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Digitisation of audio-visual archives at the National Archives of Zimbabwe

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Abstract

This research pursues bringing to light the modern landscape of administering audio-visual archives at the National Archives of Zimbabwe (NAZ) and getting it on the journey towards digital preservation. The Victorian era paved the way to analogue technological evolution in the audio-visual archiving fraternity. A technological breakthrough initiated by a Frenchman, Louis Daguerre, led to the invention of a photographic image on a silver-coated copper plate medium in 1839. Again, in 1927, the outstanding Thomas Alva Edison positively documented audio on a rotating tin foil cylinder carrier. The form of documented memories in many African archives is mostly in conventional formats. Nonetheless, in the contemporary past, NAZ combined audio-visual archives and television archives that were raised up by the United Kingdom, which was the colonial supremacy during the period of 1890 to 1979. The British administration established the Colonial Film Unit at the commencement of the Second World War, in 1939, as part of political creativity focused on colonies. The NAZ audio-visual unit was born in 1988 under the library section to assist the information desires of the establishment, through the creation, purchase, organisation, preservation, and dissemination of audio-visual archives. The researcher used a qualitative case study methodology with an interpretivist perspective where the main focus of the research was on the NAZ's Harare head office. Interviews, document analysis and observations were used as the major data collecting tools. The results showed that the institution houses audio-visual materials and is still struggling to preserve all the formats digitally. Lastly, the study recommends the adoption of digital preservation mechanisms to facilitate the proper care and access of these precious non-conventional records as declared by UNESCO.

Keywords: analogue, audio-visual archives, digital, National Archives of Zimbabwe, preservation, television archives

Introduction and background

The Victorian era paved the way to technological progression in the cinematographic fraternity. A Frenchman by the name Louis Daguerre declared that he had captured a photographic image on a silver-coated copper plate in 1839. In 1939, the British government established the Colonial Film Unit (CFU) as part of propaganda creativity directed at colonies. The purpose of the unit was to explain the war to British subjects in the colonies and solicit their support and it was administered by the Rhodesia Ministry of Information. The CFU gave birth to the Central African Film Unit (CAFU) in 1948 that covered northern

Rhodesia (now Zambia), Southern Rhodesia (now Zimbabwe) and Nyasaland (now Malawi) from 1948 to 1963. Soon after the dissolution of the federal government in 1963, the southern Rhodesian government concentrated on community development film productions. Audio-visual records are the best historic critical foundations of phonological and cultural mixture, declared by the United Nations Educational, Scientific and Cultural Organization (UNESCO) as treasured cultural birthplaces of information.

The National Archives of Zimbabwe's (NAZ) audio-visual unit had over 3 000 film titles produced during the period of 1940 to 1980 which came in 16 mm and 35 mm gauges. Most of these films were produced by the Central Film African Unit and its predecessors (Federation Film Unit and Zimbabwe Production Services). The unit has a collection of television programmes, largely on U-matics, Betamax and VHS and has a small but growing collection of television programmes from the Zimbabwe Broadcasting Corporation (ZBC). A lot of history and culture are captured in these numerous collections, and people from within and outside the country make use of these materials, from individuals, organisations, artists, filmmakers, academics, government organisations and legislators. It is the responsibility of the staff working for audio-visual institutions to preserve, protect and provide responsible stewardship for the materials, and, to the best of their ability, provide continued long-term access (Russell, 2000). Asogwa (2011) laments that "the proliferation of digital information; the desire to access materials in remote locations; the quest for collaboration, partnerships and resource sharing; and the ever-increasing cost of preserving analogue materials are some of the forces that prompted digitization of archives and records." The Zimbabwean government, like most governments in Eastern Southern African Regional Branch of the International Council on Archives (ESARBICA) region, find themselves with other numerous tasks such as the eradication of poverty, food security, health, and education, which means that the preservation of audio-visual heritage remains a lesser priority. Such problems with cuts in funding are frequent in developing countries. Ironically, it is in such places that audio-visual archives are most desired since a large part of the African traditions and folklore are transmitted verbally. The study could be a significant platform to harness the support of all stakeholders and bring a fresh approach to audio-visual migration from analogue to digital formats. The development of such a strategy will aim to convince the governments that audio-visual documents are heritage information sources.

Contextual profile of the NAZ

The NAZ came into being through an Act of Parliament in September 1935 and resorted under the government of Southern Rhodesia. Soon after the country gained its independence in 1980, the department became known as the National Archives of Zimbabwe (NAZ) with its mandate the acquiring, preserving, and providing of access to the historical and cultural heritage of the country in whatever format. Television was introduced into then Southern Rhodesia (Zimbabwe) in 1960; it was the first such service in the southern region, as neighbouring South Africa did not introduce television until 1976. The ZBC introduced colour television in 1984, with a second channel available only in Harare in 1986, which was disconnected in 1997 and replaced by the first independent channel known as Joy Television (TV). Joy TV discontinued its operations in 2001 after failing to pay the necessary fees to the ZBC.

Statement of the problem

Digitisation was presented as a solution for anomalies of preservation and access (Britz & Lor, 2004:216). However, scholars like Chigariro (2014) have highlighted that digitisation is

an immense duty facing the NAZ. The existence and growing volumes of analogue audio-visual media have created new challenges in the institution to some degree comparable to conventional paper. Research studies done by Zinyengere (2008) and Matangira (2010) indicated that the NAZ, like the rest of African archival institutions, faces challenges in preserving audio-visual materials. These challenges have grown into an obstruction to the competent and effective access to audio-visual archives. The institution has basic infrastructure and technical equipment mainly for analogue media, and quite a few for digital technologies but suffers from technological lap. Obsolescence of analogue audio-visual carriers presents a challenge to the archivist in the audio-visual unit who lacks knowledge and skills in the digitisation of these valuable media.

Purpose and objectives of the study

The aim of the research was to examine the state of the digitisation of analogue audio-visual materials at the NAZ, the positive developments so far regarding the digitisation process and the challenges encountered and possible recommendations for better service delivery and access. Against this backdrop, the objectives of the study are to:

- To assess technical equipment, infrastructure, and storage vaults in place.
- To examine the technical experts, skills, and knowledge available.
- To determine the extent of the digitisation process of analogue audio-visual materials.
- To assess the challenges faced and propose solutions.

Methodology

The qualitative methodology was embraced in this research as the data gathering methods are seen as more natural than artificial (Amaratunga, Baldry, Sarshar & Newton 2002). Since a single case phenomenon was under inquiry, which was the NAZ Harare head office, the study adopted a single case study research design to produce all-inclusive, multi-faceted findings appreciative of a complex issue in its factual context where the researcher profoundly explores an event (Creswell, 2014). Digitisation of audio-visual archives is a contemporary topic and therefore a case study was favoured as the best research methodology. The population of the research consisted of the deputy director of the NAZ, responsible for the public archives, research, and library service division; one public archivists from the public archives and library service division; two audio-visual archivists and the chief archivist responsible for technical sections. Participants of the research were purposively nominated because of their knowledge of the administration of audio-visual archives at the NAZ. Data were also collected through document review and observation to augment the reliability of the findings. Interview transcripts, observation and document review notes were edited, encoded, and categorised in line with sub-themes or research questions of the study. The results are presented in the next section.

Presentation and discussion of findings

The first objective of the study sought to assess technical equipment, infrastructure, and storage vaults in place. In this regard, the study sought to have a complete understanding of the digitisation processes of audio-visual materials. The researcher observed the following equipment and storage vaults: film inspection, editing, cleaning, dubbing, preservation, viewing, copying, data entry for cataloguing and access, electric film inspection table, manual

film inspection table, film cataloguing table, ultrasonic cleaning machine, Telecine machine 35/16mm projector, film rewinding table, Sony video monitors, ree-to-reel audio player, gramophone, cold-rooms, dehumidifiers, Revox headphones, Revox tape deck, slide reader, Revox speakers, Ferguson video cassette recorder, video cameras, computers, black magic Cintel film scanner and VHS to DVD converter. The equipment found at the NAZ audio-visual unit corresponds with the basic equipment as propounded by the UNESCO (2007) guide for technical equipment as well as that of Schuller, Stickells and Storm (2004) on the basic equipment for audio-visual archiving. However, from the list of equipment found at the unit, the researcher noted that the unit was not fully equipped with digitisation equipment needed by an audio-visual archive, as it had the equipment for a basic audio-visual archive, as stipulated by Edmondson (2004).

The second objective sought to examine the technical experts, skills, and knowledge available regarding the digitisation of audio-visual archives. In this regard, an audio-visual archivist stated that "we have not yet received formal training in digitising audio-visual archives, the only group was of our predecessors who received training in 2011 through an audio-visual training workshop, which was arranged by the Eastern and Southern Africa Branch of the International Council on Archives (ESARBICA)." The institution has not planned courses in audio-visual archiving for the two audio-visual archivists who were in charge. Access to partnerships and training is a valuable resource that can be leveraged to help an archive improve its digital preservation and access initiatives (Van Malssen, 2012). The researcher observed that the unit did not have an in-house technician who, according to Kuiper and Bowser (1980) should likely be knowledgeable about the film processing systems, the chemical degradation of film, the optics of the projectors, the acoustics of viewing theatres, the mechanics of viewers, the maintenance of the electronic and electrical apparatus and, in the spare moments, program the computer for the cataloguers. With regards to training, when interviewed, an audio-visual archivist indicated that "the institution also facilitates the training of audio-visual archivists in countries like the United States of America, Brazil and India; but after the training, these audio-visual archivists will leave the institution in search of greener pastures. Recently trained audio-visual archivists from the George Eastman House in USA left the unit after he got training for greener pastures."

The third objective sought to determine the extent of the digitisation process of analogue audio-visual materials. In this regard, responses from the interviews with audio-visual archivists indicated that "the unit is currently digitising film archives to a lesser extent and not any other audio-visual formats since we have got one film scanner. The digitisation process is on high quality making use of high-definition archival standard." Responses from a senior audio-visual archivist indicated that, "the digitisation of film is still ongoing, and the project was initiated by the International Federation of Television Archives (FIAT) in 2018." Another participant indicated that, "the institution has got plans for digitising other audio-visual materials as well."

The fourth objective sought to assess challenges faced when digitising audio-visual archives. Responses from an audio-visual archivist indicated that "we are facing complications from films that are affected by vinegar syndrome." The researcher observed that the unit lacked an in-house technician who should assist in preparing and repairing films and equipment housed in the audio-visual unit. Responses from an audio-visual archivist highlighted that "technical challenges are rapidly increasing, yet the resources of the institution are becoming a big limitation." The researcher observed malfunctioning of analogue equipment that is used for film preparation, access, and repair for digitisation. Responses from an audio-visual archivist

indicated “the upkeep of cold-rooms that are used to preserve film archives has been the main challenge as they are exclusive to sustain and only a few specialists are available in the nation capable of restoring them.”

Conclusion and recommendations

Audio-visual materials are important to every citizen regardless of colour, creed, political inclination, gender, and stature in society. Access to content is via migration to new technologies through digitisation. When migration initiates are not available, audio-visual materials will face technological obsolescence. The audio-visual archive had basic equipment for analogue audio-visual archiving, but the institution has not adopted digital equipment for all the formats due to inadequate funding because it is a government department with a stringent budget like the rest of African governments who prioritise food and health. Most of the staff are graduates of disciplines that are totally irrelevant to the film industry or documentation, buttressed by a lack of trained staff to assume various responsibilities in film and television archives and a lack of an in-house technician to repair the equipment. The audio-visual unit is a member of the IASA, AMIA, FIAT and several other audio-visual organisations, but, lately, the institution has not been in a position to send its members to attend workshops on analogue and digital technology in their profession and thus the unit was left behind and faced obsolescence of its equipment and analogue technology. In addition, the audio-visual archivists are not receiving scholarships from these organisations for training in digital archiving in the developed countries.

The institution should network with regional audio-visual archives with the same digitisation projects such as the National Film, Video and Sound Archive of South Africa (NFVSA) to assist in digitising audio-visual archives. The audio-visual archive of South Africa is well established, and NAZ audio-visual archivists should cooperate with the South African audio-visual archivists through training and workshops on digitisation through some inter-archival arrangements. Audio-visual archivists should be taught general maintenance work on repairing playback equipment such that audio-visual carriers will be digitised successfully and all the processes of audio-visual archiving will be performed effectively and efficiently. Audio-visual archivists need to have general technical expertise of the equipment they use in order to be familiar with them. Obsolete equipment should be replaced by equipment needed for the task even if it is second hand. Edmondson (2004) emphasises the cannibalising part of the equipment, which includes that of using old parts from non-working equipment to fix other machines.

The institution should network with national film archives from developed countries to donate digitisation equipment they no longer require but that is still in good condition. In 2006, through networking, the audio-visual unit received a 16 mm Pageant projector courtesy of Tim Wagner and inspection bench handles courtesy of the Northeast historic Film, which were shipped to the NAZ by the George Eastman House at their own expense. This cooperation and networking among film archives and audio-visual archivists should continue. Policy makers should appraise the current archival legislation to reflect new digital technologies. This is crucial in the case of the NAZ and other institutions within the region. The NAZ was struggling to propose the amendment of the NAZ Act of 1986 so that it would accommodate legal deposit of audio-visual archive materials of Zimbabwean concerns as it was at the NAFVA of South Africa Act No. 43 of 1996. There is need for the institution at large to engage with the global community, which includes the Japanese Cultural Fund which used to donate a lot of audio-visual equipment and helped to rescue the dissipating audio-

visual materials. This can also be done through training, attaching experts to the unit, and offering financial rescues.

References

Amaratunga, D., Baldry, D., Sarshar, M. & Newton, R. 2002. Quantitative and qualitative research in the built environment: application of mixed research approach. *Work Study*, 51(1): 17-31.

Asogwa, B.E.. 2011. Digitization of archival collections in Africa for scholarly communication: issues, strategies, and challenges. *Library Philosophy and Practice* [Online] Available WWW: http://unllib.unl.edu/LPP/ (Accessed 03 March 2022)

Britz, J. & Lor, P. 2004. A moral reflection on the digitization of Africa's documentary heritage. World library and information congress: 69th IFLA general conference. *IFLA Journal*, 30(3): 216-223.

Chigariro, D. 2014. Collaboration in the management and preservation of audio-visual archives: a case study of the National Archives of Zimbabwe. MLIS dissertation, University of the Western Cape, Western Cape.

Creswell, JW. 2014. *Research design; qualitative quantitative and mixed methods approaches*. 4th edition. London: Sage.

Edmondson, R. 2004. *Audiovisual archiving: philosophy and principles. UNESCO Recommendations for the safeguarding and preservation of moving images*. [Online] Available WWW: http://www.ifap.ru/library/book104.pdf (Accessed 02 February 2022)

Kuiper, J & Bowser, E. 1980. *A handbook for film archives. International Federation of Film Archives (FIAF)*. FIAF Secretariat, Brussels.

Matangira, V. 2010. Understanding the basics of audio-visual archiving in Africa and the developing world: challenges for the archive lagging behind. *ESARBICA Journal*, 29: 14- 18.

Russell, A. (2000). Preface. In Sitts, M. (Ed.), *Handbook for digital projects: A management tool for preservation and access*. [Online] Available WWW: http://www.nedcc.org/digital/dighome.htm (Accessed 20 February 2022).

Schuller, Dietrich, Lloyd Stickells & William, Storm. 2004. Audio archives. In: Guide to the Basic Technical Equipment required by audio, film and television archives. Milton Keynes: TCC, 1991, 27-37.

Van Malssen, K. 2012. Tools for smaller budgets. Using open source and free tools for audio-visual digital preservation workflows. In: *Avinsider 2: Preservation in Times of Precarity*, 2: 13-20.

Zinyengere, I. 2008. African audio-visual archives: bleak or bright future. A case study of the situation at the National Archives of Zimbabwe. *International Preservation News*, 46(1): 37-41.