



MUHAMMAD SUBUH FOUNDATION

WSA – MSF 2011 AGREEMENT

Preservation of the Audio recordings of Bapak's talks

(2012 – 2014)

Final report

(14 July 2014)

The Agreement

Following the joint decision of WSA and MSF in June 2011, an archives agreement (contract of work) was signed between the WSA and MSF on December 13, 2011 for the professional re-mastering, to current archival standards (digital conversion) of the original sound recordings of Bapak's talks with a budget of \$231,000. On December 31, 2011, MSF was able to sign a contract and a Project Identification Document (the technical parameters for the digitization project) with Memnon Archives Services. This was followed by a visit by Bachtiar Lorot (MSF) and Armand Bisson (WSA) to Memnon, in Brussels on January 31, 2012.

Discussions with the Memnon managing director, Michel Merten, confirmed some of the key elements of Amalijah's advice to the WSA in 2009 relating to digital conversions: 1) permanently monitor the stability of the digitized files; 2) manage digital files through changing technologies; 3) control authenticity of content.

In accordance with the WSA – MSF archives agreement, MSF hired a Subud technical expert in sound archives management and preservation, Amalijah Thompson, who worked for many years as an archivist for WSA. The contract was signed on April 11th, 2012.

The Film

A one month contract was also signed on March 1st, 2012 with Olivia Lorot, a third year student at a film making university in Spain. Olivia and Bachtiar went to Brussels on April 23rd, 2012, to do interviews and film the digitization process. During the weekend of April 28th and 29th Olivia came to Orgiva, Spain, to meet with Bachtiar to discuss editing the film and during that visit, Olivia was able to record interviews with Subud Members about the importance of Bapak's talks to them.

Final editing of the "Memnon Digitization Film" took place at Alicante between May 26 and May 28 with Amalijah and Bachtiar. Amalijah was able to take a copy of the film to present it to Memnon on May 29th, at their request, before distribution.

The Changes

In September 2012, Memnon informed MSF that the total number of the audio recordings was 2500 hours. This was significantly higher than the 1900 hours originally budgeted for. It was also very clear that the digitization could not be completed before of the end of 2012.

Because of this situation, it was agreed with Memnon to split the project into 2 phases:

- Phase 1: the digitization, in 2012, of the audio recordings that did not require a prior restoration
- Phase 2: the digitization, in 2013, of the audio recordings that required some restoration prior to the digitization process; these were named the "exceptions"

Consequently, it was necessary to extend the WSA - MSF agreement to 2013 (for the "exceptions") and to add a new budget item for the Memnon project in the 2013 MSF budget. On October 2012, the MSF board of trustees and the WSA board of directors approved an additional budget of \$60,000 for the completion of phase 2 in 2013.

At the end of 2012, the 260 remaining files of phase 1 were not able to be digitized by Memnon as expected and were digitized in 2013 together with the "exceptions", which represented 220 files.

Therefore, the 2013 budget was increased to \$68,000 during the 2013 annual meeting in Poio, Spain, in order to include the completion of the phase 1.

The Outcomes

At the beginning of 2013, 2178 digital files (phase 1) were sent to Amalijah in Canberra, Australia where the *technical listening process* was carried out over several months using professional software and the assistance of an archival sound engineer (Tony Hunter) to ensure the conversion from analogue to digital had been done correctly by Memnon.

Phase 1 was completed by the end of 2013, and the implementation of phase 2 was postponed to 2014 for various reasons. Consequently, in February 2014, the MSF board of trustees and the WSA board of directors approved the 2014 MSF budget with a budget item of \$44,174 for the completion of phase 2 of the Memnon Project.

The Completion

The total number of digital files created from the analogue recordings of Bapak's talks (phase 1 plus phase 2) was 2,656. These files - which were sent to Amalijah Thompson in Canberra, Australia - include:

- 2,178 files from the first batch (phase 1)
- 126 files from the cassettes (phase 2)
- 259 files from the "exceptions" (phase 2)
- 93 files from the Chile and Briarcliffe recordings (phase 2)
- From phase 2, 15 files contained errors that needed correction
- Ten tapes could not be digitized (17 files)

From a technical point of view, Memnon was consistent with the transfer work and no problem was found with the quality of the conversion from analogue to digital. The conversions are clean with no inappropriate interventions. Nothing has been introduced into the recordings during the conversion from analogue to digital, such as jitter or digital artifacts.

Some errors in data entry and some inconsistency in file leveling were found in a few files. These have been or are being adjusted or rectified including one speed variation

One 8 track recording could not be digitized and will be the subject of a further attempt via appropriate equipment and expertise in Canberra later in the year

General Comments

The quality of the original audio varied considerably depending on the expertise of the person doing the original recording, the equipment used, the type of tape used and all the usual parameters involved in recording analogue sound.

Even with careful spooling and care of the tapes during the process to ensure the most effective transfer and capture of the maximum amount of information - alias the full available dynamic range of sound at the best quality possible - some tapes had developed very bad print-through combined with sticky shed residues which added to the percentage of files that need filtering for listening purposes.

Many of the problems inherent in the original recording can in the next stage, be resolved completely or partially by filtering using modern software without harmful interventions or introducing jitter or digital artifacts into the recording.

A rating was created for each digital file to indicate, on a scale of 1-5, which digital files needed a second stage restoration process and which were of sufficient quality, without any enhancement or filtering for immediate listening.

From a listener's point of view, much of the collection rated over 2.5 is very easy to listen to and has good round voice quality. Some need a little filtering but many have excellent clarity as they are. Files rated 2.5 and under need filtering to improve the listenability of the files both for ongoing archival needs and distribution

Rating table

Rate	Number of files	%
1	177	7
1.5	103	4
2	538	20
2.5	737	28
3	686	26
3.5	187	7
4	8	0
5	0	0
Sub total	2436	92
No discernable audio recorded	220	8
Total	2656	100

Extract from a comment by archival sound engineer

"There are many fine recordings of Bapak through the collection. Good tape recordings can be amazingly transparent, the natural warmth and timbre of the human voice can be so perfectly captured by tapeon many recordings especially those marked 3.5 and higher, it was like being transported back into the ambience of the room"

Even though we did not have the full range of original recordings available for the process and, some tapes were too badly degraded to re-master and others had significant problems, the overall outcome has enabled a percentage of what was originally received and recorded to be available to the future *without loss or reduction*

As new technologies develop, for both analogue and digital archives, we hopefully have done our best to not only mitigate the risk of transition, but have left the door open to emerging technologies of the future to the best of our ability

The Project's Expenses

The total project expenses amount to \$212,685 for the successful digitization of 2,656 files in high resolution conversion without any compression, representing more than 2,500 hours of audio recordings of Bapak's talks. Assessing the additional hours is an ongoing archival task which will take some time to complete and is not within the area of MSF responsibility

The cost of the Memnon Company totals \$177,146 (83%) and fees expenses for the archivist (Amalijah) and the sound engineer (Tony) amount to \$26,956 (13%). The film and the international travel represent together an expense of \$8,583 (4%).

Items	US dollars		%
Memnon		177 146	83
- Phase 1	162 075		
- Phase 2	15 071		
Film	Phase 1	3 890	2
International travel	Phase 1	4 693	2
Fees		26 956	13
- Phase 1	19 852		
- Phase 2	7 104		
	Total	212 685	100

In terms of phases, the cost of phase 1 amounts to \$190,150 and of phase 2 (exceptions and other recordings) to \$22,175.

Phase	US dollars	%
Phase 1 :	190 510	89,6
Phase 2:	22 175	10,4
Total	212 685	100

The project was implemented over a period of 3 years. The annual expenses are presented in the table below:

Year	US dollars	%
2012	171 541	80,7
2013	24 922	11,7
2014	16 222	7,6
Total	212 685	100

The 2012 expenses were financed by the MSF general fund upon a common agreement between WSA and MSF. In July 2013, the WSC decided that WSA will pay back MSF the \$171,541 in order to re-build the MSF capital.

The expenses of years 2013 and 2014 (\$41,144) were financed by an earmarked donation from Subud Canada of \$32,830 which transferred the earmarked bequests of Ilbert Walker, Samuel Chapleau and Matthieu Ross to MSF. Then, an earmarked donation of \$36,913 from the BSB Trust completed the Subud Canada contribution.

At the request of the BSB Trust, the unused funds of its donation will contribute to the payment of the 2012 project expenses of \$171,541. This unused fund represents an amount of \$28,599.

Table of analogue to digital conversions

Number of digital files from analogue recordings		2656
Number of files from first batch		2178
Second batch		
Cassettes		
Failed digitisation	0	
Problem digitisation	0	
No. of digital files delivered to Canberra	126	126
Files checked as OK	126	
Files needing level adjustment	0	
Files queried for other reasons	0	
Files for re-digitisation	0	
Exceptions – recordings that could not be re-mastered without further restoration and care		
Failed digitisation (10 tapes= 17 files not able to be delivered)	17	
Problem digitisation	0	
Files needing level adjustment	1	
Files checked as OK	258	
Files delivered to Canberra	259	259
Files queried for other reasons	0	
Files for re-digitisation	0	
Chile and Briarcliffe recordings		
Failed digitisation	0	
Problem digitisation – speed adjustment	1	
Files needing level adjustment	1	
No of digital files delivered to Canberra	93	93
Files checked as OK	92	
Files queried for other reasons – data entry errors	14	
Total files received		2656

Note

1. The number of tapes delivered to Memnon were 1226 containing an estimated 1900 hours
2. Current archival standard for analogue to digital conversions requires one tape side equal to one digital file. Each wave file created is limited to 4GB. Therefore, for some very long recordings a technical segmentation of the recording takes place when the wave file limit is reached. This means that for some recordings there may be more than two digital files per tape
3. Current standard for digital conversions:
4. Master file in RIFF Wave 24 bit/96 kHz ; coding PCM uncompressed ; number of channels 2, stereo or dual mono
5. Access file in MPEG 1 layer 3 format ; compression 192 kbps ; constant bit rate ; no tags ; number of channels 2, stereo or dual mono.

Bachtiar Lorot.

Bachtiar Lorot
MSF chairperson



Amalijah Thompson
MSF archivist