RHIZOME

NDSR Project: Born-Digital Preservation in the Rhizome ArtBase

Goal Summary

The goal of this project is to enable the functional preservation up to 50 born-digital, performative artworks from the ArtBase collection, in various stages of preservation or decay. It will also focus on building metadata and infrastructure across the entire collection, as it migrates to an innovative Wikibase system (in conversation with the WikiMedia Foundation), and a new front-end interface. While the project is part of an ongoing, monumental effort that has required the care and attention of all Rhizome's staff and fellows, over several years of work, it will be given focus and structure through five key project stages, outlined below. The project will, at various stages, involve pioneering or using the new methods of preservation that are constantly in development within the organization — such as cloud- based Emulation-as-a-Service and the Colloq social media archiving tool. The project will also require the Fellow to communicate this work to peers in the preservation field, through a white paper, writing on the Rhizome journal, and public presentations — in order to provide leadership to the field of born-digital art and digital preservation more broadly.

Specific Objectives

To develop a set of standardized criteria and metadata that can express the level of preservation and access quality of works in the ArtBase collection, relevant to other collections like it.

To undertake an audit of up to 500 works in the ArtBase and evaluate them for their level of preservation and access quality, according to such newly-defined criteria.

To communicate, through short description and interface architecture/design, the level of preservation quality for up to 500 works in the ArtBase — with a wide-ranging public online access on the web in mind.

To preserve up to 50 works of born-digital art, including the development and usage of new tools such as the Colloq social media archiving tool, and cloud-based Emulation-as-a-Service.

To communicate the Fellow and Rhizome's work to peers in the digital preservation field, through approximately one white paper, three journal articles, and one public presentation.

Timeframe & Deliverables

Months 1-3: Research, planning and infrastructure

- o Introduction and broad exploration of the collection, and of Rhizome's infrastructure, tools, methodologies, philosophical approaches, and past research.
- o Work with the Digital Conservator to plan criteria and workflows for quality assessment and artifact access.
- o Participate in the refinement of the Wikibase system and migration.

Months 3-6: Auditing and description

- o Audit up to 500 works in the ArtBase based on the criteria and workflows
- o Communicate, through description and interface, the level of preservation and access for those works.

Months 6-9: Preservation and presentation

- o Preparing and perfecting up to 50 artworks for access.
- o Conserve new digital artworks based on the established workflows.
- o Finalizing written papers and communicating research outcomes, with a strong focus on workflows and the whole collection.

Resources Required

Rhizome will provide the Fellow with desk space at our brand new offices at NEW INC, adjacent the New Museum. It will also provide the Fellow with a dedicated mentor, Espenschied, who will train the fellow in Rhizome's current preservation tools and methods. The Fellow will require full access to the ArtBase servers and backend.

Context

In addition to the extensive, ongoing development needed to care for and make accessible the ArtBase, Rhizome has undertaken many special projects that have contributed new research to the field, while fulfilling our collection's own needs. For example, Colloq is a new tool for creating contextual archives of online practices such as social media interactions, built on top of the web archiving toolchain pyweb and in collaboration with developer Ilya Kremer. It has allowed us to accession artworks performed on Instagram, Yelp, YouTube and others into the ArtBase collection, with high fidelity and in context. It is supported by a Knight Foundation Prototype Fund grant, and was recently the focus of an extensive New York Times print feature.

Other research includes a close collaboration with the University of Frieberg to develop, test and refine the Emulation- as-a-Service framework, bwFLA. Currently, we are working to develop the first instance of a cloud-based Emulation-as- a-Service platform, in order to make the prominent feminist videogame maker Theresa Duncan's early CD-ROM works available to a mass audience, online. Recently, we also worked to preservation and publish Cory Arcangel's artwork Bomb Iraq, through an in-browser emulation accessed by more than 1,000 visitors in 2 days.

To support these projects and the ArtBase as a whole, Rhizome is currently migrating to the use of Wikibase for cataloguing artworks, software and systems, to enable flexible and temporary ontologies and descriptions systems — allowing for wide experimentation and research in this field. This new development is in response to the overall challenge in describing digital artworks and their complex relationships and dependencies, where current ontological systems have proven insufficient. Class/instance hierarchies don't adequately describe software in general — for example, software lacks a fixed existence in space and time, but instead can exist in countless variations, while still being regarded as a single entity. The broader challenge of meaningfully describing artworks in metadata is compounded when that artwork consists of software dependent on complex legacy systems in order to re-enact the work. The problems posed here are ontological/philosophical, but need to be resolved in order to address real-world preservation issues.

Required Knowledge and Skills for Resident

The Fellow should have a graduate degree in Library and Information Science, Digital Preservation or equivalent, in addition to:

- Good understanding of computer systems.
- Basic Unix skills.
- Basic knowledge about ontology.
- Basic skills in python or similar scripting language.

Preferred Knowledge or Experience

- Demonstrated interest in art history and digital art.
- Basic knowledge about emulation.
- Experience with Wikimedia Foundation software and infrastructure.