# The Tiger's Leap: Re-authorship and the Digital Archive

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## **Abstract**

### Moderator/Panelist:

 Rhonda Holberton, Associate Professor of Digital Media Arts, Department of Art & Art History San José State University.

#### Panelists:

- Vanessa Chang, Director of Programs, Non-Profit Think Tank
- Elvia Arroyo-Ramirez, Digital Archivist, Special Collections and Archives, University of California Irvine Libraries

Panelists will discuss their roles in a collaborative inter-institutional project funded by the Knight Foundation to reauthor artist projects that are in danger of becoming uninhabitable due to platform rot. Invited artists work with a team of digital archivists from Leonardo/ISAST under the supervision of Vanessa Chang and students in the CADRE New Media Program at San José State University to reauthor works using several methods being developed under the guidance of Professor Rhonda Holberton.

The panel will offer perspectives on collections management, artist contracts, and best practices for reauthoring with insights from the reauthoring process of 3 projects: 1) Lynn Hershman Leeson's Difference Engine #3, 2) Tamiko Thiel & Zara Houshmand's Beyond Manzanar 3) Christine Tamblyn's She Loves It, She Loves it Not.

## Keywords

Digital Archives, Artist Contracts, VRML, Web3D, Controlled Digital Lending, Digital Collections, Digital Exhibitions, Cross-Platform Compatibility, Digital Stewardship, XR Accessibility, Publicly Accountable Cross-Sector Partner Service Organizations, Durable Code

## Introduction

Rhonda Holberton, Associate Professor of Digital Media Art, San José State University, is leading an initiative with the panelists to preserve and archive several important bodies of digital media produced within the San Francisco Bay Area from 1984-2014. The archive will focus on XR and 3D digital projects, and collaborative research from the CADRE Media Lab at San José State University and

SWITCH Journal, Leonardo/ISAST Non-Profit Think Tank, Zero 1 Art Organization, and the San José Museum of Art archive/collections.

The entries will be archived on New Art City, a virtual exhibition toolkit originally developed by Don Hanson, a MFA candidate in the Digital Media Art program at San José State University, in response to the loss of physical exhibition opportunities for enrolled students during the early months of the COVID Pandemic. New Art City utilizes web stable languages (HTML, JS, & CSS) which will ensure the longevity and accessibility of new media works that were originally produced to run on esoteric or out of date platforms. Digital Archivists from Leonardo/ISAST and Students currently enrolled in the Digital Media Art program at San José State University will work directly with the original artists & digital creators to identify processes for rebuilding original artworks and/or archiving components for future researchers. All artists can elect to host their projects publicly or download the files for local exhibition. Each artist will also have the opportunity to work with the New Art City development team to create custom features and interaction options.

User experience of the archive will be grounded in interactive engagement with the region's rich history of collaborative new media art production utilizing an archive built on the New Art City's web-based 3D platform. Unlike traditional digital archives, the San José State University XR Archive will integrate collection management databases, blockchain security certificates, digital lending, and exhibition services. Users of the lending and exhibition services will experience spatial proximity, temporal texture, and architectural aggregation rather than overlapping windows or the long scroll to help researchers, exhibition designers, and public visitors make deep connections to and between digital entries.

Resilient Story Telling. How does access to the time-based experience inform the way we understand stories? This project invokes the multivalent qualities of digital archives: as a term, re-authoring signifies coding practices that extract and repackage original data structures as well as narrative processes. Rather than strict fidelity to original works, which is often not possible, these re-authored works might weave strands between preserved and reproduced elements, at times staging dialogues between the past and the present. Untethered from original

medium, platform and historical context, these artworks become foci for creative and curatorial interpretation, for telling stories not only about the work but also their roles as gathering places. Their stories endure because they activate, through digital platforms, communities of practice. In this context, curatorial practice is also a form of storytelling. The archival experience is at once a reproduction of the work, and the story of its re/making. Re-authorship becomes, in a real sense, co-authoring. So rendered, resilient storytelling is the fruit of inter-institutional, cross-temporal collaboration.

**Digital Stewardship** As envisioned, the archive is the first of 3 discrete phases of development that fit into a longer-term vision; the instantiation of the Center for Creative Digital Production & Stewardship at San José State University. Within the center, Faculty and Students will collaborate with digital creators and partner institutions to develop best practices and documentation for digital stewardship of technology-centered artist practices and create standards for artist contracts for institutional acquisition of digital work using blockchain technology applied in concert with controlled digital lending via the University of California Irvine Library.

Digital stewardship brings together the concepts of both digital preservation and digital curation and provides a framework for long-term thinking to ensure that preserving and managing digital content for the long-term is not merely an afterthought, but baked into the production process.

## **Archiving Process**

## Lynn Hershman Leeson's Difference Engine #3

First shown in 1995 at ZKM, Lynn Hershman Leeson's Difference Engine #3 used the architecture of the museum as a 3D template and the visitors as the interface. With both physical and virtual infrastructure (VRML) as its materials, it highlights critical questions about how interactive works might be preserved. Most recently shown again at ZKM in 2015 with new software, Difference Engine #3 lies dormant in museum archive storage - with no accessible artifacts or ephemera - and needs to be physically installed onsite to gather any of its assets. With the museum's support, we are documenting both physical and virtual elements of the work to inform the re-authoring of its VRML and the 3D rendering of its architecture. Through consultation and interviews, the artist is contouring these representations.

Tamiko Thiel & Zara Houshmand's Beyond Manzanar

We are currently working on reauthoring Tamiko Thiel's Beyond Manzanar which is currently exhibited using VRML web browser. The work consists of an interactive 3D virtual reality art installation, a metaphorical landscape that explores political scapegoating of ethnic populations in times of crisis. The installation recreates the prison camp at Manzanar, layering imagery drawn from the imprisonment of Japanese Americans during World War II and more

recent experiences of Iranian Americans during the hostage crisis The student team is rebuilding 3D assets in Blender and exporting obj & gltf files to New Art City Web 3D Environment. In this case, we will export the HTML, CSS, & Javascript to exhibit the work on a local computer (will only ever be viewable when physically installed).

Christine Tamblyn's She Loves It, She Loves it Not "She Loves It, She Loves it Not" (1994) is an interactive CD-ROM created by Christine Tamblyn in collaboration with Marjorie Franklin and Paul Tompkins. It collates media - text, image, sound, film clips - about how women use technology in the past, present and future. Before her death in 1998, Tamblyn initiated but did not complete leaving her body of work to Special Collections at University of California, Irvine. As a result, its property rights and literary rights are split between an institution and an individual. In the re-authoring process, the obsolescence of the CD-ROM platform echoes the artist's absence. This posthumous effort raises important questions about re-authoring work whose creators cannot partner on the process, or even contribute personal insight and experience. We are thus especially attentive to the artist's broader archive, including interviews and personal and published writings, placing these in conversation with excavated disk images to produce a spatialized, interpretive exhibition of the work that necessarily transcends the structure of the CD-ROM.

# Digital platforms and the Temporality of the Everywhen

As these re-authoring projects unfurl along several temporal axes, they pose emergent questions about the time and space of the digital archive. By gathering archival materials in a dynamic, time-based contemporary platform, this project incarnates the spatiotemporality of the Everywhen. Past, present and future cohabit and collaborate in virtual space - across periods, across timezones, and across temporal ideologies encoded in technologies. With multimedia elements that reproduce or mimic obsolete formats and platforms, built by different collaborators at different moments in time, the digital archive is at once synchronic and diachronic.

Even as this archive embraces atemporality in the interest of endurance, we also explore if and what right works have to pass on with the platforms they were designed for. Through the process of re-authoring Beyond Manzanar, Tamiko Thiel has emphasized that she does not want the project to be simultaneously and permanently available. Rather, it should be viewed in context and in community.

This re-authoring effort thus also takes what Walter Benjamin called "the tiger's leap into the past" (261), detaching and exploding a past moment from the continuum of history with the aid of the present.

## **New Art CityDigital Exhibition Platform**

New Art City Originally developed as an online exhibition solution for Digital Media Art BFA exhibition at San José State State University, the New Art City platform has since expanded to host international art exhibitions with institutions like Gray Area SF, Bitforms Gallery NYC, Lumen Prize, Format Festival and several solo and group shows for individual artists & digital creators. The platform will allow designers to spatialize the visitors' experience of media entries in the archive using architectural orientation to present oral histories and contextual information alongside primary resources that take the form of websites, video, 3D animations, image, text, and soon; VR projects.





Figure 1. Screenshots of RENDERING REAL: Asian American International Film Festival hosted by New Art City. Works shown: Exhibition Lobby & Historical Ephemera (top, Alt Text: A cityscape with numerous buildings adorned with vibrant red lanterns, creating a captivating and lively atmosphere.). Ten Miles Of Track In One Day by Yuge Zhou and Hwa-Jeen Na (bottom, Alt text: A cactus and a fence in a desert area, showcasing the arid landscape and the boundary between nature and civilization.) ©Artist Retain Copyright

New Art City & Accessibility for Disability In Fall 2020 Moderator/Panelist 1 worked with New Art City founders to help complete a Voluntary Product Accessibility Template (VPAT) for the platform. In Spring 2021 the San José State University System certified New Art City for systemwide use after determining the platform met information and communication technology accessibility standards under Section 508 of the US Rehabilitation Act and Section 255 of the US Communications Act. In addition to the 3D environment, New Art City now provides a 2D view optimized for Screen Readers. XXX New Art City has prioritized communities disadvantaged

by structural injustice by regularly convening an Accessibility Panel of artists and researchers who identify as disabled. In their Accessibility Statement, New Art City provides standards for accessible 3D environments, and is excited to work with the team to define new standards for accessibility in Mixed Reality environments including sound triggers/guidance, guided tours in 3D & XR environments, and new forms of translation between XR, 3D, and 2D web designs



Figure 2. 2D Catalogue View of RENDERING REAL: Asian American International Film Festival hosted by New Art City. Exhibition hosted by New Art City (Alt Text: A screenshot of a website displaying a bottle of ketchup and a hand holding a photograph above a mirror). The catalogue view is automatically generated when exhibition designers upload their digital assets to the platform, alt text can be added for screen readers. ©Artist Retain Copyright

## **Audience & Impact**

The project leads believe the practice of citation is a political act that shapes the future as much as it contextualizes the past. With this framework in mind, it is important to recognise preservation as a political act as well; and to understand that all archives suffer from intersecting and overlapping biases, limited accessibility, and data rot. San José State University (and public universities more broadly) can play an important role as a publicly accountable cross-sector partner service organization in the production and long-term preservation of tech-centered artist practices. Toward this goal, the project team is currently:

- Working with librarians & archivists to expand the capabilities of research databases that determine what is citable in the first place
- Collaborating with artists & digital creators to create best practices for the digital stewardship of ephemeral technology dependent projects
- Connecting communities from public institutions with students and faculty at San José State University in the

- production creative projects that make meaningful technological advancements while at the same time expanding public understanding the social impacts of technology
- Providing support to technology platforms to develop accessible standards in-line with Section 508 of the Rehabilitation Act published in the Federal Register to ensure the technology we use in our projects is available to the broadest community possible

# Inter-Institutional and Community Collaborations Through collaborations between San José State University, San José Museum of Art, University of California Irvine Library, New Art City, Leonardo/ISAST, and Zero 1 Arts Organization, the project will build bridges between San José State University students, the public, and contemporary Digital Media Artists/Digital Creators. This is an exceptional opportunity to celebrate the rich legacy of interdisciplinarity at San José State University and our legacy of collaboration with art institutions in the Bay Area

(California) while at the same time creating standards and

best practices for the production & preservation of

tech-centered artworks for generations to come.

As one of San José State University's Hispanic Serving Institutions (HSI) and Asian American Native American Pacific Islander Serving Institutions (AANAPISI) as recognized by the United States Department of Education, the San José State University community represents a diverse set of perspectives. The project team and organizational partners integrate the student body and communities within the city in the design of the archive and the curation of the entries within it to advance a broad and socially responsible approach to integrating artistic expression within historical contexts.

## Gaps in Existing Ethics & Approaches

There are several challenges facing digital stewardship of experimental and creative digital media projects:

- Digital preservation is not an isolated process, but instead, one component of a broad aggregation of interconnected services, policies, and stakeholders which together constitute a digital information environment
- An Emphasis in Media Art to push boundaries and forage new paths with cutting edge technology that leads to poor documentation and limited/inconsistent standards for best practices
- Constantly shifting hardware and software requirements mean a never ending game of catch-up for collections managers
- An air gap between digital archiving and digital media production practices means work is produced with little thought for preservation

- Inconsistent standards for artist contracts in rangers to digital preservation, maintenance and updates/reauthoring for future use
- Until very recently, VR & AR projects required specialized hardware and software packages

Recognizing the importance that public universities can play by leveraging the administrative support, frameworks for long-term solutions, and inter/trans-disciplinary resources in facing challenges of tech-centered arts practices, this project will:

- Integrate practitioners and archivists into the production environment to collaboratively produce standards for digital preservation for Media project with a focus on VR/AR/XR
- Development of an application free (web-based) hardware agnostic VR platform build using webstable programming languages: HTML, CSS, & JS
- Work with Artists to create standards for Digital Contracts & Archival Material supplements that state the artists wishes for reauthoring for archival purposes and future use and provide materials for re-authoring works
- Work with artists to reauthor existing works created with legacy software for obsolete hardware
- Bridge communities through public partnerships and collaborations
- Work with diverse range of practitioners to develop archives that honor research methods across many areas of knowledge production
- Provide technical support, equipment, and student research assistants to artists through residencies and visiting lecturer appointments to teach experimental classes to support project production with a focus on sustainable practices

This project has and will also identify areas where more standards for ethical approaches are needed including:

- Digital Media & Platform Rot
- Posthumous Archiving
- Temporality of rights
- Material rights vs IP rights

## **Adding Alt Text to Figures**

We would like to encourage authors to include alt text with their figures for improved accessibility.

# Acknowledgements

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## **Panel Biographies**

Moderator/Panelist 1: Rhonda Holberton utilizes technology as a medium to reconcile the biological body with geologic time, revealing their material and environmental impacts both on individual entities and on a planetary scale. Her subtle animations, digital interventions, sculptures and installation pieces move between the material and the immaterial, the authentic and synthetic, and pay special attention to the phenomenology of climate change in order to imagine ways we might collectively write more inclusive rules for digital platforms. Holberton has exhibited widely, including at RMIT Gallery (Melbourne); La Becque Résidences d'artistes Tour-de-Peilz, Switzerland); FIFI Projects (Mexico City); Yerba Buena Center for the Arts (San Francisco); and the San Jose Institute of Contemporary Art (San José) Holberton's work is included in the permanent collections of the Whitney, SFMOMA, and the McEvoy Foundation. She holds a MFA from Stanford University and is currently Assistant Professor of Digital Media at San José State University.

Panelist 2: As a curator, writer and educator, Vanessa Chang builds communities and conversations about art, technology and human bodies. She is Director of Programs at Leonardo/ISAST. She holds a Ph.D. in Modern Thought and Literature from Stanford University, where she was a Geballe Fellow at the Stanford Humanities Center. Most recently, she curated Recoding CripTech at SOMArts Cultural Center, Intersections at the Leonardo Convening at Fort Mason Center for the Arts, and Artobots, a CODAME festival of art, automation and artificial intelligence. She has appeared on NPR's On the Media and State of the Art, and her curatorial work has been profiled in such venues as Art in America and KQED Arts. Her writing has been published in Wired, Slate, Noema, Los Angeles Review of Books, Journal of Visual Culture, and Animation: an interdisciplinary journal, among other venues.

Panelist 3: Elvia Arroyo-Ramirez is the Digital Archivist for University Archives at University of California, Irvine. She holds a BA from UCLA and an MLIS from the University of Pittsburgh. She is the co-editor of the special issue on "Radical Empathy in Archival Practice" in the Journal for Critical Library and Information Studies (JCLIS). Her practice and scholarship are grounded in a feminist ethic of care and works to expose and repair archival practices rooted in systemic biases that perpetuate harm to Black, Indigenous, People of Color (BIPOC) and other marginalized communities.