



ROHINGYA HISTORICAL ARCHIVE

Preserving Ancestral, Cultural, and Social Documents

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ABSTRACT

The Rohingya Project (RP) seeks to establish a sustainable future for the stateless Rohingya population through digital solutions seeking to educate, train, and empower them. Several services that hope to enable this marginalized group's financial and social inclusion have been established, namely the R-ID, the R-Academy, and the R-coin. The R-ID serves as a digitised self-sovereign identity stored on a blockchain platform, allowing individuals to manage and own their personal data. This is supported by the R-academy, which provides training programmes and education. As part of the financial inclusion arm of this project, they have tested a form of Cryptocurrency, the R-coin, which complements the social component of the organisation by serving as an incentive for refugees to engage in volunteering activities. This report seeks to outline the establishment of a new initiative by the Rohingya Project: the Rohingya Archive (R-Archive), and the results of the pilot programme testing it.

ROHINGYA HISTORY AND THREAT TO THEIR HERITAGE

A report by Reuters published in late 2018 depicts the systematic erasure of the Rohingya population in Arakan State in Burma. Following the flight of over 730,000 Rohingya due to a brutal military crackdown since August 2017, satellite images depict the areas where the Rohingya Muslims previously lived undergoing extraordinary changes. Their villages have been burnt, and the land has been replaced by new homes to facilitate the resettlement of Buddhist individuals, effectively getting rid of any evidence that the Rohingya were ever there¹.

Hostility towards the Rohingya is not a recent development in the predominantly Buddhist state. The prejudice is apparent when one considers the 1982 Citizenship Law that makes membership in a national race the prerequisite for citizenship of Burma. A privilege that the Rohingya did not experience. ² Driven by the belief that the Muslim population is trespassers from neighboring Bangladesh, Burma denies them citizenship despite their presence in the region spanning centuries. ³

¹ 'Rohingya Project – Financial and Social Inclusion Platform for Stateless', Rohingya Project – Financial and Social Inclusion Platform for Stateless, accessed 11 February 2022, https://rohingyaproject.com/.

² Nick Cheesman, 'How in Myanmar "National Races" Came to Surpass Citizenship and Exclude Rohingya', Journal of Contemporary Asia 47, no. 3 (27 May 2017): 461–83, https://doi.org/10.1080/00472336.2017.1297476.

³ Poppy McPherson, 'Three Years after Exodus, Myanmar Erases Names of Rohingya Villages, U.N. Map Makers Follow Suit', Reuters, 11 September 2020, sec. APAC,

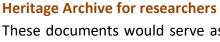
Consequently, a stateless population that is deprived of various other rights along with their identity- such as the freedom of movement, discrimination in access to education, and arbitrary confiscation of property is formed. ⁴ Erasure sought by the Burmese government has been slowly unfolding, with Rohingya slowly fleeing beyond Myanmar since 1978, even before the mass exodus since 2017.

OVERVIEW OF ROHINGYA ARCHIVE

While the other projects designed by RP aim to support the Rohingya refugee population and their survival in foreign lands following their expulsion from their home, the R-Archive directly responds to the erasure of the history and identity of the Rohingya. This is achieved by creating a decentralized digital heritage archive that preserves the legacy of the Rohingya, which is at risk of being forgotten. Documents ranging from personal articles (family photographs and letters) to legal documents (birth records, land and property deeds, civic service certificates, and especially identity documents, such as old passports and national ID cards) which prove Rohingya residence and participation will be archived. This would challenge the claims of a genocidal programme that hopes to rewrite Rohingya history.

Hence, this endeavour aids the Rohingya population in 3 keyways:

The documents would demonstrate the nature of life and the extent of civil participation of the Rohingya throughout history. Moreover, the archive would serve as a safe and reliable digital platform to store the documents, photographs, and the like that narrate the Rohingya's story across generations, which can subsequently be accessed from anywhere with ease. The continuation of the culture, identity, and experiences of the Rohingya across time and space would be enabled.



These documents would serve as crucial primary sources for those who seek to learn more about the plight of the Rohingya.

⁴ Human Rights Watch, 'Burma/Bangladesh: Burmese Refugees In Bangladesh - Discrimination in Arakan', 2000, https://www.hrw.org/reports/2000/burma/burm005-02.htm.



The suffering of the Rohingya people throughout history and in the present can be recorded as digital documentary evidence in the archive, which bears the potential to be used to support legal claims about dispossession and human rights abuses should it meet the necessary evidentiary standards.

The R-Archive works by storing data in a permanent and securely encrypted decentralised storage network known as Arweave, a form of blockchain technology. This project is made possible through the collaboration of several partners. RP operates on the ground through the provision and training of field officers who engage in collecting, scanning, and indexing documents in Bangladesh, Saudi Arabia, and Malaysia. The Catalyst grant by the Roddenberry Foundation, coupled with the Arweave grant, which provided the technology, funded the pilot programme. Moreover, the German technology solutions provider, Datarella, was in charge of the technical design, project management, and development of the R-Archive. ⁵

EXISTING ARCHIVAL MECHANISMS

Over the past decade, several digital archives have sought to memorialise history and genocides against populations like the Jews in the Holocaust and the Tutsis in the 1994 Rwandan Civil War. These projects inspire the R-archive in how the experiences of groups subject to persecution can live forever through digital archives.

Prominent preservation of genocide would be the United States Holocaust Memorial Museum which acts as "a living memorial to the Holocaust," seeking to inspire "citizens and leaders worldwide to confront hatred, prevent genocide, and promote human dignity". This is achieved by focusing on exhibitions (where some are available online) narrating the history of the Holocaust and its effects using historical artifacts, video footage, and personal stories. Interestingly, one of the online exhibitions available is on Burma's path to genocide. Personal stories of the Rohingya are documented, proving their very existence being erased through the burning of their villages, and showing proof of participation in Myanmar, albeit the rejection by the state. However, these are limited due to being rather broad and curated for the sake of exhibitions and showing a general timeline of events rather than serving as primary data and sources from, for instance, specific villages and periods.

⁵ 'USC Shoah Foundation Visual History Archive', accessed 14 February 2022, http://vhaonline.usc.edu.

The atrocities of the Rwandan Civil War have also been immortalised through projects like the Genocide Archive of Rwanda, which has become significantly more accessible through the online platform of the Archive. Along with the over 8,000 testimonies, videos, audio clips, photos, and documents, the digital Archive features comprehensive data on the topography and history of the memorial site, postgenocide reconstruction and peace-keeping information, and location-specific information from survivors and perpetrators. Access to these primary source materials has made the Rwandan genocide "one of the most comprehensively documented and easily researchable genocides of all time".

The Visual History Archive by the USC Shoah Foundation is presently the most comprehensive digital archive documenting testimonies of individuals' lives before, during, and after their first-hand experience with genocide. The online archive gives everyone access to over 55,000 video testimonies and 724,228 photographs and images from victims of the Holocaust and other crimes against humanity from 65 countries, making it the largest archive of its kind. ⁶ These are indexed according to over 65,000 keywords, making it an ideal resource for anyone, from researchers and documentary filmmakers to survivors and their families, to access primary sources. ⁷The current collections available include the holocaust, the Cambodian genocide, genocide against Tutsi in Rwanda, Armenian Genocide, Guatemalan genocide, Nanjing Massacre, Northern Syria, Contemporary Antisemitism, and Anti-Rohingya Mass Violence. Nonetheless, it is crucial to note that while there are over 50,000 files regarding the Holocaust in this database, there are only 11 thus far regarding the Anti-Rohingya violence, revealing a gap that the R-Archive can fill.

TECHNOLOGY REVIEW

The pilot R-Archive operates through Arweave, a mechanism that acts as a decentralised storage system. Arweave prides itself in making information permanence sustainable by allowing users and developers to store information forever accurately. The ability to preserve critical information for the rest of time is functional when considering the context of the Rohingya. Within a population whose histories and stories are threatened to be lost forever under a genocidal project, the ability to store data that cannot be rewritten indefinitely makes Arweave an irreplaceable asset.

⁶ 'USC Shoah Foundation Visual History Archive', accessed 14 February 2022, https://about.proquest.com/en/products-services/USC-Shoah-Foundation-Visual-History-Archive/.

⁷ USC Shoah Foundation, 'Collections', accessed 14 February 2022, https://sfi.usc.edu/what-we-do/collections.







R-Archive operates through a web app, where encrypted and carefully indexed documents regarding the Rohingya can be uploaded to the "Blockweave". The blockweave is a blockchain-inspired, open & permissionless data structure that enables extensive data storage while incurring minimal costs. Blockchain technology is typically not employed to store large amounts of data due to the sheer costs that would accrue. For instance, storing 1 MB on Ethereum would incur over hundreds of USD. However, the R-Archive uses the Arweave, where storing 1 MB would cost below USD one cent.

Permanent storage with low costs is possible due to Blockweave's data structure that only stores network nodes of arbitrary size. Within a growing weave size, miners likely only store a small fraction of it. But miners are motivated to replicate data sets frequently due to Arweave's consensus algorithm, which increases the chances of mining the subsequent block and earning rewards if they store more data. Permanent storage is possible due to the interaction between a conservative estimate of the development of storage costs and AR (fees paid in \$AR) transaction costs that go into an endowment value revealed to the miner. ⁸

Another benefit of Arweave for this project would be the non-custodial nature which enables the permanent storage of data in a decentralised manner. The Arweave network is also accessible via HTTP, compatible with existing web infrastructure. Moreover, it is crucial to note that the R-archive also acts as a pilot for using Arweave digital storage technology, bearing the capacity to benefit other archival systems and infrastructures should the pilot succeed. Hence, we can justify the use of Arweave in the R-Archive pilot project on several fronts. These include the low-cost permanent storage system and a clear chain of custody where every transaction is tied to the accounts that upload data.

⁸ 'The Immutable Rohingya Archive', DATARELLA (blog), 26 October 2021, https://datarella.com/the-immutable-rohingya-archive/.

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ROHINGYA ARCHIVE PILOT PROCESS

RP worked on a pilot program for the R-Archive across 2021 which aimed to

Illustrate the feasibility of employing a functional digital archive which remotely stored data on blockchain technology.

Perform a sampling of documents tied to Burma from the Rohingya diaspora in refugee communities in Malaysia, Bangladesh, and Saudi Arabia through a community-driven method which engaged in the data collection; and

To depict the possibility to scale up and expand the R-Archive to feature significantly more documents in the subsequent 18 months. This pilot unfolded specifically in Bangladesh, Saudi Arabia, and Malaysia which features the highest numbers of displaced Rohingya populations.

The first phase, planned to operate from January to June 2021, emphasised consultation with partners and research advisors to determine what would be the most appropriate method to engage in data collection in a way that met specific technical and legal standards. This stage revealed the necessity for video and audio testimonials to be attached alongside the recorded documents to elaborate the context and stories behind it.

The second phase, operating from July to November of 2021, sought to build the technological capacity of the project. Considering the limited resources available, a user-friendly digital archive was developed. Simultaneously, field officers were recruited and trained to reach out to the Rohingya community in the subsequent phase to carry out the collection of documents.

Finally, the document collection phase, held from November 2021 to January 2022 targeted the immediate community mechanisms available to the field officers. The concerted decision to not publicise the project was made to prevent the possibility of misinformation and to minimise any distress which might be caused upon the community.



PILOT RESULTS

The pilot program yielded 42 documents to be uploaded into the platform developed for the archive. These include old identity cards, passports, family listings, school certificates, and travel certificates which were officially issued by the Burmese government prior to the 1980s. These were supplemented with 25 audio and video testimonies by the owners of the documents who provided the context of the documents themselves such as the ease or struggles involved in attaining them. These documents were uploaded by the field officers from within the Rohingya communities in 3 locations: Bangladesh, Malaysia, and Saudi Arabia.

SAMPLE DOUMENTS









PASSPORT

FAMILY LIST

NATIONAL ID CARD THREE FOLD

NATIONAL ID PINK CARD TWO FOLD

Despite the success in collecting a considerable number of records which map the history of the Rohingya population, the pilot revealed several difficulties within the project itself. The development of the pilot was limited by the restrictions on the ground due to the ongoing pandemic. For one, training of the field officers had to be done online, which made the training less effective, and officers had to be supported beyond the training phase and during the document collection process itself. The pandemic also made it harder to meet those with documents for collection and verification purposes. Furthermore, many were unwilling to share their identity or resources due to unfamiliarity with the project and the organisation. This is evident in the disjoint between the number of documents collected and the corresponding testimonies.

NEXT STEPS

Moving on, the R-Archive hopes to increase the collection to 1000 documents within the next 18 months. This would be achieved with a scale-up plan of archival operations that considers the lessons learnt from the pilot through collaboration with experts to understand the necessary changes.

The existing interface for the archive would be refined and altered to enable easier categorisation of documents and filter different types of documents. Moreover, capacity building for field officers would take place to allow the mobilisation of a larger team of field officers who would operate with minimal external support from outside the field. The multi-year expansion plan also seeks to coordinate and combine the R-Archive with other existing databases that track Rohingya genocide information and train the refugees on archival methods

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