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programmes and technologies

The Manila National Film Centre

by
Christopher Roads

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PHILIPPINES

THE MANILA NATIONAL FILM CENTRE

by Christopher Roads

Report prepared for the
Government of the Philippines
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Scientific and Cultural Organization
(Unesco)

U N E S C O

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Organization of the mission and its terms of reference

1. The Philippine Government requested Unesco to provide a consultant to enable them to ensure that the Manila Film Centre, already under construction in the Cultural Centre Complex in Metro Manila, possessed an archival section fully up to the technical specification and standards essential if it were to be capable of being operated as the national film and audio-visual archive. The Director-General of Unesco arranged under the Organization's Regular Programme for 1981-1983 for a consultant to carry out a mission for the purpose of designing the film archives level, including room layouts down to necessary detail of the electrical and service connections and built-in furniture. The consultant was required to specify technical equipment and supplies; to advise on staff training both in-house and overseas; to advise on the administrative procedures for the acquiring and cataloguing of films and audio-visual documents; to advise and specify the full space and installation requirements for the video-laser transfer facilities; and to advise on the selection and collection of artefacts, books, periodicals and audio-visual documents.
2. The consultant arrived in Manila in the early afternoon of Monday 31 August and departed in the evening of Friday 18 September, thus completing three working weeks. A pattern of work quickly developed in which the consultant spent most mornings drawing up or revising the detailed room layouts, their overall relationship and their specifications while the architects spent the same period incorporating the new data from the previous day into the consolidated plans. Both parties then spent the afternoon jointly going over the latest plans and specifications and agreeing on that which should be incorporated into the building's design. Occasionally there were site meetings with the engineers while meetings with the Director were held as often as needed.

History of the project

3. The idea of a national film archive in the Philippines goes back many years but concrete steps to realize it were not taken until recently. The building itself was envisaged as having two major components, namely, auditoria and archives and, while it was felt that there was sufficient expertise available in the Philippines to cope with the former, it was recognized that Unesco assistance would be invaluable in the design of the latter, especially as it was hoped that it might be as modern as possible and tailored to Philippine needs. Late in February 1981, it was decided that the consultant, already scheduled to visit Manila for other audio-visual archival discussions, should allocate some of his time to advising on the best form for the archival element. In fact the consultant, after this first visit from 15 to 27 March 1981, left with the architects and engineers responsible for what was then known as the "Film Palace", a complete room layout and room-by-room specification of furniture and equipment and environment. Subsequent to this visit the overall project was revised, the area available for the archives reduced, and construction started on the building in June. Suggestions made by the consultant, that the archive should have a special unit entirely devoted to the long-term preservation of moving image documents which, by the newest technology adapted along suitable lines, would be totally effective for thousands of years, rather than the decades or centuries at present attainable, were accepted. It thus became urgent that the consultant should return to Manila to redesign the archival component to fit the new dimensions of the overall building. Unesco responded rapidly to the Philippine request and the consultant returned to Manila on 31 August. By the time he departed three weeks later the new room lay-out was completed and the room-by-room specifications completed in outline while work on the building itself was proceeding so rapidly that it stood 50 feet high in places.

The overall building specification

4. The building of the Manila National Film Centre is sited about 300 metres south of the Philippine Plaza Hotel on reclaimed land in the Bay of Manila. The entire structure, which at the archival or ground level measures about 145 m by 116 m (472' x 377'), is supported on more than nine hundred piles which reach to the bed-rock about 120 feet below. The structure bears close resemblance outwardly to a classical temple with dimensions at the fourth level of 106 m by 68 m (344 x 221') making it roughly the same size as the Post Office building in Manila. On these dimensions the area enclosed at ground level is about 16,820 sq. metres (177,944 sq. ft.) but only about 9,000 sq. metres (95,500 sq. ft.) are allocated to the archives.

5. The major physical feature of the building is a central auditorium seating about 1,600 persons. Above it are two further auditoria each designed to accommodate 500. At high level, round the smaller auditoria, is a series of viewing rooms of which the largest will seat about one hundred but the others only between thirty and fifty.

6. The film and audio-visual archives are made up of a number of components, viz., short- and medium-term film storage, film work rooms and viewing facilities; still photograph negative and print storage together with photographic library and complete photographic studios and darkrooms complex; periodicals and reference library with reading rooms and stacks; video tape storage and workrooms; a museum and gallery for the history of photography and the cinema with conservation laboratory and preparation of exhibit areas; administrative and security offices and visitor reception rooms including areas for students under training; welfare and refreshment areas; and long-term and medium-term storage; video disc mastering and production; and video disc storage. The archives level is so designed as to ensure maximum future flexibility, to allow for likely developments in technology, especially over the next ten years, and to permit consequent reapportionment of space.

The place of film in the Philippines

7. The decision to set up this comprehensive and forward looking Film Centre in so prominent a position as part of the Cultural Centre of the Philippines is a natural one in the light of the intense popular interest in the medium of film. An annual full-length feature film production of 170 films is a very impressive total for a country of only 47 million inhabitants but what even more vividly demonstrates the extent of national interest in film is the fact that the average person regularly spends part of his disposable income on going to the cinema. In the Philippines the cinema is still far more powerful than television, though the latter can, for example, boast six colour channels in Metro Manila. The importance of cinema in the arts and culture of the country is not only confirmed by the comprehensive specification of the new film centre but very much reflected in the components of the specification. The emphasis placed upon the archive and especially on the need for an effective long-term means of storing the colour moving image without loss of quality is a strong reminder of the fact that the almost certain absence of archival storage facilities in the country means that of the hundreds of Philippine films made before 1951 not one has survived in the country. Few more striking, if tragic, testimonies for the need for archival facilities could be imagined.

Archival and viewing facilities

8. Space allocation in the Manila National Film Centre directly reflects the need to serve future generations without denying the legitimate interests and aspirations of present generations. It reflects the necessity to be able to accept and process moving image or sound records regardless of the medium on which they happen to be received. They give working effect to the full recognition of film as a legitimate and major component in artistic and cultural expression as well as in media of record. In other words, library, research, documentation, cataloguing, indexing and search are all allocated space in logical juxtaposition. But, perhaps, the strongest emphasis of all is laid upon the need to make film holdings accessible to all. In the overwhelming majority of film archives around the world much of the film held is accessible only to those of certain standing or who have serious academic or commercial reasons for access. In the Manila National Film Centre, as soon as incoming film has been converted to the long-term storage medium then it will be accessible to any and every visitor, however humble his standing or modest his needs, with ease and flexibility comparable to reading paperback books in a library.
9. The Manila National Film Centre has been designed on the basis that it must be able to accept at least 100 million feet of acetate film which is at present lying in unsuitable storage accommodation with film and television companies in the Philippines. This must be moved into more suitable accommodation in the Film Centre as soon as possible. In addition, much of the annual production of feature films as well as, perhaps, 20 per cent of television output should also be placed straight into the archive. Setting aside construction costs, the cost of running film vaults with their temperature held at 22°F, which is the temperature recommended for long-term film storage, is prohibitive in the tropics. And even under these conditions a colour film will survive for only a matter of decades without recopying, with an inevitable serious loss of quality. The Film Centre therefore contains no such long-term film storage accommodation. Instead, it is designed to be capable of holding existing and arising film in short- or medium-term storage, at 50° or 38°F, for only as long as is necessary for it to be copied onto the long-term metal storage medium. Once in such form not only is it totally accessible, probably for centuries, through the cheap and versatile access copies created at the time of its transfer to the metal preservation medium, but it is also storable under conditions only a little more demanding than those of an office environment.
10. Naturally for very many years, films coming in by purchase or loan as well as films destined for cinema distribution will continue to be in conventional acetate or video tape or similar form. Therefore the Centre is equipped with the fullest conventional cinema and viewing machine facilities.
11. Bearing in mind the prominence, in every sense, of the Manila National Film Centre, the inclusion of a museum as well as a library is logical. Indeed stemming from the premise that the public will be actively encouraged to visit the building and use its facilities - which often seems not to be the case in some countries - the whole archival area is laid out to cope with their presence. A shop, photographic souvenir bureau, reception areas and restrooms complement the exhibits display and gallery areas. In short, the building contains a fully fledged museum as well as an archive and can handle a considerable flow of visitors. Some part of this visitor accommodation is readily utilizable for students and trainees so that instruction can take place without interfering with either visitors or archival work. Amongst the many features included either wholly or in part to aid the instruction of students are a comparative viewing cinema and ten viewing booths: the latter are almost all rather larger than the usual standard so that up to 8 or 9 persons can be accommodated simultaneously.
12. The design of the building also acknowledges the fact that the normal input of films is unlikely to reflect all aspects of Philippine life and society. It rarely does in any country. In order to supplement them, it will be logical in due

course to organize a filming programme for record purposes, namely, to go out into the field to film less well documented aspects of life. However, it is also desirable to record, while they are still alive, the memories and reminiscences of those older members of the community who recall the earlier decades of the century. To this end the fourth level includes, with its viewing rooms, a small audio and film studio suite.

13. The archival printing facilities in the building must include those normal for any archive since the only way to cope with present immense film holdings will be to spread the transfer of the backlog over a reasonably large number of years. Moreover, when films are received in very poor condition they must be copied on to new film stock with every attention given to achieving the best possible copy. Such facilities are included in the building. In the case of black and white films there are growing dangers in relying upon commercial laboratories for printing requirements since the virtual disappearance of black and white films from the film production scene in most countries has led to the closure of facilities for handling such film. The archive therefore contains facilities for printing and processing both 16 mm and 35 mm black and white film.

Technical specification

14. The consultant worked closely with the architects and engineers assigned to the project so that, as agreement was reached on any given area or room layout, i.e. that compromise which is nearly always necessary between an ideal layout for working inside the room balanced against the optimum service connections and relationship to neighbouring rooms and areas, he could go straight on to specify the precise positioning of equipment and furniture within the room. Essential parameters on room climatization covering temperature, humidity, dust content, salt levels and fume removal were laid down and their effect upon air handling units discussed and agreed with the engineers. At the specific request of the client the consultant prepared a memorandum (see Annex) on necessary climatic parameters with special emphasis upon the consequences of the buildings within proximity of the sea. To cover the full room specification the consultant devised and largely completed (leaving a copy with the architects) a proforma for each of over a hundred rooms covering the following points:

- | | |
|-----------------------------------|-------------------------|
| 1. Temperature | 15. Finishes-walls |
| 2. Humidity | 16. Finishes-ceiling |
| 3. Dust | 17. Windows/glazing |
| 4. Drains and sinks | 18. Furniture/built-in |
| 5. Water supply | 19. Furniture-loose |
| 6. Power supply & outlets | 20. Capital equipment |
| 7. Gas supply | 21. Furnishings-soft |
| 8. Compressed air supply | 22. Ultrasonic/CCTV cvr |
| 9. Fire/smoke detection | 23. Staff in room |
| 10. CO ₂ extinguishing | 24. Fume exhaust |
| 11. Doors & locks | 25. Overhead clearance |
| 12. Lighting | 26. Telephones/intercom |
| 13. Special features | 27. Sound insulation |
| 14. Finishes-floors | 28. Expendables |

Staff

15. The entire layout of rooms and equipment for the archive has been calculated by the consultant on the scale necessary to be able to cope within a reasonable period of time, with the quantities of film and video tape in the country in urgent need of preservation. The figure put on the footage of acetate film in such

urgent need is about 100 million feet. In addition due regard has been had for the volume of annual production for the cinema and television and a need to have some reserve capacity to deploy in the direction of education, training, culture and regional requirements. The implications in terms of staff and staffing levels were naturally kept constantly in mind and the appropriate accommodation duly incorporated into the building.

16. The staff would naturally divide into a number of sections or departments. For the moment consideration is not how these will be related to each other in the administrative hierarchy of the archive but rather on what posts would constitute each of these basic divisions. These basic divisions or units are as follows:

Directorate Director-General, Deputy Director-General, Secretary to the Director-General, Secretary to the Deputy Director-General, and two assistants.

Secretariat Secretary to the Board, Public Relations Officer, two assistants, eight typists in a pool.

Administration and General Establishment Officer, Finance Officer, Deputy Establishment Officer, Deputy Finance Officer, three financial assistants, three establishment assistants, Chief Security Officer, Deputy Security Officer, eight security officers, Head Warder, Deputy Head Warder, twenty-four warders, six porters, two gardeners, Shop Manager, Deputy Shop Manager and Photo Souvenir Manager, two shop assistants, Loans Officer, three general assistants and ten cleaners.

General Archival Chief Cataloguer, Deputy Chief Cataloguer, six cataloguers, two attendants, two vaultkeepers, Head Projectionists, five projectionists, and a Research Officer.

Technical Chief Technician, four graduate technical engineers, two electronic engineers, one video technician, and two general technicians.

Education Chief Education Officer, Deputy Education Officer, three guides/lecturers, three assistants.

Cinematographic Chief Film Officer, Deputy Film Officer, two grading assistants, four printers, four processors, two film cleaning assistants, four recanning assistants, twelve cutting room assistants, and three video tape assistants.

Photographic Chief Photographer, Deputy Chief Photographer, four printing photographers, three glazing and mounting assistants, two general photographers, two assistants, Chief Photographic Librarian, Deputy Photographic Librarian, and three photo-librarian assistants.

Library Chief Librarian, Deputy Librarian, five librarians, two attendants, two assistants for xeroxing and two assistants for micro-filming.

Museum Keeper, Deputy Keeper, Assistant Keeper for the Art Collections, two research assistants, four conservators, two designers, two draughtsmen, two craftsmen and two assistants.

Video disc long-term conservation Staffing yet to be determined.

17. Naturally not all these staff would be required initially: in fact it would be a matter of phasing them into post. However, in every section a nucleus of staff will be needed from early on: especially is this true where the first recruited staff,

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after overseas training, are themselves responsible for in-house training of other staff. One must also bear in mind that film once offered for preservation in the archive cannot be turned away without serious risk of jeopardizing the future use of the archive. And there is the need to get ready for the Manila International Film Festival in January 1982.

18. Staff training will thus divide between, on the one hand, that which can be done in post with some outside assistance and proper backup from the manufacturers and suppliers of equipment and, on the other, though to a much lesser extent, that which will necessitate sending suitable candidates overseas to relevant institutions. To a degree the extent to which either the one or the other course is adopted will depend upon the present expertise and professional knowledge of each individual. Until at least a probationary selection of personnel to fill the various positions has been made, specific judgements on specific individuals cannot be forthcoming. The consultant has undertaken to continue to tender advice, as and when necessary, during the coming months to ensure that the goal of an efficiently working archive is smoothly attained.

Acquisitions and cataloguing

19. Working with the Director-General designate, the consultant considered the quantities and types of film and video tape that might be expected to be sent to the archive. Apart from making adequate provision for its storage the most effective tactics for its acquisition were discussed. It was agreed that an inducement, probably in the form of free storage, should be offered to those who were prompt in responding to the appeal for footage but that those who only later reacted should be charged for storage. This should constitute a powerful inducement to early acceptance of the facilities on offer and thus a strong move towards the effective conservation of the national heritage of moving image records.

20. The listing and cataloguing of films and audio-visual accessions is recommended to be done in accordance with the minimum data list of the International Film and Television Council. Negotiations are under way for permission to use an available Univac 1100 computer and terminals connected to it have been planned for inclusion in the specifications left with the architects. Fortunately this model of computer will be satisfactory for a number of applications in the archive, including retrieval in the photographic and cinematographic archives.

21. It is definitely preferable to have offered to the Centre more materials, artefacts, books, periodicals, photographs, etc. than too few. Those then chosen for permanent retention are more likely to be in fair condition and suitable for exhibition with much less expenditure of time and money. There already exist at least a few private collections of films, photographs and other items relating to the history of the cinema in the Philippines: one hopes that it may be possible to draw on some of this material either in copy or in original so as to furnish a nucleus for the displays in the museum and gallery. Beyond this a general appeal to all cinemas, production and distribution companies for obsolescent and obsolete film projectors and equipment is a sine qua non: having regard for the large number of such organizations that can be so approached it should produce a worthwhile response. The excellent conservation laboratory facilities included in the specification of the archive level should enable even badly rusted or damaged artefacts to be restored to display condition.

22. The library too should benefit from a national appeal which, provided that it is directly linked to the main appeal, should at least result in useful deposits of old periodicals and instruction manuals. Much will inevitably be in poor condition

but the provision of a micro-film unit should allow for the copying of all worthwhile material in danger of complete disintegration.

Future role of the Manila National Film Centre

23. When completed and running as planned, the Manila National Film Centre will be admirably suited to serve as the national focus for a wide range of purposes associated with film and audio-visual media. With its considerable built-in training and teaching capacity it will be able to play a vital role in ensuring that the next generation in the Philippine film industry is fully abreast of world developments in the field.
24. In the nearer future the Manila National Film Centre stands as the natural focus for the co-ordination of the different guilds and elements of the film industry. It can invite outside experts to visit and lecture in the specialities providing them with all the facilities that they are likely to need: or it can provide rooms or viewing arrangements suited to any of the meeting or assembly needs of the film industry.
25. Internationally the Manila National Film Centre will have some reserve capacity in terms of transferring films on to its ultra-long term storage medium, which it may wish to offer to other countries in South East Asia. At the least the excellent facilities of the new building added to those of the existing Cultural and Convention Centres will, in due course, form an ensemble for the showing, study and appreciation of film and all moving image documents with scarcely an equal in the world.
26. Finally it is relevant to recall the discussions held under Unesco auspices in Buenos Aires in 1978 when experts met to consider problems associated with the conservation, in countries of the developing world, of their cultural heritage of moving image documents and expressed a belief in the need for an archetype archive suitable for the requirements and conditions of the developing world, and especially those in the tropics. Designed with an eye to the special circumstances of countries in the tropics in the developing world, the Manila National Film Centre could serve as a possible pilot archive where new techniques for the long-term preservation of moving image media particularly suited to the needs and circumstances of the developing world can be evolved. In this sense, as foreseen at the Buenos Aires meeting, the Manila National Film Centre will represent a major and concrete step towards the practical implementation of "recommendations for the safeguarding and preservation of moving images" adopted by the General Conference of Unesco at its twenty-first session, held in Belgrade, in 1980. Paragraph 4 of the "General Principles" reads "...research should be specifically directed towards the development of high quality and lasting support media for the proper safeguarding and preservation of moving images". The proposed design and equipping of the Manila National Film Centre will uniquely qualify it for this purpose. In this sense it is to be hoped that the Manila National Film Centre will make a significant international contribution to the ability of future generations, perhaps thousands of years from now, to see and appreciate the twentieth century's remarkable heritage of moving images.
27. Finally the consultant would like to take this opportunity of thanking Mr Ernesto de Pedro and Mr Froilan Hong and all their team of architects and engineers for the most courteous, kind and productive reception that they extended to him.

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ANNEX

MANILA FILM CENTRE

MEMORANDUM ON THE CLIMATIC CONDITIONING OF THE ARCHIVAL AND PROJECTION AREA

General

1. The obvious problems which arise in terms of the climatic conditioning of the archival and projection areas stem from the general climatic extremes that are experienced in the Philippines, namely, high temperature and high humidity. In addition, the siting of the Manila Film Centre on reclaimed land close to the sea, adds possible risk of inundation and salt contamination.
2. Were the building purely an auditorium, then the guiding factor would have been the general comfort of the audience, but as it is intended at least in part for the medium to long-term storage of cellulose tri-acetate film, then a distinctly more exacting situation is encountered.

Film and its storage parameters

3. Nearly all the film - and the footage could be between 60 and 100 million feet - which will be stored in the Manila Film Centre will be cellulose tri-acetate. This means that the base will be of a material which has good optical qualities, constant elasticity and tensile strength. On the base is a very thin adhesive substratum of gelatine, and on that again, an emulsion layer of gelatine. Of course, black and white films have only one layer of emulsion, containing finely distributed particles of silver halogens, whereas colour films have several layers. Unfortunately gelatine as an organic product, viz. animal albumen, rapidly becomes swollen and sticky if it becomes too moist. The condition is aggravated with warmth. As if this were not enough, gelatine is an excellent nutrient for bacteria or fungi. Indeed they can penetrate the emulsion layer and easily destroy the image.
4. It is thus necessary that all areas and rooms in the Manila Film Centre where cellulose tri-acetate films are held for any appreciable time be air-conditioned to the appropriate temperature and humidity levels to avoid irreversible damage to film.

Laser-read videodisc and its manufacturing parameters

5. In the first stage of the manufacture of videodiscs which is called mastering, it is essential that the making of the glass disc be achieved under entirely dust-free and extremely clean atmospheric conditions. For this reason, on this part of the archives level, it has been necessary to install the highest standard of air-conditioning, not only governing temperature and humidity, but also ensuring the complete removal of dust and salt. Staff access is through triple airlocks only, and then subject to change of clothing and showering, while goods are similarly screened and cleaned. Dust is likely to be removed by means of a high voltage filter while salt will be eliminated by ionization.

Precision photographic, printing, processing and projecting equipment and their working parameters

6. Widely distributed throughout the building in its auditoria projection rooms and its special viewing rooms is a considerable amount of projecting equipment. In addition, in certain areas on the archival level is the necessary photographic and cinematographic printing and processing apparatus. In addition, there are cameras of

a wide range of types in a number of areas. All this equipment must be safeguarding against "sweating" and thus will only be found in rooms or areas where temperature and humidity are controlled within reasonable limits.

7. Given that temperature and humidity are closely controlled at reasonably modest levels, the effects of salinity will be reduced. Given too that almost all this equipment must in any case be placed on regular maintenance schedules, it will be appropriately inhibited and lubricated at sufficient frequency to minimize the risk of damage through the presence of salt or other corrosion agents. Without need to fix a special schedule or programme, there will, in effect, be complete monitoring of the condition of all vulnerable equipment.

8. Nevertheless it is recommended that the air handling units be so set up that should the findings of this monitoring suggest the unlikely contingency that it is not possible to cope with the deleterious effects of salts in the atmosphere within a realistic maintenance schedule, then additional units for the removal of salt by ionization can be installed at a later date. At present, on all available evidence, with the sole exception of the laser-read videodisc manufacturing area, there does not seem to be justification for the additional capital outlay. It is worth noting however, that such use of ionization to remove salt is now relatively common practice in major museums with vulnerable collections - such as ceramics or textiles - and is found to be cost effective. That is the view, for example, of the head of the Canadian Museums Conservation Unit and the head of the conservation committee of the International Council of Museums.