and Google Drive and will be backed up to an external hard drive weekly. Any new scans created by the project team will also be given to the archive of origin.

<u>**Year 2**</u>

Quarter 1: January 2023 - March 2023

At the beginning of Year 2, the project team will begin to populate the map. Archival materials will be pinned to their pertaining location on and layer and all metadata will be made public. This process will continue throughout year 2 of the project as needed. The team will continue to update the project blog with their progress. They will conduct usability tests on the site and ensure that it is responsive so that it works on desktops, laptops, and mobile devices.

Quarter 2: April 2023 - June 2023

The project team will develop a series of interdisciplinary lesson plans to publish on the website as a guide for undergraduate instructors who wish to incorporate the deep map into their curriculum. These lesson plans will be useful to students of literature, theater, history, and museum studies and ask them to consider the ways literary cultural heritage is shaped and how it changes over time. The project team will suggest the best way to navigate the map and point to particular archival materials for use in assignments.

Quarter 3: July 2022 - September 2023

Quarter three of year two will involve re-evaluating the research goals and objectives based on the findings related to spatiality, embodiment, affect, and performance. They will also write an editorial process that will outline the workflow for publishing data on the website and quality assurance to ensure its sustainability in future iterations of the project.

Quarter 4: October 2023 - December 2023

In the final quarter of the grant period, the project team will determine the feasibility of launching a pilot program and develop a white paper outlining the steps to be taken to implement the next stage of the project. The results of this phase will provide the basis for a Level III Digital Humanities Advancement Grant. The project team will also develop a proposal to present their findings at the annual Shakespeare Association of America conference.

Data Management Plan

ROLES AND RESPONSIBILITIES

The DMP should clearly articulate how sharing of primary data is to be implemented. It should outline the rights and obligations of all parties with respect to their roles and responsibilities in the management and retention of research data. It should also consider changes to roles and responsibilities that will occur if a project director or co-project director leaves the institution or project. Any costs stemming from the management of data should be explained in the budget notes.

For the project, in progress data will be shared among the project team through Michigan State University servers. Original, finalized data and metadata will be published on its own page on the project webpage. For any archival materials or data featured in the project that is not created by the project team, links will be provided for the original location. At the time of the PI's departure from MSU and loss of access to free server space, data will remain on the paid version of the same server until they become affiliated with a new institution.

EXPECTED DATA

The DMP should describe the types of data, samples, physical collections, software, curriculum materials, or other materials to be produced in the course of the project. It should then describe the expected types of data to be retained.

Project directors should address matters such as these in the DMP:

- **the types of data that their project might generate and eventually share with others, and under what conditions;**
- **how data will be managed and maintained until shared with others;**
- **factors that might impinge on their ability to manage data, for example, legal and ethical restrictions on access to non-aggregated data;**
- **the lowest level of aggregated data that project directors might share with others in the scholarly or scientific community, given that community's norms on data;**
- **the mechanism for sharing data and/or making it accessible to others; and**
- **other types of information that should be maintained and shared regarding data, for example, the way it was generated, analytical and procedural information, and the metadata.**

This project will use the open-source content management system Omeka S to create the wireframe for a larger mapping project that incorporates both geographical data and digital copies of archival and performance repertoire materials. For the mapping portion of the project, data will be stored in CSV form. Archival and repertoire materials will take a variety of forms, including document (PDF), image (JPEG), and video files (MOV).

PERIOD OF DATA RETENTION

NEH is committed to timely and rapid data distribution. However, it recognizes that types of data can vary widely and that acceptable norms also vary by discipline. It is strongly committed, however, to the underlying principle of timely access. In their DMP applicants should address how timely access will be assured.

Original GIS data and other original materials created by the project time will be available for users to access with the launch of the initial pilot project and will be updated bi-monthly throughout the project period. Links to the original locations of project materials will be included in the metadata for each uploaded archival object.

DATA FORMATS AND DISSEMINATION

The DMP should describe data formats, media, and dissemination approaches that will be used to make data and metadata available to others. Policies for public access and sharing should be described, including provisions for appropriate protection of privacy, confidentiality, security, intellectual property, or other rights or requirements. Research centers and major partnerships with industry or other user communities must also address how data are to be shared and managed with partners, center members, and other major stakeholders.

All data will be in compliance with the Library of Congress Recommended Formats Statement in terms of both preferred file form and suggested metadata. Materials will be marked with the appropriate Rights Statement or Creative Commons License.

DATA STORAGE AND PRESERVATION OF ACCESS

The DMP should describe physical and cyber resources and facilities that will be used to effectively preserve and store research data. These can include third-party facilities and repositories.

The data created for displaying the map as well as the multimedia materials will be stored via both Michigan State University's SharePoint and Google Drive as well as backed up to a physical external hard drive. Originally produced GIS data for the Stratford-upon-Avon map will be made publicly available on the project website.

Sustainability Plan

For the remaining three years of the PI's time at Michigan State University, data will be stored and the website will be hosted on university servers. The budget for this project includes the money to purchase server space for three years to account for potential gaps in institutional affiliation. The project will move with the PI to their next institution when they are employed following the completion of their PhD program. The project team will include a web developer that is responsible for maintaining the webpage, and support money will be written in for their work. The project team will also apply for Level III Digital Humanities Advancement Grants that could potentially support the project for up to an additional three years. For the next phase of the project, the project team aims to partner with the Folger Shakespeare Library to potentially create a permanent home for the project within their digital collections as they are currently recruiting digital projects. If it is accepted, the digital initiatives staff of the Folger will maintain the general upkeep of the website while the project team will remain responsible for keeping the research current.

Appendix: Works Cited

D'Ignazio, Catherine and Lauren Klein. *Data Feminism*, MIT Press, 2020,
data-feminism.mitpress.mit.edu/.

"Dr Faustus and the Rose Theatre." *Ortelia*, The University of Victoria, 2020,
ortelia.com/project/dr-faustus-and-the-rose-theatre/.

Ioppolo, Grace et al. *The Henslowe-Alleyn Digitisation Project*. King's Digital Lab, 2020.
https://henslowe-alleyn.org.uk/.

Jenstad, Janelle, and Kim Mclean-Fiander, editors. *Civitas Londinvm. The Map of Early Modern
London*, edited by Janelle Jenstad, University of Victoria, 07 Jun. 2018,
http://mapoflondon.uvic.ca/agas.htm.

Lefebvre, Henri. *The Production of Space*. Cambridge: Blackwell, 1991.

Richmond, Hugh Macrae. *Shakespeare's Staging*. 2016, University of California Berkeley,
https://shakespeare.berkeley.edu/.

Thomas, Julia. *Shakespeare's Shrine: The Bard's Birthplace and the Invention of
Stratford-upon-Avon*. University of Pennsylvania Press, 2012.

Tolia-Kelly, Divya P. "Race and affect at the museum: The museum as a *theatre of pain*."
Heritage, Affect, Emotion: Politics, practices and infrastructure, eds. Divya P.
Tolia-Kelly et al. Oxon: Routledge, 2016.