The arqive: An LGBTQ Digital Storytelling Map Cynthia Wang, Department of Communication Studies, Cal State LA Zachary Vernon, Department of Art, Cal State LA

PROJECT NARRATIVE

Project History and Impact

The arqive (https://thearqive.com) is an LGBTQ (Lesbian, Gay, Bisexual, Trans, Queer) digital storytelling map. Initially founded by Dr. Cynthia Wang (Associate Professor, Communication Studies) and built in 2014 as "GlobaltraQs", *The arqive* is an interactive repository of geographically and temporally located LGBTQ events and stories that presents narratives of LGBTQ history and provides ways for people to connect to local advocacy groups and resources, enact social justice activism through organizing and accessible storytelling, while tacitly contributing to global solidarity through the sharing of stories, experiences, and places. These user-generated stories and narratives, pinned on a digital map, represent an archive of queer stories located across space and time. Stories can be anything from historical events (e.g.,: Stonewall), to personal happenings, to LGBTQ experiences around the world, currently and historically, while also making these stories accessible to a wider public.

LGBTQ histories have often been told piecemeal, rather than passed down through familial narratives or taught in classrooms. LGBTQ histories are, in many parts of the world, still considered controversial and are actively hidden or dismissed from the canon of the human experience.. Larry Gross (2001), through his discussion of LGBTQ representation in the media, speaks about the invisibility endemic to being queer, which is a double-edged sword. On one hand, invisibility creates an opportunity for LGBTQ individuals to "pass" as straight, if one so desires, although oftentimes one is coerced into invisibility. On the other hand, social isolation is rooted in this coerced invisibility. Despite a slow journey toward increased civil liberties, LGBTQ individuals, for the most part, still remain marginalized within heteronormative societies and cultures. As such, especially in places that are less open to discussing different manifestations of sexualities and gender, it can sometimes feel like one is the only person who

has "unacceptable" desires and identities, with social isolation widespread within LGBTQ communities (Farrar, 2018).

Hence, LGBTQ individuals turn increasingly to digital platforms and social media to seek connectivity and community. *The arqive* is one of the free digital tools accessible to communities around the world to increase visibility of LGBTQ experiences, locally and globally. Our mission is not only to decrease social isolation and give LGBTQ individuals a connection to a larger historical consciousness, but also to connect activists, scholars, resources, and community spaces, both intellectually and sociopolitically, around an ethos of solidarity amongst local groups and between international communities advocating for LGBTQ rights and justice. Moreover, as *The arqive* generates more content and stories, it becomes a research tool for a wide variety of scholarly pursuits, whose subjects include but are not limited to: geographic information systems (GIS), critical ethnography, sociology, geography, anthropology, and media studies, among other disciplines.

Recent Updates

Fall 2019 saw the start of a full redesign of *The arqive*, bringing on Zachary Vernon (Assistant Professor, Art) as co-founder and creative director, and the start of a collaboration with an interdisciplinary team of Cal State LA students from the departments of Computer Science, Art, and Communication Studies. John Hurley (Lecturer, Computer Science) led the development and coding of a brand new site through the Computer Science Senior Design Project (CS-SDP), while co-founder Vernon advised students from Cal State LA's Art Department in spearheading the rebranding of the project given its new name and visual look. Finally, Dr. Kate Kurtin (Associate Professor, Communication Studies) oversaw Communication Studies students in the creation of public relations and sustainable social media plans.

Department (at Cal State LA)	Number of Students	Level of Degree	Faculty
Computer Science	25	Undergraduate	John Hurley
Communication Studies	13	Undergraduate (12), Graduate (1)	Dr. Cynthia Wang, Dr. Kate Kurtin
Art (Graphic Design/Visual Communication)	4	Undergraduate (3), Graduate (1)	Zachary Vernon

Table 1:

The arqive provides a unique opportunity for students from these fields to work across disciplines and job descriptions, learning how to delegate, collaborate, and communicate with colleagues outside of their fields of expertise. Additionally, being compelled to consider the implications of Queer histories, which represent a diverse intersection of society, has allowed the students to address contemporary issues around digital justice in regards to identity, security, and privacy online, due to the dangers that queer people face in less progressive areas around the world. Currently, in the 2021-2022 school year, our team is in the process of updating our existing mobile application, and exploring mobile gamification and augmented reality options for the app.

Project Successes

The site currently has over 170 stories in over 21 different countries, with 87 users registered to the site. The work that *The arqive* is doing has also been presented at national and international academic conferences like the Inter-Asia Cultural Studies Society Conference in Singapore in 2013, the International Conference on Business, Information, and Cultural Creative industries (ICBIC) in Taiwan in 2014, the Console-ing Passions Conference in 2017 in North Carolina, the National Communication Association conference in Salt Lake City in 2018, and the Design as Common Good conference in 2021. Additionally, Dr. Wang has spoken in multiple forums and events about *The arqive*, including the ONE Gay and Lesbian Archive event "Mapping Queer Terrains" at the University of Southern California in 2015, the American Communities Program event "Queer Disappearance" in 2019, and the Los Angeles Contemporary Archives "Common Ground" in 2019. This project was also featured in the art publication, Hyperallergic, in 2019¹ and also claims a chapter in the book *Interactive Storytelling for the Screen* (edited by Sylke Rene Meyer, published in 2021). It has also won several awards for its branding and website redesign, including student recognition for the branding in Graphis² and Graphic Design USA (2020)³, recognition for the website from the Summit International Design Awards (2020),⁴ and an honorable mention from the International Design Awards (2022).⁵ In addition to awards, *The arqive* has also been used as an exemplar to apply to class concepts. Just at Cal State LA, around 150 students per year learn about the work that *The arqive* is doing.

Project Overview

The arqive exemplifies the project of digital justice. This platform, which is accessible both on desktop at <u>https://thearqive.com</u> and on mobile platforms (iPhone and Android), is the perfect opportunity to leverage the accessibility and visual design of digital technologies as a means to increase visibility of historically marginalized LGBTQ experiences and stories around the world. This project, at its core, foregrounds social justice, diversity, equity, and inclusion through a humanities perspective throughout all aspects of development/design, content creation, and outreach. We are requesting support from the American Council of Learned Societies to build out the next phase of development for *The arqive*. This next phase includes three components: 1) the continued development of the platform for both desktop and mobile use, as well as additional UX/UI features such as gamification and augmented reality; 2) content creation and research, which would include seeding more stories on the site through collaborations with researchers, graduate assistants, and other institutions; and 3) outreach to community partners, sponsors, and the public to increase visibility of this site, generate more user activity, and increase long-term

¹ https://hyperallergic.com/498115/common-ground-los-angeles-contemporary-archive

² "New Talent Annual 2021." Graphis, 2020,

www.graphis.com/entry/78b626d1-3f39-42d3-802a-f07cbb6168a8/.

³ "American Graphic Design Awards." *GDUSA*, 2020, http://gdusa.com/.

⁴ "Summit International Design Awards." Summit Awards, 2020,

https://summit.awardsplatform.com/gallery/eKmJnmNn/kdJPyVqD?search=940c8b5a5bf34ed2-1.

⁵ "International Design Awards." *IDA*, 2022,

https://www.idesignawards.com/winners/zoom.php?eid=9-34496-21.

sustainability. We are committed to keeping this a free and accessible resource, and this grant would help us solidify our foundation for longevity and growth.

1. Continued Development

The top priority of this project is to continue developing the technical aspects of the platforms, both desktop and mobile. Funding would support continued site and app maintenance, and the expansion of UX/UI capabilities, both on the mobile and the desktop platforms, ensuring smooth integration between the two, as well as maintaining easy user access to the platform. As *The arqive* is heavily geo-location based, a robust mobile application is crucial in the experiencing of the history that this site seeks to preserve. We plan to expand the gamification capabilities of the mobile app as it would help capture more real-time user-generated stories and make the platform "sticky", with users more likely to regularly check the site/app and generate content. The funding would support Cal State LA Computer Science students through their senior design project as part of the continued development of the site, as well as hiring a part-time developer to continue leading platform and accessibility development and expansion. Additionally, we will use the funds for hosting and server costs until such time as we can generate sustainable funding sources.

The arqive's server-side application is written in the Python programming language using the Django REST web application framework. The client-side web application is written in JavaScript using the ReactJS framework, while the mobile application uses the related React Native library to support both iOS and Android versions. Mapping functionality is provided by OpenStreetMap, a free and accessible foundation, and related Application Programming Interfaces (APIs). We also use numerous other open-source APIs to provide accessibility features, clustering of stories, CAPTCHA capabilities, and log-in procedures. Our code is stored on Github, an open-source code repository. We are currently able to use a free academic account to host the code repositories. *The arqive* and its database are hosted on DigitalOcean servers at the current cost of a modest \$27.51/month. As usage and the size of the database grow, we will require more server resources, but DigitalOcean's pricing will allow us to scale the servers

at a controlled pace. This is a major consideration as we work on sustainable ways to host more rich-media content on the site (e.g., images, videos, audio recordings, etc.).

As we seek to expand the reach and capabilities of the project on both desktop/browser and mobile platforms, our team plans to continue to focus on open source software. This approach enhances the financial sustainability of the project and allows our student development teams to practice finding publicly available development resources. We are currently conducting research to plan for augmented reality (AR) enhancements to *The arqive*. Future student teams will have a wide choice of AR platforms to choose from, with a variety of benefits and drawbacks. The majority of AR platforms require subscriptions or other forms of payment, but as with the rest of the project, we will prefer open source frameworks. In addition, with the counsel of a privacy/security specialist, we will also be able to better protect the privacy of vulnerable users, particularly in countries where homosexuality is still a crime.

2. Content Creation and Research

Funding would also be allocated toward building content for *The arqive* through collaborations and partnerships with community organizations and institutions, scholars, and other platforms doing this work. In particular, we are in conversation with scholars like Jen Jack Gieseking (University of Kentucky and author of *A Queer New York: Geographies of Lesbians, Dykes, and Queers*) and Dr. Megan Carroll (CSU San Bernardino), and organizations like the ONE National Gay and Lesbian Archives (University of Southern California) about how to build collaborative collections of stories through maps.

We recently hired a graduate research assistant to develop content and community engagement, and plan to hire another to lead and oversee two undergraduate research assistants to conduct archival research at the ONE Archives and the Los Angeles Contemporary Archive (LACA) in order to populate the site with historical data, community resources, oral histories, and other relevant stories. By doing so, we hope to provide emerging scholars an opportunity to practice research methods and contribute to their fields. We additionally envision sharing data and stories with other LGBTQ+ mapping sites, like Queering the Map, Queer Maps, Queer Terrains, the Digital Transgender Archive, etc. As such, *The* *arqive* serves as a prime opportunity for student researchers to contribute to the collection and preservation of queer histories in a digital format that is easily disseminated and shareable, both to those within LGBTQ+ communities and those interested in learning about Queer issues.

3. Community Engagement

Funding will also be used to develop new connections and maintain existing relationships with community partners and potential sponsors. With this funding, we will hire a public relations student to lead in the outreach effort. Our team would also greatly benefit from the coaching of the Nonprofit Finance Fund provided by this grant to help us better utilize and cultivate those relationships.

To date, there are a number of oral history projects that relate LGBTQ stories, as well as a handful of projects that map out LGBTQ stories, including Queer Maps⁶ and CurbedLA⁷, both of which map out LGBTQ historical locations in Los Angeles, and Queering the Map⁸, which allows users to post anonymous stories globally. Our project not only extends the reach of stories beyond a specific city, region, or country, but also allows users to post their own stories in addition to other histories and community resources. Furthermore, we have a multitude of additional features that allows a choice for anonymity or identified authorship of stories, user profiles, comment sections, mobile application development, and gamification—all of which serve to encourage visibility, connectivity, and community engagement on a global scale.

Scholarly Contribution

Collaboration with and support of scholars and students within our own community at Cal State LA and with other academic institutions is at the heart of *The arqive*. As *The arqive* may be used as both a storytelling platform as well as an ethnographic and data-driven research site, the potential for combining community engagement on a global level with innovative research projects based in space, place,

⁶ https://queermaps.org/

⁷ https://la.curbed.com/maps/mapping-los-angeless-groundbreaking-role-in-lgbt-history

⁸ https://www.queeringthemap.com/

geography, and history are expansive. From a development and training perspective, we will use this funding to sponsor teams of computer science students to continue development of this site through Cal State LA's Computer Science Senior Design Project (CS-SDP) program, where students get hands-on learning through working with sponsors (in this case, us), as well as graduate and undergraduate researchers in the humanities and social sciences.

Internal Partnerships

As mentioned above, there have been a total of 42 students from multiple different disciplines within Cal State LA involved with this project. We plan on continuing to provide opportunities for young scholars to participate, learn from, and contribute to this growing resource. Moving forward, we plan on leveraging and increasing engagement with several groups and entities on our campus:

- The Center for the Study of Genders and Sexualites which provides support for scholars, teachers, students, and community partners who investigate gender and sexuality;
- The Cross Cultural Centers which encourages student learning as well as foster an inclusive campus environment that challenges racism, sexism, heterosexism, and other forms of oppression. With a commitment to increasing cross-cultural awareness;
- The Institute for Interactive Arts, Research, and Technology (InART), an interdisciplinary response to changes in how we understand, share, and express our experience of the world embedded in new media and digital technologies;
- The Trans Queer Connection (TQC), an LGBTQIA+ student group on campus, and;
- The Women, Gender, and Sexuality Studies program.

External Partnerships

Other community partners will include LGBTQ+ resource centers (Los Angeles LGBT Center, The Center Long Beach, etc), health centers (like APAIT), and activist groups (like API Equality LA, Satrang, Latino Equality Alliance, NQAPIA, PinkDot, amBi, just to name a few) around the world. We also have existing relationships with scholars at other academic institutions, both locally and globally, giving us the opportunity to collaborate on research projects based on the content of this site, including those that revolve around geographic information systems (GIS), critical ethnography, sociology, anthropology, and media studies, among other disciplines. We have collaborated previously with archives that are social justice centered like the ONE Archives and LACA and will maintain these relationships while seeking additional opportunities in this area. In addition to research, the pedagogical implications and potential for such a project, particularly as it extends to inter-institutional collaborations and awareness, are significant.

Long-term Sustainability

By the start of this grant funding period, we will have *The arqive* fully functioning on a mobile platform, complete with a mobile app design and some early gamification elements implemented. We are currently in discussions with the Cal State LA University Library and Institute for Interactive Arts, Research, and Technology (InART) to discuss potential hosting and maintenance of the site. By integrating with Cal State LA's hosting services, we also hope to gain access to IT resources that will help us manage the back-end of the platform.

While our plan is to provide *The arqive* as a free public service, we are also working on creating a sponsorship option for community partners supplemented through soliciting donations from the public. We are committed that the main fundamental functions of the site—reading and posting stories, creating profiles, and commenting—remain free. The donations and sponsorship funds mentioned above will be used to support a part-time programmer to continue site maintenance and development.

A consideration we have for the site in terms of sustainability is the moderation of content. We have a built-in system in place to promote active and reputable users to become moderators of content on the site, in the style of Wikipedia, and we have also implemented a process of reporting offensive and

inappropriate posts. A major goal is for this site to be a valuable community resource, with active participation from the LGBTQ community, and engaging with the user community to create and moderate content is a sensible way to do this.

BIBLIOGRAPHY

- Farrar, M. (2018). Tackling Loneliness In The LGBTQ+ Community. Retrieved March 19, 2019, from http://www.theprouddiplomat.com/facts/2018/6/10/tackling-loneliness-in-the-lgbtq-community
- Gross, L. P. (2001). Up from invisibility: lesbians, gay men, and the media in America. New York: Columbia University Press.

PROJECT TIMELINE

<u>July–August 2022</u>: This phase will focus on building personnel infrastructure and include job postings and hiring for essential positions.

- The Development Lead will oversee the maintenance and expansion of the site
- Privacy/Digital Security Consultant will help ensure the safety and security of *The arqive*'s users
- Graduate Research Assistant will assist with, conceptualize, and oversee archival research and content generation for the platform.

<u>August–December 2022</u>: This phase will see the introduction of new interdisciplinary student teams to the project.

- The Computer Science Senior Design Team and Art teams will orient themselves to previous work (website and mobile app) and begin to research development and implementation strategies/technologies for gamification, as well as explore options to collaborate with other LGBTQ+ mapping digital projects.
- Concurrently, an undergraduate assistant will be hired for archival research and content generation to continue to populate the site/app.
- Deliverables will include the Requirements document for technological development, concept visualizations, and a content creation report for the project directors.

January–June 2023: This phase will build upon the work of the previous semester, focusing on the development and promotion of the gamification addition to the project.

• We will hire our Public Relations (PR) Consultant to identify potential partnership/sponsorship opportunities and create and implement targeted communications in pursuit of creating long-term financial sustainability.

- A PR team of students from Communication Studies will be added to the interdisciplinary group, focusing on promotion to the public and specific communities (e.g., LGBTQ, potential sponsors/partners, academia), and work with the PR Consultant.
- A second undergraduate assistant will be hired to continue archival research and content generation for the site/app.
- Deliverables will include implementation and launch of gamification on the app, the student-created PR strategy, community-based events promote the app within targeted communities and generate content, and a content report for the project director.

<u>August–December 2023</u>: This phase will see the introduction of new interdisciplinary student teams to the project.

- The Computer Science Senior Design Team and Art teams will orient themselves to previous work (website and mobile app) and begin to brainstorm and research development and implementation strategies/technologies for augmented reality (AR).
- We will also review our PR campaign and create a sustainability report in regard to partnership/sponsorship to share with the student PR team joining in January 2023.

BUDGET AND BUDGET DESCRIPTION

The argive (July 2022 - December 2023)

CATEGORY/DESCRIPTION	TIME PERIOD	COST
PERSONNEL SALARY/WAGES/BENEFITS		\$98,927
Cynthia Wang, Cal State LA, Departments of Communication Studies (Project Director): 3 units of course release for 2 semesters at \$3,393.6/unit and 49.5% benefits rate.	18 months / 2 semesters	\$30,441
Zachary Vernon, Cal State LA, Department of Art (Project Co-director): 3 units of course release for 2 semesters at \$2,598.80/unit and 60.952% benefits rate	18 months / 2 semesters	\$22,610
Sponsorship for CS-SDP (\$10,000/year)	18 months	\$15,000
Developer lead (\$50/hour)	400 hours	\$20,000
Graduate Student Assistant (\$22/hr including 17% benefits)	200 hours	\$5,148
Undergraduate Student Assistants (2 students @ \$17/hour including 17% benefits each student)	100 hours	\$3,978
Public Relations/outreach lead (\$25/hour)	30 hours	\$750
Privacy and digital security consultant (\$50/hour)	20 hours	\$1000
WEB HOSTING FEES		\$695
DigitalOcean hosting costs (\$27.51/month)	18 months	\$495
Domain fees	18 months	\$200
EQUIPMENT AND SUPPLIES		\$378
Printing costs	18 months	\$378
TRAVEL & LODGING		\$0
DIRECT COSTS		\$0
OPTIONAL COST SHARING		\$0
BASE PROJECT COSTS		\$100,000
TOTAL BUDGET REQUEST		\$100,000

INTELLECTUAL PROPERTY STATEMENT

The argive is committed to making the software, features, and content developed with grant fund open source. a) The software code that is developed with the grant funds for both the browser platform and the mobile app will be stored in Github and available as open source. b) The content of *The argive* itself is open to the public without registration or a password through the web and is considered a public repository of stories and information. c) There will be no infringement of third party rights with respect to the development, dissemination, and use of the software and/or digital content, as the software itself is originally developed and produced, as is the content/stories on the site, which are produced by users. Cal State LA will retain intellectual property ownership rights of the software, digital, and content created with the support of ACLS grant funds. Our terms of service dictates that all posted stories fall under a Creative Commons license (CC BY-NC) for the use of content posted. We plan on securing either grant funding or funding from other sources or additional features via gamefication past the grant date, and plan Vla _ on maintaining the software indefinitely.

PROJECT STAFFING

Cynthia Wang, PhD - Project Director - Communication Studies, Cal State LA

Cynthia is the Founder of *The arqive*. Her role is to oversee all aspects of The arqive project and seek additional funding opportunities and partnerships. She is responsible for managing the budget and personnel, as well as advising on research collaborations and content creation. She has a background in non-academic operations management. Additionally, her academic background in critical/cultural approaches will ensure that this project remains framed through social justice perspectives, and allow her to direct the research and content aspects of this project.

Zachary Vernon - Project Director - Art (Graphic Design/Visual Communication), Cal State LA Zachary is the co-Founder of The arqive. His role is to direct and oversee the creative and UX/UI design of the platform and promotional strategies/materials. His background is in advertising, branding, and design, having worked at local, national, and international levels with digital and full-service agencies. Research interests include interdisciplinary collaboration (in academia and industry), identity, and social design.

Development Lead

The arqive is seeking a Developer to lead expansion and maintenance efforts for our website and mobile application. The developer will be responsible for the documentation and ongoing maintenance of web/mobile, API, batch, and related identity and access management systems and web/mobile applications used across *The arqive*'s enterprise. This person should be fluent with the software and resources upon which *The arqive* has been built, while also being able to innovate and conceptualize better options as the platform develops. The position will last for 18 months with a start date of July 2022. John Hurley, the current faculty advisor for the Computer Science student team, will help evaluate potential candidates' technical competencies and expertise. We will recruit for this job through job sites

like Indeed and Glassdoor, as well as through the University's career center and other professional networks.

Privacy and Security Consultant

The Privacy and Security Consultant will advise the development and upkeep of digital privacy and security measures across both web and mobile applications for *The arqive*. The position will average 20 hours over the course of the grant, and will be specifically relevant pre- and post-launch of new features. The hired individual will start in July 2022. The hiring process will rely on the recommendation of the Computer Science faculty liaison to the project, John Hurley, to help evaluate technical competencies and expertise.

Public Relations Lead

The responsibilities of the Public Relations Lead will be to identify potential partnership/sponsorship opportunities and create and implement targeted communications in pursuit of creating long-term financial sustainability. The position will last for 30 hours over three months with a start date of January 2023 and will report to Cynthia Wang and Zachary Vernon. We will post this position opening on the Communication Studies internship page and the Career Center recruit this person through the recommendation of Communication Studies faculty

Graduate Research Assistant

The Graduate Research Assistant (GRA) will oversee 1-2 archival research projects around historic LGBTQ communities over the course of three semesters (18 months), and will generate at least one conference paper or journal article during the funding period. The GRA will also supervise the research of the Undergraduate Research Assistants and will report to Cynthia Wang. Recruitment will be done through reaching out to the Women, Gender, and Sexuality Studies (WGSS) and related

departments/programs on Cal State LA campus as well as nearby universities. The position will start in August 2022.

Undergrad Research Assistant (2)

The Undergraduate Research Assistants (URA) will pursue archival research and generate content (stories/posts) for the website/mobile app under the supervision of the Graduate Research Assistant. URAs should show interest in LGBTQ histories and communities. One URA will be chosen for each of the first two semesters of the project (Fall 2022, Spring 2023) and will last the entire semester. Hiring will be through the intra-university career services site, Handshake, and recommendations from faculty in various Cal State LA departments.