AUDIO-VISUAL PRESERVATION: A PERPETUAL DILEMMA AMONG SELECTED PHILIPPINE ACADEMIC LIBRARIES

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Abstract

The paper looks into how three of the major academic libraries in the Philippines – the University Library of the University of the Philippines Diliman, the Rizal Library of the Ateneo de Manila University and the University Library of the De La Salle University Manila – in custody of audio-visual collections are coping up with the looming issue of media obsolescence. As these libraries/media centers face the daunting turn in media preservation brought about by technological advances, including digitization, the apparent dilemma seems to be the identification of the most appropriate media carrier that can withstand technological shifts, at least at the moment. The search for the suitable medium is rather what complicates the preservation of cultural heritage in the Philippines today, as intensified by the day-to-day existing material degradation factors that put the AV materials at risk. The audio-visual preservation issues and challenges being confronted by these libraries and the preservation strategies and opportunities that they undertake are the major focus of this paper. The paper offers a glimpse of the AV preservation situation in the Philippines as well.

Keywords: audio-visual preservation, media obsolescence, cultural heritage, libraries

INTRODUCTION

People take pictures, shoot videos or record speeches and music because they would want to capture every moment that would probably speak of their history someday. They would keep it safe and locked away in their memory banks. When the time comes for them to sit down with their grandchildren to reminisce and relive these fondest memories, they can always go back, flip pages or playback videos and records. It is this guarded trove of legacy that people would want to impart to their grandchildren, so that the next generation would have the opportunity to understand their heritage.

This is the very core of preservation. Feather (2004) explains preservation as something that has got something to do with the means by which the documentary heritage is handed down to future generations, while being made available to current users. Past, present and future are the keywords of preservation. Whatever was documented in the past is what present users are benefitting from today, and it is the role of today's users to safeguard the heritage for the future generations to enjoy. Therefore, there should be a <u>means</u>, a tangible medium that is, to document the information one is intending to preserve.

This medium is what complicates the preservation of cultural heritage today. While the principle and documentary intention of preservation remains purposeful, the type of information carrier that can withstand the test of time and technological shifts without limiting user access has become a major issue in audio-visual preservation. Although there is no promise that guarantees everything can be preserved for life, the librarian or archivist is left with no other choice but to put his foot down and try to put an end to the document format dilemma. And doing so, or at least persist trying, is not a piece of cake.

PRESERVING THE HERE AND NOW

It is instinctive among media custodians the desire and keep everything in their collection for the sake of the future generations to come. What is in fact being safeguarded here is not the media carrier *per se*, but the information contained in these media. Protection of the intangible heritage is always the advocacy of preservation.

Despite the looming reality that it is impossible to preserve everything forever, it does not follow however, that custodians and preservation managers can not do anything about it. What is achievable can be done. At this point, the gathering of the AV collection in one place and putting them in storage to extend the collection's lifeline is already an act of preservation. Edmondson (2002) defined audio-visual preservation as the "totality of things necessary to ensure the permanent accessibility, with minimum loss of quality, of the visual or sonic content or other essential attributes of the work concerned". Preservation managers are all up and arms in ensuring that there is minimum loss of value in the documentary heritage as it is being cared for, since permanent accessibility is the major point of preservation. If the carrier is decayed and inoperable, there will be no other way then to get to its content, therefore no cultural transmission will ever occur. Preservation adds significance to the archival value of the object, this being the bearer of historical evidence (Smith, 1998).

To make preservation of audio-visual materials happen, a preservation policy must be put into place in order to have a sense of direction for this undertaking. This policy is intrinsic to the institution that will constitute it. Feather (2004) further identified the components that must be integrated into the preservation policy. It should reflect the institution's:

- (1) history, ownership and function
- (2) financial and human resources
- (3) nature of buildings in which it is housed

The policy mainly anchors on the institutional aims that will characterize the taking shape of the audiovisual archives, library or media center. Therefore, the policy that is drawn should be doable and practicable, by all means. Administrative support is especially crucial to the preservation manager, who will be the chief implementer of the preservation work.

AUDIO-VISUAL PRESERVATION IN THE PHILIPPINES

In his UNESCO technical report, Roads (1981) conjectured that the Philippine cinema will continue to flourish and escalate in the years to come. This can be rooted on the fact that the country has an enduring history of film and television industry. And with the advent of cable and satellite technology, even the *bahay kubo* (nipa hut) in the far-off rural areas now has color television that an entire household can gather around and benefit from. The fact that cinema has been culturally ingrained among Filipinos is enough testament of the vast audio-visual heritage collection the country has amassed over the years.

The Magnetic Culture

Fifty years ago, the magnetic tape era would have given a posterity promise to the broadcasting world. With the wear and tear capacity of this medium at that time, magnetic tapes seemingly offered greater

advantages over film stocks in terms of malleability and cost. For these reasons, a videotape was seen as "...a medium for long-term historical record keeping" (Martin, 2005). However as with most information carriers, this medium is not exempt from the elements of the ever changing shifts in media technology. Its physical benefits may have foretold its life expectancy as the ideal carrier, but not really.

The Philippines also basked in the ostensibly endless possibilities offered by the magnetic tape technology. To this day, old studio giants, such as the *Sampaguita Pictures* for example, maintain film archives of their motion picture productions and keep preservation copies of their master negatives in Betacam or U-matic tapes. These magnetic formats render broadcast quality transmission as it functions as the film's second generation copies. Third and fourth generation duplicates, later in Beta or VHS, would emanate from the second wave materials. Media libraries, on the other hand, are repositories of mainstream audio-visual materials. Earlier on, video recordings usually come in VHS or Beta formats, while sound recordings in sound cassette tapes. Preservation copies are made using the same media, i.e., Beta to Beta, cassette to cassette.

This duplication practice, a common preservation strategy applied by archives and libraries, is a continuing effort done by media custodians in line with their objective of keeping the information contained in the magnetic carriers going. *Refreshing* – "the continual copying of data from one carrier to another" (Webb, 2004), is a common response to this issue. Because of its flexibility, a magnetic tape usually has high levels of resistance and that its quality only gets affected after several hundreds of replays, therefore, much less vulnerable (Schüller, 2004). However, one drawback of duplication – although a cheap process, is the generation loss of quality. The carrier is *refreshed*, and yet its quality diminishes. This practice weakens the physical integrity of the magnetic tape as well.

Far beyond the mechanical stress brought about by *refreshing* is the damaging effects imposed by nature upon the magnetic tape. The Philippines' tropical climate is a degradation agent itself to magnetic media. For smaller archives and media libraries in the country, warding off the effects of nature is an enormous challenge in defending their audio-visual collection. This inevitable danger limits the retention aspect of magnetic media.

Given the limitations of this medium, although still in existence, magnetic media's life expectancy proved not to be very promising (Van Malssen, 2008). For this format to survive until the next wave of media carriers comes along, contents of magnetic tapes should be constantly transferred into another carrier. Or better yet, copying the data from less stable to more stable medium – *media transfer*, that is (Webb, 2004). Or even better: migration.

Going Digital

Audio-visual archivists recognize the daunting turn in preservation at this time of booming technological advances. It is apparent that "the creation, distribution, preservation and reuse of media materials will soon go digital" (Van Malssen, 2008). This shift of preservation strategy could be rooted mainly on the emergent issue of obsolescence, another key enemy of information carriers. No matter how well-kept the media carriers are, if the playback equipment units for which to replay them get superseded every time, the information carriers then get stale, therefore no knowledge transfer will ever occur. The solution that quite addresses this technical problem is to migrate whatever must be preserved from one file format to another (Webb, 2004). Van Malssen (2008) emphasized that reformatting is urgent, "not only because of the deterioration of carriers, but more so, because of the disappearance of playback

equipment and parts". Once again, the intangible heritage is what is at stake here. Every possible solution to safeguard the content must be exhausted. Accommodating every single technological option, if only to preserve the documentary heritage, should be considered.

It seems that with the current condition of audio-visual preservation, digitization is the anticipated system to embark on. There have been a number of digitization ventures locally, from the simple migration of analog magnetic tapes to digital video discs (DVDs) in small libraries, to major digitization projects, such as the *Philippine eLib* project (i.e., digitization of rare Filipiniana/Philippine collection materials) of the government. However plain or grand, media custodians are taking baby steps in protecting the documentary legacies in media carriers.

While digitization offers hope of being a long-term solution to material and immaterial longevity, Rothenberg (1999) believes that this technological shift rests on a "technological quicksand". This system may have been working perfectly today, as with magnetic culture fifty years ago, but it does not ensure stability in the future. Although promising, digitization is not yet the final frontier. The trick is not to lose sight of what should be preserved. Rothenberg (1999) further suggests that "it is necessary to develop a truly long-lived solution to digital longevity that does not require continual heroic effort or repeated invention in new approaches every time formats, software or hardware paradigms, document types, or recordkeeping practices change". Preservation managers must be quick to anticipate what is next to come and prepare themselves for any preservation eventuality.

BATTLE FORMATS: MEDIA LIBRARIES IN DILEMMA

As the rest of the audio-visual archiving community explores alternatives, if not for a feasible solution, to fight off the scare of media obsolescence, another sector is also working hard to manage this emerging predicament – the library.

Big university libraries in the Philippines are most likely to maintain media resource centers to complement their print collection and other services in support of their patrons' instructional and research needs. Since curricular support is its primary thrust, a library tends to concentrate more on building up their collection, and then its preservation. This is where a library media center and an independent AV archive usually differ. While archivists are vigilant in the safeguarding and up keeping of the AV materials more than collection development, librarians on the other hand, pay more attention to research and information support, as this is their foremost role. However, this does not mean that media custodians in libraries are not concerned with preservation at all. With the apparent shift in media carrier generation taking place, media centers are truly not exempt from the obsolescence crisis. And this they are definitely not putting aside.

The Media Centers of the University of the Philippines Diliman (UPD), the Ateneo De Manila University (ADMU), and the De La Salle University (DLSU) Libraries

The libraries of the UPD, ADMU and DLSU are considered ancient, as these universities came into existence for more than a hundred years to date: ADMU in 1859, UP in 1908, and DLSU in 1911. Over time, their nature of library collections has evolved parallel to the progressing needs of their library users, as they keep in step with their common mission of providing the best access to information in support of instruction, research, extension and other programs of their institution. From loose

manuscripts to books, libraries now have alternative resource centers for AV materials and electronic resources. These non-book formats offered a more stimulating learning environment among the library's researchers, which they continue to benefit from and enjoy. UPD's Media Services Section (UPD-MSS) and DLSU's Instructional Media Services (DLSU-IMS) started building their AV collection in the late 80s, while ADMU's Rizal Library Multimedia Resource Center (ADMU-RLMRC) began setting up theirs in the late 90s.

Collection make up

The three university libraries' media centers are home to a large number of audio-visual resources covering a myriad of subject areas, both of local and foreign genres. Since they adhere to their own collection development policies (CDPs), these media centers collect materials that are in line with their universities' research and institutional curricula. Common subject areas include local and foreign documentaries with socio-political contexts, humanities, language studies, general interest, and mainstream motion pictures and music. General material composition of video recordings is in magnetic format (Beta and VHS) and optical disc format (DVD and VCD), while its sound recordings are in audio cassette tapes and optical disc format. A majority of these three media centers' video recordings are in VHS format, as this was the most prevalent format at the time they began putting their AV collection together. They later on acquired these in DVD and VCD formats. Slide sets are also collected, with accompanying music in audio cassette tapes.

Preservation issues and line of attack

It is evident that the foremost hurdle confronting small but progressing media centers is to synchronize what is stipulated in their preservation policies vis-à-vis the limitations they have at hand. While it is widely an acknowledged deficit in managing their own collections, there are no written preservation policies in the three identified institutions. They simply follow the common rule-of-thumb preservation procedures, oftentimes improvising on some practices, when specific preservation materials are not locally available. Quick thinking and improvisation often compensates the scarcity of resources – generic silica gels for magnetic tapes, charcoal as dehumidifier for films, scissors as splicer, isopropyl alcohol on inexpensive but lint-free cloth for cleaning audio and video tape heads, preservation winding (preswind) magnetic tapes, and air-conditioned rooms as vaults for low-temperature storage are just some of the media centers' inventive measures to keep its preservation efforts at bay. As for cold storage, the rooms provided for the collections of ADMU-RLMRC and DLSU-IMS are in good form. The ADMU Rizal Library has a new library building with a very good, well-architectured provision for its Media Resource Center. Although situated in a small corner, the DLSU-IMS is housed in a fully-centralized, air-conditioned library building, which meets the temperature requirement for the storage of its collection. Meanwhile, UPD-MSS is struggling with poor air-conditioning system, which is sadly ironic, considering that they have the largest collection compared to the two media centers. The Philippines' tropical climate, with occasional power shortages coupled with feeble storage conditions could truly cripple a media center's AV collection.

Another aspect of the preservation program that seem to prove challenging to media centers is the budget. As Puplick (2009) puts it, "the first and most pressing, especially in these times of global financial stress, is that we lack the money and the resources to identify, preserve and protect these treasures". Money is always the common denominator as preservation processes do not come cheap. In

the case of the three institutions, it is the UPD-MSS that usually faces the dilemma of preservation due to the large number of its collection and its relatively small finance base for its maintenance, unlike the ADMU-RLMRC and DLSU-IMS which can always source out money from their home university, being private institutions. Budget and storage are other issues that frequently hamper preservation which oftentimes leave pieces of its collection with irreparable consequences.

Along with technological developments comes the human resources issue of the preservation program. The chief media custodians of the three media centers have different specializations as librarians, with staff members as AV equipment operators. Once again, the thrust of librarians and media custodians in libraries hinges more on instructional and research support, but AV preservation training is fundamental to the maintenance of the AV collections. As there is really no formal course specific to AV preservation offered in the Philippines, and with occasional opportunities for AV preservation training that seldom trickles down to the staff level nor afforded by the staff whenever available, staff members of all three institutions end up relying upon themselves to discover improvised preservation techniques they get to learn and adapt over time. They capitalize on self-training based on their personal experiences on AV preservation and trouble-shooting skills gleaned along the way. Keeping abreast of the new technologies require continuing education and training, and this is another aspect that the media custodians have to be vigilant about.

Obsolete assault

Perhaps the thinnest tight rope the three media centers are now treading is the scare of obsolescence. With their role as an instructional support system, the impact of media obsolescence is especially felt whenever there is a problem with replaying video and sound recordings in tape format. A large bulk of ADMU-RLMC's and UPD-MSS' video collections consist of Beta and VHS tapes, and with the frequency of servicing these materials to their students, mechanical stress is experienced by both the tape itself and its playback machine, therefore, causing the material, the machine and its accessories (e.g., video tape rewinder) to break down. To make matters worse, playback machines and parts, as well as magnetic tape formats are all rapidly going out of the Philippine market. Given this alarming reality, the media custodians of the three media centers were prompted to take action.

To ease the impact a little, the media carers of the UPD-MSS, ADMU-RLMRC and DLSU-IMS resorted to producing preservation copies of their AV collection. Refreshing became their common preservation practice. This is to ensure continuity and sustainability of the information contained in the media carriers, while it could still be exhibited for class instruction. The initial procedure was to duplicate using the same medium, e.g., VHS to VHS. But with the steady shift in media technology, modern media equipment and equivalent machinery later became prerequisites. Over time, VHS players have started disappearing and then DVDs became the popular format with the most available playback machines in the market today. Hence, the three media centers later turned to another preservation strategy, which is migration – the copying of what must be kept from one file format to another (Webb, 2004). The ADMU-RLMRC and the DLSU-IMS use capture cards installed to a computer to record the video being played on a VHS machine straight into the hard disk, to which a special software converts it into a video file. This is later converted into a movie file playable among compatible DVD players, and then burned into a DVD. The UPD-MSS on the other hand, uses a DVD recorder (DVDR), lined in from either a VHS or Beta player, to capture the video, to which the DVDR burns it directly into a DVD.

The respect for the intellectual property rights is still being upheld, and the three institutions are well aware of the law. Therefore, preservation for in-house exhibition and classroom use is the primary intention as to why all three media centers adopt this strategy. While the DVD is the current media carrier that is portable and readily playable today, these institutions recognize that this may not yet be the carrier that could guarantee longevity and that there could be another stable medium – or system, that may open up opportunities for long-term stability. Digitization is now happening left and right and could be the next big thing to ease the challenge of obsolescence being faced by the media centers in the country. The UPD-MSS, ADMU-RLMRC and the DLSU-IMS are trying its hand on digitization inch by inch. Aside from migrating its video collection, the UPD-MSS is likewise exploring on digitizing its sound recordings into portable file formats (MP3). On the side, there have been slide sets which were digitized using simple scanning machines.

Truly, the above-mentioned efforts and procedures may put the three media centers on the "wrong side of the digital divide" i.e., storing AV collection onto a DVD (Van Malssen, 2008). But if only to preserve the contents held by their present media carriers, this is by far a better alternative than to have no preservation strategy at all. At this time, the end goal of preservation, i.e., accessibility of the content for the future is carried out.

BEYOND THE SHADOW OF THE UNKNOWN

If there is one thing clear in all three media centers at present, it is the fact that there is yet an ideal media format for which to store information, as each format poses a problem when it comes to mechanical integrity. Each has its own fragility. As such, the trick now lies on proper storage and handling techniques for each type of data carrier. The basic rule of thumb to ensure media stability for now is controlled temperature and relative humidity conditions, while in handling, it is to keep the data carrier clean at all times. Data carriers require handling techniques inherent to each type, so as to avoid deformation.

The assumption in the AV archiving domain is that everything will go digital. Librarians and archivists must then engage themselves in standard preservation techniques while they wait for future developments in AV archiving. As for the UPD-MSS, ADMU-RLMRC and the DLSU-IMS, their ultimate goal for now is to eventually create a digital media library that will serve both their constituents while at the same time, safeguarding cultural heritage and information to be passed on to the future generation of library users.

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REFERENCES

- Edmondson, R. (2002, March). SEAPAVAA manual for AV archives: an outline prepared for UNESCO. Retrieved August 1, 2009, from the South East Asia and Pacific Audio-Visual Archives Association: http://www.pia.gov.ph/seapavaa/downloadables/SEAPAVAAMANUALoutline.doc
- Feather, J. (2004). Introduction: principle and policies. In Feather, J. (Ed.), *Managing preservation for libraries and archives: current practice and future developments* (pp. 1-25). England: Ashgate Publishing Limited.
- Martin, J. (2005). The dawn of tape: transmission device as preservation medium. *The Moving Image*, 5.1, 45-66. Retrieved July 29, 2009, from Project MUSE database.
- Puplick, C. (2009). Is our audio-visual heritage at risk and how can we work together to resolve these problems? Bandung, Indonesia: 13th South East Asia and Pacific Audio-Visual Archives Association (SEAPAVAA) Conference. Retrieved August 1, 2009, from the South East Asia and Pacific Audio-Visual Archives Association: http://www.pia.gov.ph/seapavaa/papers/2009/s5-puplick.pdf
- Roads, C. (1981). Audio visual archiving in the context of South-East Asia: report prepared for the government of the republic of the Philippines by the United Nations Educational, Scientific and Cultural Organization (UNESCO). Retrieved August 1, 2009, from http://unesdoc.unesco.org/images/0004/000470/047053eo.pdf
- Rothenberg, J. (1999, January). Avoiding technological quicksand: finding a viable technical foundation for digital preservation. *Council on Library and Information Resources*. Retrieved July 31, 2009, from http://www.clir.org/pubs/reports/rothenberg/contents.html
- Schüller, D. (2004). Sound recordings: problems of preservation. In Feather, J. (Ed.), *Managing* preservation for libraries and archives: current practice and future developments (pp. 113-131). England: Ashgate Publishing Limited.
- Smith, A. (1998, May/June). Preservation in the future tense. *Council on Library and Information Resources*, 3. Retrieved July 31, 2009, from http://www.clir.org/pubs/issues/issues03.html#preserve
- Van Malssen, K. (2008). Joint Technical Symposium 2007: audiovisual heritage and the digital universe, University of Toronto, June 28–30, 2007. *The Moving Image*, 8 (2), 78-86. Retrieved July 29, 2009, from Project MUSE database.
- Webb, C. (2004). The malleability of fire: preserving digital information. In Feather, J. (Ed.), Managing preservation for libraries and archives: current practice and future developments (pp. 27-52). England: Ashgate Publishing Limited.