

# POLONSKY DIGITAL HUMANITIES SCHOLARS SUMMER 2018

## DIGITAL SCROLLING: UNFURLING THE MATERIALITY AND MOBILITY OF JAIN PAINTED LETTER-SCROLLS

**Lyla Halsted, Institute of Fine Arts**

### **Biography**

Lyla Halsted is a doctoral candidate in Art History at the Institute of Fine Arts at New York University. She received her Bachelor's degree from Davidson College with honors in Art History and her Master's degree from the University of North Carolina at Chapel Hill in Art History where she also received a certificate in Middle Eastern Studies. Her primary field of study is medieval Islamic art and architecture, with a secondary field in South Asian art. Her interests include materiality, networks of exchange, and digital art history.

### **Project Description**

During the 18<sup>th</sup> and 19<sup>th</sup> centuries, Vijnaptipatras, or Jain invitation scrolls, became particularly popular in North Western India, in the regions of Gujarat. These paper scrolls, ranging from 12 to 50 feet in length, were sent from wealthy Jain merchants in cities to itinerant Jain monks. These monks were invited to cities for the monsoon season, bringing their blessings to the merchants and inhabitants of each city. The letters began with intricately painted scenes of the cities from which they originated, at times terminating with images of the monk in question in the context of the city, illustrating for him how he would look amongst its inhabitants who would welcome him warmly. The scrolls end with text that extends the formal invitation. Rarely published, these objects have remained relatively obscure in the field of art history, as their unwieldy forms and locations in private collections has isolated them from other painted traditions. Lyla's project identifies a corpus of over 30 scrolls, digitizing them for the first time in an Omeka site through NYU hosting. Her site not only brings together metadata for the scrolls in one accessible location for the first time, but also includes interactive maps, produced via the Neatline plugins for Omeka. These maps organize the scrolls based on the monks they were addressed to, and the cities from which they were sent. Each map features several scrolls, with visualizations that trace their routes and destinations. Lyla also worked in collaboration with the Freer Sackler Galleries of Art in Washington to learn valuable visualization tools like image stitching that she was able to apply to one of the Vijnaptipatras. The photos and visualizations she generated and compiled are embedded into her Omeka site as well, producing a platform where one can access many aspects of the scrolls, including their routes of circulation, stitched images, three dimensional models, and bibliographic information. This project traces the

circulation of these objects, while simultaneously seeking to underline their materiality and content via imaging and visualizations of not only their content, but also their form.

## SAVING DATA JOURNALISM: ARCHIVING TODAY'S NEWS FOR TOMORROW'S COMPUTERS

**Alexa Logush, Archives and Library and Information Science**

### **Biography**

Alexa Logush is a dual degree student with New York University and Long Island University, studying to receive a Masters in Archiving and a Masters in Library and Information Science. She has worked in archives, university special collections, and public museums. Her interests include the intersection between archives, archival theory, history, and technology. She also has interests in sustainability, open access, and the usability of archives for researchers and communities.

### **Project Description**

The "Saving Data Journalism" project is an Institute of Museum and Library Sciences (IMLS)-funded project that involves the development of a software prototype that will work in conjunction with the NYU-developed reproducibility tool, ReproZip, to package up and archive dynamic web content for access and discoverability in the future. Through a collaboration between the New York University Libraries, the NYU Arthur L. Carter Journalism Institute, the NYU Center for Data Science, and ProPublica, the project is primarily concerned with both packaging up and archiving the frontend and backend of news applications, which are dynamic journalism projects built by news agencies to capture stories that are then interactive for users. The project is important in that it aims to archive material that has never been archived before. It seeks to explore questions regarding technological obsolescence, time, and preserving dynamic web content. It will round out by storing these packages in a scholarly digital archive that will be indexed with NYU's BobCat library catalog, so they can be discoverable and accessible for researchers and library users. Alexa's role in the project has been to develop the digital repository and create and assign relevant metadata to these fragile objects.

## SHADOW LINES: HIDDEN RELATIONSHIPS IN COLONIAL COLLECTING

**Emily Rogers, Museum Studies/Gallatin**

### **Biography**

Emily received her BA in Business from Sweet Briar College, her MA in Individualized Study from New York University's Gallatin School and her Advanced Certificate in Museum Studies from NYU's Graduate School of Arts and Sciences. Her work in museum studies focuses on facilitating working relationships between institutions and tribal communities, and creating digital tools for Indigenous use. Her MA research focused on contemporary witchcraft in the United States and its relationship to

capitalism and the Anthropocene. She is a queer activist, union advocate and textile artist, and is engaged in community farm work in Brooklyn.

### **Project Description**

Through the colonial collecting endeavor, Native American, First Nations and Aboriginal peoples' lives and cultural practices were collected, documented and recorded at unprecedented levels. During this period, which peaked between the 18<sup>th</sup> and 20<sup>th</sup> centuries, enormous amounts of tangible and intangible cultural heritage were removed from communities and detached from local knowledge systems. These early colonial collecting endeavors were haphazard and largely contingent on personalities, alliances and allegiances. As a result, collections and documentation became mixed, messy and inconsistent. This is an ongoing problem for communities seeking to access their collections and to make claims for their return. Using a range of digital tools, this Shadow Lines is working to trace hidden relationships (BETWEEN?) and to create a new kind of decolonial archive that visually and digitally connects communities to the institutional contexts where cultural belongings gathered from these colonial encounters now reside.

This internship was used to explore new and innovative ways to connect researchers, communities, and data. The majority of the internship was spent reconstructing and reorganizing master datasheets that make up the Shadow Lines database. This included standardizing data, eliminating redundancies and developing processes for adding data later on in the project's development. This database is going to be used to create a new visualization for mapping collections of Indigenous materials that will be a valuable tool for communities and tribal organizations.

## **MAPPING COGNITIVE AND EMOTIONAL STATES IN ANCIENT GREEK DRAMA USING NLP METHODS**

### **Rebekah Rust, Classics**

#### **Biography**

Rebekah Rust is a Ph.D. student in classics at New York University with research interests in affective and cognitive states in 5th and 4th century BC Greek drama. She earned her BA in Classics from the University of North Carolina at Chapel Hill and her M.St. in Greek and Latin Languages and Literature from the University of Oxford. It was the extensive word-searching and text analysis for large numbers of texts for her master's thesis on tragic anger that persuaded her to learn Python and become a digital humanist.

#### **Project Description**

Ever since Aristotle, emotions have been considered an essential component of Greek drama by scholars. Some focus on one emotion across many plays, others on many emotions in one play, but a comprehensive analysis of cognitive and emotional states in both tragedy and comedy is a difficult task. The time and memory required for such context-rich analysis over large numbers of text is considerable. For her internship, Rebekah's goal was to develop an approach to quantify and analyze the plot of a play

via the emotions felt, either explicitly or implicitly, by the various characters. By examining the vocabulary usage of emotion terms and their associated contexts, the emotional arc of a plot can be presented and visualized. The project was divided into three parts: text acquisition, emotion detection, and data visualization. Tasks for the first part included locating digitized texts of Greek literature, developing a comprehensive text database from multiple corpora, standardizing the text encoding, and cleaning the texts. For the second part, using NLP techniques and a neural network sentiment classifier, lines marked as exhibiting a certain emotion were tagged. Finally, a data visualization was developed whereby the background of the play's tagged lines would be colored according to the type of emotion detected thus creating a heat map or 'color script' of the play.

## PHONOLOGICAL CORPUS TOOLS FOR UNDER-RESEARCHED LANGUAGES

### Ildikó Emese Szabó, Linguistics

#### Biography

Ildikó Emese Szabó is pursuing a PhD degree in Linguistics at New York University, and is planning to graduate in 2020. Her work focuses on combining computational tools with phonology and phonetics. She especially enjoys building learners to model sociophonetic and behavioral data or computational processing of phonological datasets. Before coming to NYU, Ildi received a BA in English and an MA in Theoretical Linguistics at the Eötvös Loránd University in Budapest, Hungary.

#### Project Description

Within the field of linguistics, some languages receive more attention and resources than others, and as a result of a lack of datasets, indigenous languages are in particular often under-researched. This project involved the creation of resources for studying two such languages, Aymara and Nkore-Kiga. Aymara is an indigenous language spoken by a total of 2.8 million people in Bolivia, Peru and Chile. Ildi's work contributed to establishing a corpus of 81,266 transcribed word forms based on the orthographic forms in the An Crúbadán corpus ([Scannell, 2007](#)). After loan words were filtered out, the corpus was transcribed into the symbols of the International Phonetic Alphabet as well as into an unambiguous transcription Ildi devised, using only ASCII characters. These tools were then implemented for Nkore-Kiga (formerly Runyankore and Rukiga), a Bantu language spoken by about 4 million native speakers in Uganda and Rwanda. The digitized version of a dictionary (Taylor, 1959; digitized as part of [CBOLD](#)) was transcribed in an IPA- and an ASCII-compatible way, resulting in corpora of 11,395 word forms each, and additional corpora of 6,516 roots. The project contributes to phonological research in two ways. First, the corpora resulting from these projects can be used for further research on Aymara and Nkore-Kiga. Second, the more general phonological corpus tools that Ildi developed in this project could be applicable for the generation of phonological corpora for other languages furthering cross-linguistic research. The entire code base and documentation for the project can be found at the following Github link.

## THE ARTIST ARCHIVES INITIATIVE'S JOAN JONAS KNOWLEDGE BASE

### **Melissa Tincopo, Museum Studies**

#### **Biography**

Melissa Tincopo is a student at New York University pursuing a Masters in Museum Studies. She hopes to secure a career in Digital Humanities. She obtained her Bachelors in History with a minor in Anthropology from Chapman University. Melissa has handled archival collections in the non-profit and profit sectors since 2015. Her work has included a digital walking tour of LGBTQ history in Greenwich Village, as well as the modernization of the Kinder Transport Collection at the Simon Wiesenthal Archives.

#### **Project Description**

Artist Archive Initiative is accessible at <https://cs.nyu.edu/ArtistArchives/Initiative/>. Since its inception, Performance Art has been difficult to properly document. This may be attributed to that fact that it does not fit into the typical confines of archives. As a result, comprehensive databases on performance art are practically nonexistent. Thorough documentation of pivotal performance artists and their works will result in future generations of scholars, curators, and art enthusiasts comprehension of the vitality of both the artists and their works. Additionally, it will provide for further iterations of the art. NYU professors, Glenn Wharton and Deena Engel, and Joan Jonas scholar and UQAM professor, Barbara Clausen have collaborated with NYU computer science, Museum Studies, and Fine Arts students to research and establish a digital database on the ground-breaking performance artist, Joan Jonas. Melissa's work centralized around casting an archivist eye on the drive of data and crafting a finding aid. Along with that Melissa utilized wiki markup to create guiding pages on how to publish a myriad of content on the public facing semantic wiki site. In regard to the front-facing archive, Melissa employed textual analysis tools to create tags and crafted an image scheme for organizing the content. Each of the aforementioned aspects will supply future contributors with the foundations for their work. Upon completion, the Joan Jonas Artist Archive will be available to the public, but password protected in order to make changes.

## MACHAUT'S MATCHING RHYMES: BORROWINGS IN THE FONTAINE AMOUREUSE FROM THE *ROMAN DE LA ROSE* AND *THE OVIDE MORALISÉ*

### **Mimi Zhou, French**

#### **Biography**

Mimi Zhou is a PhD candidate in NYU's Department of French Literature, Thought and Culture. She primarily studies medieval French literature through the lens of Derridean deconstruction. Her dissertation, titled "Beginning to Read Chrétien de Troyes," explores moments of thematic beginning – or, moments of openings, entries, and emergences – and their relation to adventure and identity for Chrétien's knights in his last three romances. Her work also includes philology and digital humanities. For the latter, she has earned support from the Renaissance Society of America and the Newberry Library in addition to the Polonsky Foundation. Before undertaking her doctorate at NYU, Mimi earned undergraduate degrees in French and Comparative Literature from UC Berkeley.

### **Project Description**

The 14<sup>th</sup>-century French poet Guillaume de Machaut is known for his intertextuality. In his works, which are often written in rhyming couplets, he recycles rhymes from previous works like Guillaume de Lorris and Jean de Meun's *Roman de la Rose* and the anonymous *Ovide Moralisé*. This project takes Machaut's *Fontaine Amoureuse* and uses Python to systematically locate the rhyme pairs he repeats, something that has never been undertaken. With this information, Mimi has created a prototype of a website featuring the text of the *FA* that indicates the borrowed rhymes from the *RdR* and *OM*. This website provides scholars with a new tool to analyze Machaut's play with his predecessors' works and the formation of his particular brand of imitation.

## **BRINE DIGITAL HUMANITIES SCHOLARS SUMMER 2018**

### **VOICES IN CONTEMPORARY ART DIGITAL ARCHIVE**

#### **Kim Adams, English**

##### **Biography**

Kimberly Adams is a PhD candidate in English at NYU. Her dissertation follows the application of electricity to the body in American literature and medicine from 1867 to 1970, arguing that the human body, as formed in race, sex, and gender, stages the changing public meanings of electricity across media and genres, and that electricity activates a politics of embodiment embedded in cultural and literary forms. Her project makes use of methods from the digital humanities, the history of science, and literary scholarship. She is invested in work that combines material history with theoretical stakes to evoke practical consequences. She holds a B.A. in English from Vassar College and an M.A. in English from Brown University, with specializations in poetry and poetics and literary theory.

##### **Project Description**

Voices in Contemporary Art (VoCA) is a non-profit organization that aims to stimulate critical discussion on the production, presentation, and preservation of contemporary art and to advocate for the importance of artist intent as a key factor in the conservation of contemporary art. To accomplish this mission, VoCA works with artists, conservators, curators, and institutions, on a national and international scale, through three major program streams: *VoCA Journal*, VoCA Talks, and VoCA Workshops. *VoCA Journal* is an online journal of contemporary art criticism. VoCA Talks are long form artist interviews which are digitally recorded and presented publically online. VoCA Workshops, often paired with the talks, are collaborative lessons in interviewing practice for professionals and scholars in the arts. This focus on art conservation has generated

an interest in the digital preservation of their own materials. To preserve the valuable material gathered in these interviews and workshops, and in the production of the journal, VoCA requested a Polonsky Fellow for the summer of 2018 to aid in the process of digital archiving. This phase of the project focused on preparing existing digital material from the VoCA Talks for future storage in Fales Archives and Special Collections.

## INQUISITE: DESIGNING AND DOCUMENTING DATA TOOLS FOR HUMANITIES TEACHING AND RESEARCH

### **Grace Afsari-Mamagani, English**

#### **Biography**

Grace Afsari-Mamagani is a doctoral student in New York University's Department of English. Her interests include contemporary fiction foregrounding experiences of inter- and intranational migration, spatial and urban theory, and interaction design for digital pedagogy and cultural heritage interfaces. Her current research positions literary fiction as a locus of ethics of information experience and data visualization. In addition to her academic research, she pursues user experience evaluation and creative campaign design projects on a freelance basis.

#### **Project Description**

A collaborative experiment designed by members of NYU's Faculty of Arts & Science and the Brooklyn development studio Whirl-i-Gig, Inquisite is a browser-based platform meant to provide low-barrier-to-entry data modeling, storage, collaboration, and visualization features for faculty and students pursuing data research and teaching in the humanities and social sciences. Inquisite utilizes a repository model built on a graph database — which prioritizes relationships between pieces of data and accepts flexible data structures — to ensure that data remain secure and accessible over long-term projects with multiple collaborators, as well as to facilitate fruitful links between repositories across the platform ecosystem. This stage of the project focused on improving Inquisite's user experience, with elements including bug tracking and reporting, interaction flow development, and production of on-screen help text and user-facing documentation. The platform's documentation environment was intentionally designed for users of varying levels of technical proficiency, with multiple on-ramps meant to enhance user control and ease of use. This phase also involved engagement with best practices and theoretical frameworks for curricular design; instructional technology and data pedagogy; development pipeline management; and technical, ethical, and user software documentation. As Inquisite is deployed in pilot classrooms in AY 2018-19, both documentation and feature UX/UI will continue to evolve according to the project's scope and user needs.

## SOUND JUDGMENT: IDEOLOGIES OF LISTENING AND THE BIRTH OF ENGLISH MUSIC CRITICISM

### **Jordan Hall, English Biography**

Jordan Hall is an English PhD candidate at NYU. His dissertation traces the emergence of music criticism as a genre in eighteenth-century Britain. In addition to his academic work, Jordan is also a composer and violinist, and has performed throughout major halls in the US and Europe, debuting at age 13 with the St. Paul Chamber Orchestra at the Ordway Theatre.

### **Project Description**

Music criticism as we know it today faces a crisis: threats to its cultural influence abound. In the age of digital immediacy, arbiters of taste have multiplied exponentially, from listeners who circulate their opinions on albums and concerts to a global readership, to predictive algorithms that recommend music based on past purchases and playlists. As the future of today's music criticism becomes less certain, we can look to its past to deepen our understanding of its changing role over time. *Sound Judgment: Ideologies of Listening and the Birth of English Music Criticism*, a dissertation companion site, shows how this genre developed not through any emerging consensus over musical works, but through an intensifying disagreement over what qualified as authoritative judgment of those works. In eighteenth-century Britain, the rapid growth of print and performance multiplied the number of musical opinions and self-appointed arbiters of taste. The concept of "musical critic" and the genre of "musical criticism" emerged at this historical moment, when musical judges felt increasingly pressured to analyze not just the stage but also the growing number of opinionated listeners. Recounting this story through films, textual examples, integrated playlists, and historical representations of performance venues and listeners, *Sound Judgment* helps visitors to recognize that today's music criticism is in crisis for the same reason that it was invented in the eighteenth century: as arbiters of musical taste multiply in number and influence, the authority of musical opinions becomes increasingly ambiguous.