

Audio Division Goes Video

by
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Abstrak: *Bahagian Audio sebagai satu bahagian yang memberi kemudahan-audio ditubuhkan lima tahun dahulu. Kemudahan-kemudahan ini dihuraikan secara ringkas. Dengan adanya teknologi baru video pihak Perpustakaan berpendapat bahawa penggunaannya tentu akan memberi faedah. Bahan-bahan pendidikan dalam bentuk video makin bertambah, begitu juga perkembangan penggunaan video di Perpustakaan. Dengan perbelanjaan yang terhad Perpustakaan memilih alat-alat video yang sesuai. Kriteria dalam pemilihan alat-alat ini dan perkembangan sistem video di Perpustakaan dijelaskan.*

Towards the end of 1977, the Audio Division was established in the University of Malaya Library. It was not an Audio-Visual Division as such in the traditional sense but a pure Audio Division. Whenever there were queries as to whether we had an AV Division, we used to say that we did not have an AV but only an A.

The Audio Division was conceptualized as a unit firstly to serve the students and staff in the campus as a teaching and recreational centre; secondly to serve blind students in their needs for special requirements and better facilities; thirdly to aid the Library's Division of Koleksi Kebangsaan (Division for National Collection) in a more comprehensive programme for collecting national culture in the form of music and oral traditions; and fourthly to record for posterity live recordings of *ghazal*, *keroncong*, and *muzik asli* by local artistes.

For a period of five years, the Audio Division has been able to provide the following services: (a) Group listening in the music auditorium for groups of about seventy persons at a time, (b) Individual cassette listening booths (c) Relaying Radio Malaysia FM and AM broadcasts (d) Taping from discs to cassette or open-reel tapes (e) Taping from open-reel to open-reel or to cassette tapes (f) Taping

from cassette to cassette or to open-reel tapes (g) Fast duplication of cassette tapes especially for blind students (duplications of a C-60 tape completed within two minutes) (g) Direct microphone recording on to open-reel or to cassette tape for live recordings by local musicians or readers for the blind, and (h) A public address system for talks, seminars, conferences, etc.

Lately many educational institutions in the developed and developing countries have acquired and are presently using the hardware and software of video systems for the benefit of its clientele. With the popularisation and development of the video format, it was natural and advantageous for the University of Malaya Library to exploit and utilise this new media. The establishment of the video system will primarily be used for the orientation programme of new students and other users of the Library. This programme is explained more fully in a complementary article in this issue by Tunku Noraidah Tuanku Abdul Rahman, Head of the Reader Services Division.

It should be noted that the establishment of a video system is a natural extension and development of the Audio Division which presently exists in the Library. As a multi-media library, the University of Malaya Library, apart from acquiring printed materials like books and journals, should also strive

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to collect microtexts, phonodiscs, audio tapes, audio cassettes, video tapes and video cassettes. A wide variety of instructional, educational and cultural material are presently available in the video format and they can only be used with compatible equipment.

It is essential to have some basic understanding of the colour television standards before the hardware for video are considered. The three prevailing colour TV systems are PAL, SECAM and NTSC. The PAL system developed by the Germans, is used in many parts of Europe, United Kingdom and the British Commonwealth including Malaysia and Singapore. The SECAM system developed by the French, is used in France, Russia and in some of the former French colonies in Africa. The NTSC system developed by the Americans, is used in the United States, Philippines and some Latin American countries. It is important to note that the three systems are not compatible with one another and they, therefore, have a bearing on video recording. For example, a video tape recorded in the U.S. under the NTSC system cannot be played on a machine in Malaysia designed only for the PAL system. Video machines and video monitors, commonly referred to as switchable triple standards, are available to accommodate all three systems but they naturally cost more.

Apart from the professional video systems used in the broadcast studio and professional work employing one inch or two inch tapes, there are basically four video formats that are presently available. The U-matic developed by Sony Corporation is considered semi-professional. It uses three quarter inch tape providing good definition and high resolution with good quality video. The VHS (Video Home System) developed by JVC (a subsidiary of Matsushita) uses half an inch tape and is a popular home video system in parts of the world. At present the VHS system outsells the Beta system by an appreciable percentage. The Beta system developed by Sony Corporation for the home consumer market also uses half an inch tape which provides reasonable video quality. The VCR (Video Cassette Recorder) system developed by Philips is also a home consumer video system employing half an inch tape. The VCR system is confined mainly to some parts of Europe and it is not a popular system elsewhere in the world. Video-cassettes in this

format are also difficult to come by. It should be noted that the VHS, Beta and VCR formats are not compatible with one another.

A number of factors and considerations had to be taken into account in the choice of video equipment for the Library. Although the U-matic is the most suitable in terms of video quality and durability, it is not economical to purchase multiple units of this format. In terms of unit cost and in terms of video-cassette cost, it was more reasonable to purchase multiple units of the VHS format and make the VHS the core of the video system as a whole. When we develop and expand the video facilities, it will also be cheaper to acquire associated accessories like video camera, portable video cassette recorder, tripod etc.

We have acquired two units of VHS video recorders, one unit of U-matic (triple TV standard) and three units of TV/Monitors (PAL/SECAM/NTSC compatible). The advantage of buying a TV/Monitor is that the video and audio signals can be fed directly into the monitors resulting in better video and audio quality. The normal video cassette recorder connection via the TV antenna input is RF (radio frequency) modulated. The TV has to demodulate the RF signal before you can see the picture on the TV screen and hear the sound. The RF modulation and demodulation process degrades to some extent the video and audio signal quality. Therefore a video monitor connected to a video receiver is superior to the one connected to a TV receiver. A video/audio signal amplifier has also been acquired to enable one video cassette machine to be hooked-up to multiple units of video monitors without loss of video or audio quality.

Teleprojection equipment was considered but ruled out for the present as being expensive and inflexible. Unlike TV/Monitors which can be used under ambient light conditions, teleprojection requires subdued lighting. The definition, resolution, contrast and edge to edge sharpness of the large screen employed in teleprojection also leaves a lot to be desired. For the Library's requirements it is cheaper and more flexible to use multiple video monitors for group viewing.

For the very modest sum of M\$30,000 we have acquired a video system that is practical, flexible and which we believe will meet the requirements of the users of this Library.