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MUSIC INSTRUMENT COLLECTIONS IN MUSEUMS:  
BASIC PRINCIPLES AND CONTEMPORARY PRACTICES

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## INTRODUCTION

Museums are responsible for the curation of music instruments, yet the majority of museums in Australia, and throughout the world, are guilty of considerable neglect in that sphere of activity.

Despite the verified numbers of music instruments within each Australian museum <sup>1</sup>, little interest or care has been shown for them on a professional level. Generally, only the specialist instrument museums, of which there are none in Australia, have specialist curators.

The lack of formally established collections in this country, however, can be regarded as a tremendous advantage to the extent that Australia is in a position to benefit from the knowledge and experience of all the world's instrument collections. An Australian museum could, theoretically, draw on a combination of methods, techniques, and ideas employed elsewhere in the world. In addition, the absence of a precedent in looking after instruments in Australian museums, frees them from the constraints exercised in the numerous museums which have a long tradition or heritage in this field. Unfortunately, these constraints, such as the continued use of outmoded methods of cataloguing, are still perpetrated as an 'evil necessity', because modifications to established practices and procedures would be more impractical, from administrative and

1 See Appendix: "National Survey of Music Instrument Collections, Australia".

financial viewpoints, than the continued use of these practices and procedures.

On the whole, there is a dearth of readily accessible information about principles and practices in music instrument collections. An overview of contemporary practices and principles has been needed for some years now, and so, the material presented in this study is intended as an auxiliary reference for further detailed studies which may follow.

Three main parts of this study can be identified. The first part investigates major, public, contemporary collections of music instruments in Western Europe. The second part identifies different trends in the development of principles used in instrument museums, and makes an exposition and analysis of some current practices and values found within museums. The music instrument collection of the Gemeentemuseum in The Hague, Netherlands is discussed as a specific example. The third part puts forward some proposals for music instrument collections in museums. In this regard, the classification of music instruments has been examined in relation to the needs of museums. This is followed by a museum guide for cataloguing instruments which includes a sample number of catalogued instruments.

A major objective of this thesis is to examine some contemporary practices and some basic principles which were observed in instrument museums in Western Europe in 1974-75, and to identify some of the theories which explain the relationship between musicology and museology as found in these instrument museums. The hope is that, having come to the end of this thesis, the reader will have been

presented with an intelligent, but basic perspective of some of the principles and practices governing music instrument museums.

The terms of reference for this study are set by the definition of a museum as stated in the Statutes of the International Council of Museums (ICOM):

A museum is a non-profit making, permanent institution, in the service of society and of its development, and open to the public, which acquires, conserves, researches, communicates and exhibits, for purposes of study, education and enjoyment, material evidence of man and his environment (ICOM Statutes, section II, article 3).

The broad range of interests which form the structure of the museum instrument collection and which determine its character, is reflected in the ICOM definition of a museum. In this respect, chapter two deals at some length with the general question of the purposes of the museum, and also with the music instrument collection in the context of the museum.

#### A Word on Types of Instrument Museums

Some explanation of the organisation of music collections within museums themselves is warranted. There are two major types of museums:

firstly, larger museums, usually national or state museums, which generally have a separate department responsible for music instruments and research, and hence a collection that is independent of other museum collections; and secondly, museums which do not have a separate department or section with specific functions for music or music instruments. This type of museum treats instruments in the same



way that it treats other objects, i.e. there need not necessarily be any special concentration on music research, exhibitions, publications and the like. Thus, on the one hand there is the museum with a specialist music function, and on the other there is the broader or more general museum embracing different kinds of collections which may include music instruments.

As a result of museum experience, and nineteenth century museum practice, these two categories of museum can be further subdivided for clarification: both types of museum tend to apportion their areas of concentration between instruments of European origin and those of non-European origin or the non-Western world. The latter instruments are often referred to by the term ethnic music instruments. This term is not altogether satisfactory because of its pejorative connotations, but unfortunately it must suffice in the absence of another more suitable one.

European music instruments, like those of the non-Western world which are preserved in museums, tend to be of the art type, but most collections include other types, such as folk instruments. In museums, art instruments are generally those which are used in forms of art music, and they are usually made by professional craftsmen, i.e. those who are able to earn their living from the design and construction of music instruments. Folk instruments are those which are used in the various forms of folk music. While they may also be made by craftsmen with considerable expertise and tradition, folk instruments are usually crafted by folk artisans who do not necessarily derive their full income from their skills.

Although music instrument collections generally have divided areas of attention, it is important to realise that all collections situated in museums share common problems, e.g. conservation and restoration. The expansion of existing co-operation between these various types of instrument collections in the world has provided some more universal solutions to some of these problems.

#### Museology vs. Museography

The particular focus of the thesis is derived from museology. Museology can be defined as the theoretical background to museum activities. It embraces the history of museums, as well as other theoretical considerations influential in the science of the arrangement and administration of museums. Museography may be defined as the systematic description of the contents of museums. In general, museology does not concern itself directly with museography, although the two are closely related. Therefore, each has its areas of attention, and each deals with these in its own way.

There is an abundance of museographical publications which are pointedly concerned with describing the contents of music instrument collections in museums. Catalogues describing details of music instruments, for example, illustrate the practical result of the application of museography. Efforts in the museological area of instrument collections, however, have not been as evident; the contrast between the small amount of work done in the museology of music instruments is quite stark when placed beside the comparatively large amount of work done in museography.

A cursory look over the list of contents shows that this is in every way a museological study of music instrument collections.

All of the instrument collections in the museums referred to have been examined for museological purposes rather than for museographical reasons, and so, no detailed descriptions of instruments will be found apart from those in the sample catalogue. The sample number of instruments catalogued in chapter five, by nature, form a museographical work. Nevertheless, it finds its place in the museology of instrument collections because its primary purpose is to illustrate a certain approach to the problem of cataloguing itself. In this sense its foundation is museological.

Some may consider it more advantageous to be involved in actual museum work, and in organological research instead of being involved in research which investigates the problems of music instrument institutions in general, as this study does. This view overlooks the close and inseparable relationship that exists between organology and museology in instrument collections. Although it is seldom recognised explicitly, this relationship is one of interdependence. For example, one reason that a curator cares for instruments is the hope that ultimately, an investigation of these instruments will be made. Likewise, many organological studies could not have been made without the considerable evidence provided by instruments preserved in museum collections.

The problems experienced in doing initial organological research in museums often originate in the museum itself. It is obvious that a scholar cannot locate particular items for study, for instance, if the museum has records which do not contain much detail, or if information is incorrectly classified and arranged. On the other hand, a scholar who finds an instrument collection in a

museum well-organised from the museological viewpoint, may have his work considerably advanced by his being able to make certain deductions from information presented, and by its mode of presentation. There can be no doubt that any investigation into music instruments in collections may be enhanced if the collection is well-ordered museologically. This matter is taken up in chapter two. It presents the theory that museum-oriented organology, which is akin to museography, could make more influential, functional contributions to museology in the care of music instruments.

The incentive for this thesis was provided by twelve months' study and training in museum collections in Western Europe in 1974 - 75. The material contained in the thesis is based on the experience and observations made during those twelve months. Therefore, it is pertinent to provide an insight into the programme undertaken. This discussion is presented in chapter one.

## CHAPTER ONE

### FIELD STUDY AND SURVEY OF SELECTED MUSEUM INSTRUMENT COLLECTIONS IN EUROPE

#### STUDY AND TRAINING IN MUSEUMS IN EUROPE, 1974 - 1975

This chapter provides background information about the one year programme of study undertaken in Europe, by 1) indicating the areas of study and training, 2) the museums in which actual experience was gained, and 3) other museums, institutions and organisations which were responsible for contributing to the formation of my ideas in this area.

In Australia there are no professional music instrument curators, or museum personnel familiar with museum collections of instruments, because there are no public museums which specialise in this area. This makes it necessary to go abroad in order to learn something about the work of music instrument curators.

There are many advantages to be gained from a period of study and training in different countries. Museum principles and practices are somewhat varied in each country, and may even vary a great deal under the directorship of different persons. Instrument curators themselves employ diverse practices to look after their collections. This variety of approaches and methods contributes to the development of museology.

Even though there are many music instrument collections in the museums of Europe and the United States of America, opportunities for training and study in this area, though beneficial, are rather limited. The most usual way to learn the work of the curator is by on-the-job training in the museums under the guidance and supervision of the curator of the particular collection. Sometimes this practical work is supplemented by theoretical museological studies, and, less often, by formal courses in museology at tertiary level, which are offered from time to time.

The majority of curators today in charge of instrument collections in European museums have had music training at tertiary level before coming into the museum. Most learn museology while they are working in the museum.

Because of the shortage of staff in most instrument museums, it is rare for museum personnel to be released for the purpose of undertaking formal study outside the museum. Whether this practice will be judged to be a kind of 'false economy' in terms of the future of museum collections will only become clear in the future, but it is generally considered a luxury for a person to be able to do full-time studies.

Usually, it is easy to arrange some informal period in a museum in the form of an apprenticeship, provided that the student can be financially independent during this period. The only alternative approach is to obtain employment in a museum. In the former method, naturally, progress would be more rapid and more consistent than would on-the-job training alone.

Because there is no organised course designed for curators of music instruments, it is left to each person wishing to work in this field to devise a programme of study.

In my own case, an Australian study grant made possible the chance to undertake a one-year programme of informal study and training in Western Europe as an introduction to some of the principles and practices of music instrument collections in museums. No binding commitments were made with the museums in Europe with respect to the study programme, so a flexible programme could be planned. The overall aim, and the subsequent plan established, was to gain a wide range of impressions and experience in different instrument museums in a wide number of countries.

In Australia, it was difficult to find out where all of the important persons in this field were in Europe, because there is very little information available on instrument museums in Europe and the United States. Most of the initial contacts were made through musicologists and museum people in Australia, and so, much of the final programme had to remain open.

Basically, the programme was designed so that theoretical principles learned through academic study could be applied by training periods of a practical nature. Training periods in several major instrument museums were each of approximately two to three months' duration.

The foundation for museum experience and training was laid in the first six months of the programme which commenced in the Netherlands. Both formal study, and the work undertaken in The Hague's Gemeentemuseum, signified the development of an approach

based on the accumulation of knowledge of, and increasing familiarity with instruments. Much of the success of activities followed later in the programme depended on contacts and information gathered during the orientation period in the Netherlands.

Owing to the absence of a precedent for learning about the work of museum curators, and my own lack of experience in this area, it was anticipated that progress would be slow at first, and gradually become more consistent. In cases where a museum was unable to give guidance on a particular matter, information was sought at the next institution where work was undertaken. Principal places of study and training are listed here in chronological order as far as possible.

## 1 Netherlands

March, 1974 - July, 1974, Amsterdam:

Instituut Voor Muziekwetenschap (Institute of Musicology),  
Koningklijke Instituut Voor de Tropen (Royal Tropical Institute),  
Etnomusicologisch Centrum "Jaap Kunst" ("Jaap Kunst" Ethnomusicology  
Centre).

July, 1974 - October, 1974, The Hague:

Haags Gemeentemuseum (Municipal Museum, The Hague).

## 2 Sweden

June 2 - 8, 1974, Stockholm:

Annual Conference of the Comité International des Musées et  
Collections d'Instruments de Musique (International Committee



of Museums and Collections of Music Instruments), (CIMCIM), and the International Association of Music Instrument Collections (IAMIC).

3 Denmark

June 9 - 14, 1974, Copenhagen:

Tenth General Conference of the International Council of Museums (ICOM).

4 France

October, 1974 - December, 1974, Paris:

Musée de l'Homme (The Museum of Man), Department of Ethnomusicology, Musée Instrumental du Conservatoire National Supérieur de Musique (Music Instrument Museum of the National Superior Conservatorium of Music).

5 England

January, 1975 - March, 1975, London:

The Victoria and Albert Museum, Department of Furniture and Woodwork.

Besides these main venues of study and training it was expected that opportunities would arise for shorter visits to a selection of the remaining European collections, large and small, specialist and non-specialist. Thus, from the beginning, emphasis was placed on the importance of a blend of theoretical study and practical experience. In this way, the theory learned would not be divorced from actual museum experience.

There is no question that a good knowledge of the principles of organology forms an important part of the foundations for the care of music instruments in the museum, but this has to be reconciled with the information studied in museology. The student has to put the two disciplines together in the museum work situation, and this requires an exact knowledge of the limits of both disciplines. Part of the curator's work then, is to know how to combine musicology and museology in a satisfactory way. As will become evident from the next chapter, this fusion is not easy to establish for various reasons.

#### Review of The Study Programme

In each of the main collections in the Netherlands, France and England, a detailed plan of study was worked out in collaboration with the respective museums concerned. This was drawn up according to the particular specialisations and particular facilities offered by each museum.

The study and work done in each of these museums covered a broad spectrum of activities and interests, touching on a large variety of aspects of music instrument curating. In the short period of time available, this study programme served as an introduction to museology and musicology as they are practised in contemporary collections of music instruments.

The first part of my programme was devoted to an examination of some of the theoretical issues involved in curating, and to organology and various area studies of music. Study of the main literature on music instruments included material on

classification and acoustics, and relevant musicological and ethnomusicological sources. This was under the supervision of an experienced organologist familiar with museum instrument collections, Drs. L. Plenckers, at the Instituut Voor Muziekwetenschap, of the University of Amsterdam.

In addition, lectures and seminars were taken at the Etnomusicologisch Centrum "Jaap Kunst" which is affiliated with the University of Amsterdam, and at the Rijksmuseum Voor Volkenkunde (Government Ethnographical Museum) in Leiden.

#### Method of Selection of Museums

The first museum in which I was able to work was the Gemeentemuseum, in The Hague. This arrangement with The Hague was suitable for six main reasons:

- 1) the convenient location of The Hague meant that it was easy to spend a few days of each week learning about museum practices, while spending the rest of the week studying theory in Amsterdam;
- 2) the collection comprises both European instruments and non-European instruments from all over the world, and a wide variety of different types of instruments from varying historical periods is presented in the collection;
- 3) there is a restoration workshop on the premises, with the services of a full-time restorer of keyboard instruments;
- 4) it contains the largest music library in the Netherlands, concentrating on a wide variety of music instruments, scores, and other primary resources;

- 5) it has a complementary department of musical iconography, containing a vast collection of prints and drawings;
- 6) there are two organologists on the staff.

Another consideration was the need to develop the ability of identifying with reasonable accuracy, the variety of instruments throughout the world. The Gemeentemuseum made that development possible, for the ability to identify the large variety of instruments from numerous countries on every continent is best learned through familiarity with such existing collections.

In the selection of a second and third museum in which to study the work of instrument collections, I proposed to concentrate on European instruments on the one hand, and on non-Western instruments on the other. Further, I wanted to study both areas to a greater depth than at The Hague. Two additional museums would allow the chance to learn how different curators and collections functioned, by observing principles and practices in operation in the museums. A further consideration was the country and the city in which the collection was located. Attitudes and techniques differ in some areas of museum curating, and exposure to these differences seemed advisable.

All of these factors had to be weighed against the possibility of finding a museum meeting these factors, and of coming to some agreement with the director and curator. The museums finally selected were the Musée de l'Homme in France, and the Victoria and Albert Museum in England.

A valuable feature of the programme therefore, was its flexibility: the involvement with three museums in three countries, rather than just one museum, provided a better perspective of the nature and purpose of museum instrument collections. Residence in each country for extended periods, afforded opportunities for contact with a number of people and institutions connected in some way with the museum's collection, e.g. professional instrument builders and repairers, university and other research programmes and seminars, restoration and conservation laboratories, et cetera. This kind of contact is often available or of concern, only when one is actually involved with a museum in a professional and long-standing capacity.

The procedure followed, allowed more intensive, realistic involvement with collections through focusing attention on specific problems from their initiation to their completion. The opportunity of following through an enquiry or problem with which one had been involved from its inception, was of great use. The concept of executing day to day tasks in one location over a reasonable time made contact with museum functions and responsibilities a reality.

Valuable information was also provided by attendance at the International Council of Museums (ICOM) International Congress in 1974. Contact was made with the International Committee of ICOM that is particularly concerned with music instrument museums. This provided the opportunity to meet museum instrument curators and members of the staff of various instrument museums throughout the world, and to discuss common concerns. Some details of this contact are given here because they proved to be useful.

The International Committee referred to is known by its initials - CIMCIM: Comité International des Musées et Collections d'Instruments de Musique. This name was changed a few years ago from the name IAMIC: The International Association of Music Instrument Collections. The latter organisation continued until 1975 when the relationship between CIMCIM and IAMIC was reorganised.

CIMCIM consists of a body of professional museum specialists. These include institutional members of all museums and other public institutions with music instrument collections; individual members, i.e. all staff of these institutions, whether they be curators, restorers, research or lecturing assistants; and individual associated members, i.e. musicologists, instrument makers and restorers, and private collectors.

One of the functions of CIMCIM is to make "professional contributions to the benefit of those who are not members of nor eligible for membership in CIMCIM" (CIMCIM Newsletter V:2).

At the end of 1976, CIMCIM had a total of 180 members throughout the world (ICOM News 29:46). Members work within one or more of the four working groups: restoration, cataloguing, audio-visual, and ethnic music instruments (Ibid).

CIMCIM (IAMIC) issues a newsletter written by music instrument personnel in museums. Articles deal with information about numerous activities of instrument museums, with reports on conservation, restoration, research (both of individual museums and the working groups of CIMCIM), exhibitions, publications and recordings of museum instruments, and lists of stolen instruments from various world collections. The last part of each newsletter

has incorporated a technical bibliography for conservators, restorers and curators on the care of musical instruments (Hellwig). One of the main objectives of CIMCIM has been the compilation of the International Directory of Musical Instrument Collections, published in 1977, and edited by Jenkins. The directory contains information about instrument collections from 160 countries referring to approximately 700 collections.

CIMCIM's newsletter is the only means of written communication that museums receive regularly which informs them of a wide variety of common interests for music instrument curators and collections in museums. The work of CIMCIM is therefore an important avenue for the development of ideas and for the transmission of these throughout the world amongst collectors and museum personnel.

The reasons for the instigation of this Committee of ICOM are worth quoting as they have a bearing on the discussion in the next chapter:

For many years curators of music instrument collections have struggled with restoration, conservation, comparison of instruments of different types, and other problems of their work, more or less alone, except for occasional visits to other museums. All felt the need for some organisation which would permit a greatly increased exchange of information through some regular contact. Accordingly, a group of curators met at The Hague in 1959, where they discussed many of the most pressing problems, and formed such an organisation (IAMIC Newsletter I:3).

Considering the long establishment of most of the larger, well-known collection of European and American museums, it is

interesting to note that the formation of such an organisation was left until so recent a time as 1959.

Having reviewed the study programme and the various museums in which experience was gained, the actual areas of study and training done in museums have been indicated in the next section of this chapter.

#### SUMMARY OF RESEARCH IN EUROPE, 1974 - 1975

The summary of subjects investigated when researching the principles and practices of museum instrument collections shows a bias towards museological work and investigation rather than an organological one.

For the purposes of this chapter the summary has been separated into nine topics. These are (i) the purpose of the museum, (ii) administration, (iii) staffing, (iv) general functions, (v) the instrument collection, (vi) scientific research and work, (vii) display, (viii) public services, and (ix) specialised facilities. In order to clarify the nature of the research and work done in museums during the one year programme, some general remarks referring to these topics have been included.

(i) The overall purpose of the museum, in particular, the purpose of the instrument collection within the museum context. This was an important topic because it was necessary to come to a better understanding of the work which the museum does in general, and its functions. Specialist and non-specialist museums have different functions, and so this subject involved research into how the particular function of a collection is perceived by both curator and staff, and of how this perception is then translated to actual practices.



For example, the Victoria and Albert Museum collection of music instruments belongs to the Department of Furniture and Woodwork. As a museum of decorative arts, there is a concentration on the decorative features of the instruments.

This principle, naturally alters the emphasis of many aspects of the work of the curator when contrasted with the purposes of specialist museum collections. Specialist collections would place greater emphasis on an instrument's musical features and this emphasis will have an effect on a museum's principles and practices regarding restoration and display for example. Thus, the objective, given in this illustration of the Victoria and Albert Museum, may well be visually complete instruments rather than musically complete instruments, because the very purpose of the museum is to concentrate on the visual aspects of items.

(ii) Administration; on the one hand, of the museum and the music instrument department within that museum, and, on the other hand, of the independent instrument museum. Investigations were carried out as to the type of administration, general financing and budgeting of museum collections, degree of autonomy of the curator, and the nature of the relationship of museum collections with conservatoriums, national, state or city governments, and any other institutions.

(iii) The staffing of instrument museums; this required an examination into such matters as the number of staff, and their qualifications and experience in the areas of musicology, museology, conservation, and restoration.

(iv) General museum functions performed by instrument collections; these are the functions that relate to maintenance and storage of collections, including such concepts as museum environment.

(v) The collection of instruments; studied mainly from the museological point of view. Topics involved general questions such as the number of instruments comprising a collection, the types of instruments, and the areas represented in terms of geography and morphology. Any special or unusual examples of instruments were studied, as was the general condition of instruments. Observations were made of whether instruments were restored, and of the reasons given for restoration or non-restoration. As well as these observations, the degree and type of restoration was noted, i.e. full restoration returning an instrument to playing condition, restoration to render a specimen safe for storage or handling, and restoration for visual completeness.

The investigation and study of any collection of instruments also included a study of the museum's cataloguing system, and the manner and method in which it was employed in the museum. Questions were asked as to the kind of uses to which the catalogue was generally put, and the way in which particular queries could be answered by its use. Of special interest was the method and type of classification used in the museum.

(vi) Scientific work and research; more specifically, a study was made of selected instruments from an organological point of view, exploring the museum's related resources, such as restoration workshop, findings of museum research, and library sources. Research was carried out in the course of participation

in a variety of museum tasks that were organologically oriented. Some specific research, for example, was required for immediate museum purposes in the '"Wereld Muziekconours" Historisches Blaasinstrumenten Exhibition' (Historical Wind Instruments Exhibition). This exhibition was mounted by the Gemeentemuseum in The Hague for the 1974 Holland Festival. Courses were taken in organology at the Conservatoire National Supérieur de Musique, Paris, together with seminars at the Institut de Musicologie. Among the many day to day tasks of a more mundane nature, the following items formed other topics of research and museum work; preparation of a checklist of non-Western instruments in the Gemeentemuseum; attendance to correspondence and public inquiries regarding the collection of the Victoria and Albert Museum; observation of the casting of bells at several Bell Foundries in the Netherlands; visits to different carillons and organs in churches, as well as visits to selected conservation laboratories, instrument builders and workshops throughout Europe and England.

(vii) Display; aspects which were examined, for instance, were, the percentage of instruments on display, permanent and temporary exhibitions, and the way in which these were mounted. Instruments may be displayed in a variety of ways and for different reasons; three ways are, according to chronology, organology or typology and use. Principles of display were also investigated carefully. For example, it may be the practice to show instruments in their playing position, but this is not always the most desirable from the point of view of conservation. Lighting and other physical factors were

briefly examined, too.

(viii) Public services; a wide variety of aspects was incorporated in studies in this area because one of the primary aims of the museum is public service. Five aspects have been outlined for comment here; of these, public relations and general educational services are ranked above the others.

Since society has entrusted museums with certain responsibilities to be performed on its behalf, display serves as an immediate and major forum for public relations. Several different questions arise out of this: Should the museum display all it has? Should its display incorporate only the more attractive looking instruments, ignoring other important type-specimens in favor of the museum's public relations function of looking attractive for the public to whom the collection ultimately belongs? Should the museum display specimens which are restricted to the interests of the curator?

With reference to research and public relations, the question asked is, what are the principles regarding public access (including playing access) to collections for students and scholars, and how closely are these followed in practice? One museum conservator wrote that "As a rule - and this decision is based on lack of staff and facilities as well as conservation - access is denied" (Patterson, p.46).

General educational services offered by museums were examined, and observations were made about seminars based on museum research, concerts, and lecture-demonstrations making use of the instruments.

Loan services, another important aspect of public relations, were studied from particular points of view, e.g. the risks involved in handling instruments and in removing them from museum conditions.

The last aspect of public relations that was researched was the availability of catalogues, photographs, and other documentation, such as drawings for reproduction of historic instruments.

(ix) Specialised facilities; particularly for conservation and restoration. These were studied in terms of their immediate application in the museum. A few questions which are quoted here, give an idea of the kind of issues investigated. How should restored instruments be conserved? Why are instruments restored? What are some alternatives, some advantages, and some disadvantages of restoration? How does one choose the most suitable instruments for restoration? Will restoration result in the loss of organological information?

A wide number and variety of museums were studied in order to learn more about the principles and practices found in instrument museums. Not all of the different aspects of the above subjects were investigated at each museum, either because this proved impractical at the time, or because they were not there to be observed in the first place. The findings of this research listed in the preceding nine topics, form the basis of this thesis: of the five chapters, chapter two in particular, gives answers to much of the research. The next part of this present chapter gives a list of the actual museums which were visited during the course of the year.

## A SELECT LIST OF EUROPEAN MUSEUMS VISITED

This is a select list of museums visited, with a synopsis on each museum. Together with the main three museums in which I worked, these museums have provided an important source for observing various aspects of museum collections of instruments, and have thus contributed to the general remarks made in the preceding pages.

A guide to the publications of each institution is included. Various sources were used for obtaining bibliographic information, the main one being my own enquiries at the museums themselves. For the publications that have appeared since my observations in Europe, I have used Jenkins (ed., 1977), in addition to library sources. Many of the publications, especially catalogues of instruments, are not available in Australian libraries.

The list is arranged alphabetically according to countries and cities within each country.

### 1 Austria

#### 1.1 Salzburg:

Carolino Augusteum Museum. This municipal museum houses a small representative collection of approximately 300 European instruments. A fifth of the collection is attractively displayed in a separate section of one floor of the museum. The museum has a curator of music instruments. Catalogues and other publications are: "Die Instrumenten-Stube im Museum Carolino Augusteum zu Salzburg" (Suss), Das Museum Carolino Augusteum in Salzburg 1833 - 1908 (Fugger),

and Alte Musikinstrumente im Museum Carolino Augusteum, Salzburg (Geiringer). The last named is the most comprehensive.

1.2 Salzburg:

Mozart's House and Museum. Founded as a museum in 1880, the house was Mozart's birthplace. It contains a collection of portraits, letters, and memorabilia, in addition to thirty music instruments. Several of these instruments belonged to Mozart, e.g. his first violin, and a clavichord. A publication pertains to the five instruments which belonged to Mozart (Schurich).

1.3 Vienna:

The Austrian Museum of Folklore. Music instruments from all over the country are displayed in a special section of the museum.

1.4 Vienna:

Kunsthistorisches Museum, Collection of Ancient Music Instruments. This museum contains a magnificent assemblage of about 1,000 instruments. They are well exhibited with clear indications as to their origins and age. The collection covers all classes of European instruments of art music as well as a few folk and ethnic instruments. Amongst the European instruments are some outstanding, valuable specimens of various periods, some of which have interesting histories attached. Documentation on each instrument is

restricted to name, maker, and date, where known. Performances on the museum's instruments are held regularly, and lectures and seminars are held in conjunction with the University's Institute of Musicology. Sound recordings of several pianos in the collection have been made. The curator, Dr. K. Wegerer, is a musicologist who specialises in the baroque and the classical periods. A restoration workshop is part of the museum. Inventories, catalogues and publications are extensive in number. In manuscript are the Ambras Inventories beginning in 1596, the period in which the Archduke Ferdinand of the Tyrol established the collection in the Castle of Ambras, and appearing again in 1665, 1725 and 1730 (Jahrbuch der Kunsthistorischen Sammlungen des A.H. Kaiserhauses). There are three catalogues: Schlosser (1920), Luithlen (1941), and Luithlen and Wegerer (1966). Schlosser's catalogue, together with that of Sachs of Berlin (1922) and Mahillon of Brussels (1880 - 1922), is one of the great pre-war catalogues. Other publications are by Schlosser (1922), and Luithlen (1939, 1954, 1958, 1960, 1967, 1971).

## 2 Belgium

### 2.1 Antwerp:

Ethnographic Museum. No music instruments are displayed here, but access to the collection of 200 instruments is possible.



## 2.2 Antwerp:

Museum Vleeshuis, Music Instruments of the Royal Flemish Conservatorium, Antwerp. The section of the museum dealing with music instruments has enormous international importance: Museum Vleeshuis possesses nine Antwerp harpsichords which serve to remind one of the technical refinements of harpsichord building that was unsurpassed in Europe for more than a century. A small collection of about 500 other instruments, mainly European art instruments, belongs to the museum and is displayed in separate rooms throughout the historic building. Museum Vleeshuis is the home of the Ruckers-Genootschap, the music organisation that is internationally known for its interests and concerns with harpsichords built in Antwerp. The Ruckers-Genootschap carries out much research on harpsichords and has a world-wide membership. As well as putting out publications that deal with its own restorations of Flemish instruments (Ruckers-Genootschap), it has newsletters and annual conferences and regular concerts devoted to the keyboard (Lambrechts-Douillez, 1970). The Ruckers-Genootschap is centred on this museum because of the museum's policy of restoring as many of its instruments to correct playing order as possible. Students from the Conservatorium come into the museum each week to play the instruments. The curator responsible for establishing the collection as it stands today in Museum Vleeshuis is Dr. J. Lambrechts-Douillez. The most recent catalogue of the collection, Muziekinstrumenten Vbis, van het Koninklijk Vlaams Muziekconservatorium (1967) is organised according to the system of Francis Galpin (1956).<sup>1</sup>

1 Galpin's classification of instruments is examined at length in chapter four.

### 2.3 Brussels:

#### Musée Instrumental du Conservatoire Royal de Musique.

This collection is often referred to as the "Mahillon" collection, after Victor Mahillon, author of the collection's first catalogue in five volumes published between 1880 and 1922, and is entitled, Catalogue Descriptif et Analytique du Musée Instrumental du Conservatoire Royal de Musique de Bruxelles. The catalogue, and consequently the collection itself, became world famous because of the way all instruments of music were systematically classified. The reputation of the Musée Instrumental is reflected in its collections (4,300 instruments), exhibitions and research in organology. An active section of the Musée Instrumental is involved with opening up new areas of museum education in music and music instruments. Although Mahillon's catalogue of 3,300 instruments has been out of print for many years now, it is readily available in most major libraries. Currently, there is a check list of the small number of instruments on display in the museum. No documentation is displayed with the instruments themselves. The staff consists of a curator, two assistants and a restorer.

### 2.4 Liège:

Conservatorium of Music. A small university collection of instruments is housed in the conservatorium buildings.

### 2.5 Tervuren:

Musée Royale de l'Afrique Central. This anthropological museum is situated in a suburb of Brussels, and contains

specialised African collections from the former Belgian Colonies, particularly Zaire. The department of music is concerned mainly with music from the Central African regions: all research and most of the 10,000 instruments in the museum are based on the Central African collections. The curator of music, Dr. J.S. Laurenty, has written extensively on Central African organology. A number of catalogues of music instruments of major importance are published by the museum: Olga Boone (1936, 1951) and J.S. Laurenty (1960, 1962); each covers one type of instrument. The museum also publishes a large number of annals, produces several other publications, and issues discs of its field recordings. The Musée Royale sponsors expeditions for field work on a regular basis, in order to continue collecting in the Central African regions.

### 3 Denmark

#### 3.1 Copenhagen:

National Museum, Ethnographical Collection. Danish folk instruments of music are displayed in a separate section of the museum. The ethnographic collections contain an important archaeological collection of 100 instruments, including lurs.<sup>1</sup>

1 Lurs are Bronze Age horns found in Northern Europe, chiefly among the Danish peat bogs. They have a conical bore terminating in a flat, ornamental disc, not a bell. (Marcuse, 1975:745, and Sachs, 1972:245,6).

### 3.2 Copenhagen:

Museum of Decorative Arts. This is largely a music history museum, and includes 1,366 instruments, mainly of European origins. The permanent exhibition, showing the development of European instruments, includes a recorded commentary and music excerpts.

### 3.3 Frederiksborg:

The Slot at Frederiksborg contains the world famous Compenius organ, built in 1610. The organ is in excellent condition and is played regularly. It is said that the temperament of the instrument has not been altered since it was first built.

## 4 England

### 4.1 Cambridge:

Fitzwilliam Museum. The museum contains a small collection of music instruments, mainly early keyboard, and other music material, such as the Fitzwilliam Virginal Book. The museum is responsible to Cambridge University, and specialises in paintings.

### 4.2 London:

Boosey and Hawkes, Sonorous Works. The music instrument manufacturers, Boosey and Hawkes, have a private museum near the factory containing a substantial collection of wind instruments. A catalogue entitled Antique Musical Instruments of Historical Interest, is available from the museum. It was compiled by Anthony Baines in May, 1972 and provides essential detail on each instrument.

#### 4.3 London:

Horniman Museum. This museum contains a large collection of music instruments. Of the 5,000 instruments, most are non-Western, coming from Africa and Asia. A large part of the ethnic collection of instruments of the Victoria and Albert Museum is incorporated; the museum also owns the Adam Carse collection of more than 300 European wind instruments. J. Jenkins, the keeper of music instruments, has been active in field work in Africa and Asia, collecting, making recordings and gathering photographic and other documentation pertaining to music instruments and music. In 1976, a large exhibition devoted to music and music instruments of Islam showed the result of such field work (Jenkins and Olsen). The small handbook entitled Musical Instruments (Jenkins, 1977) is of a general nature, and adopts definitions which are the composite work of the curators of music instrument collections throughout Europe, the Comité International des Musées et Collections d'Instruments de Musique (CIMCIM). Other publications are by Carse, Ridley, Thibault, and Jenkins and Bran-Ricci.

#### 4.4 London:

Museum of Mankind, The British Museum. This museum holds the largest collection of instruments in Britain, all of which are normally in store. Noteworthy are fifteen Bronze Age horns from Ireland, a Roman trumpet mouth-piece found in Essex, and the Sutton Hoo lyre. Instruments are on display from time to time depending on the exhibitions that may be mounted. One publication relevant to music instruments is the important catalogue of Egyptian Antiquities (Anderson).

4.5 London:

National Musical Museum\* (The British Piano Museum). This is a specialised, private museum that collects and restores music instruments that are mechanically operated. The collection comprises more than 100 instruments, most of which are mechanical pianos operated by music rolls, discs, and books. The director, Mr. F. Holland, is the owner.

4.6 London:

Royal College of Music, Museum of Music Instruments. The collection is housed in a new building erected in 1970, with complete temperature control. There are approximately 450 instruments in five main parts; Indian instruments from the Maharajah Sourindro Mohun Tagore donated in 1884; the collection of the first honorary curator, A.J. Hipkins, presented in 1911; a Chinese collection given by King Edward VII in 1919; the E.A. Ridley collection of wind instruments given in 1968, and formerly in the Luton Museum; and the museum's own collection. Although the museum is affiliated with the College of Music, the curator stated that few students take advantage of the opportunity to come into the museum and to play the instruments. Concerts are sometimes given in the museum. A catalogue was commenced in 1964 and is as yet uncompleted. Photographs in black and white are available of the guitars, some of which are from the early seventeenth century; scale drawings of some instruments are also available; together with photographs. The museum has a part-time curator.

\* Since it is not a permanent, public museum it is not within the ICOM definition.  
See pp 47, 48.

5 France

5.1 Conservatoire National Supérieur de Musique, Musée Instrumental. The conservatorium has a collection that contains over 3,000 instruments, both of European and non-Western origins. As the museum is in cramped conditions in the Conservatoire, some of its instruments are on loan abroad and in different towns in France (New York, Rouen, Amiens, Orléans, Castres, Aix-en-Provence, and Besançon). Many instrument makers come to the museum to make a detailed study of the instruments; full-scale plans of many instruments are for sale. Many of the instruments have been recorded on disc. A weekly course in organology, spread over two years, is given by the Musée Instrumental from October to June each year. Lectures are given by the various specialists in organology and instrument restoration. There is a full-time curator for the Musée, plus an assistant to the curator. Three full-time restorers are attached to the Musée as well.

5.2 Paris:

Musée des Arts et Traditions Populaires. Located in the Bois de Boulogne, this museum is a specialised museum that concentrates specifically on the arts and the traditions of the world's French-speaking peoples. It includes instruments and recordings from all over the French-speaking world, e.g. southern parts of the United States. The collection numbers about

3,000 European folk instruments, mainly from France. The curator is the eminent musicologist, Dr. Claudie Marcel-Dubois. The Musée is attached to the Centre National de la Recherche Scientifique in Paris, and is both a museum and a research institute. There are 46,000 sound recordings from France and countries traditionally French in culture and language, a music section in charge of museographic activities (catalogues, exhibitions, auditions, documentation, etc.) and an ethnomusicological department with a permanent team of 10 research workers and technicians. University courses given by the Musée, are run by the Séminaire d'Ethnomusicologie de l'École Pratique des Hautes Études (Sorbonne). Specific functions of the Musée's music section may be mentioned here.

Between its creation and official opening to the public, collections of musical instruments were constituted mainly by field investigation; ethnomusicological research was commissioned to make sound and photographic records including organological observations, and to gather traditional songs and airs; themes of musical interest figured in most temporary exhibitions organised by the museum; a department of ethnomusicology with record library was set up and the teaching of this particular subject begun; many studies treating in particular of the ethnomusicology of musical instruments have been published (IAMIC Newsletter 1:26).

In February, 1973, a Galerie d'Etude was opened and a Galerie Culturelle was also completed:

Amongst other innovations it includes a 25 metre show-case with three audio-visual cells presenting a new programme,



"Music and Musical Instruments", in five parts. The first and most developed is devoted to instrumental typology, while the fifth, reserved for some functional aspects of music, prepares the way for the section "Music and Society" to be presented in the Galerie Culturelle. Instrument making, instrument playing and the problem of the musical instrument as a regional and social emblem formed the other three parts. The juxtaposition of the two cells allows visitors to hear examples of instrumental and vocal music and to follow on a film with synchronised sound the playing technique of a traditional regional instrument. The album of photographs in the third cell completes the history of traditional popular French instruments (IAMIC Newsletter 1:26).

## 6 Germany, Federal Republic

### 6.1 Berlin:

Museum für Völkerkunde, Dahlem Museum Complex. The collection numbering approximately 2,500 instruments is included in the extensive collections of ethnographic material. The New Guinea objects are well documented, and a selection of these from the Sepik, including a large number of instruments, has been profusely documented in the three volume set of books, Kunst vom Sepik (Kelm). This forms a comprehensive catalogue of the artifacts and the art of the Sepik area of New Guinea. The photographs of the instruments in these volumes are invaluable as sources of reference, and for purposes of comparison for anyone interested in non-Western music instruments. The famous Phonogram Archive, founded by Carl Stumpf in 1900 and directed

by von Hornbostel from 1905, became part of the museum in 1934. It is now called the Musikethnologische Abteilung, and together with the instruments, the library of musicological books, manuscripts, and iconographic materials forms part of the Ethnomusicology Department. Publications are by Sachs (1923), K. Reinhard (1951, 1962, 1965, 1967), Reinhard and Reinhard (1968), U. Reinhard (1965), and Koch and Christensen (1964).

## 6.2 Berlin:

Musikinstrumenten Museum, Staatliches Institut für Musikforschung. The collection of ca. 5,000 instruments, largely European art instruments, is displayed in twelve rooms. A guide book (Otto, 1965) gives a room by room description. The display traces the evolution of music from the sixteenth century to the early twentieth century. Instruments of a certain period are displayed together in adjoining rooms. Only one of the rooms has a display of non-Western instruments. Noteworthy are the Flemish harpsichords and a collection of ancient wind instruments. From 1920 until the time of his emigration to America in 1933, Curt Sachs was curator of this collection which then numbered about 3,000 instruments. Although about 50% of the collection was lost during the second world war, it has been built up again into a fine museum. There are five full-time staff in addition to an archivist; three restorers are on the staff, each one

concentrating on strings, keyboards, or wind instruments respectively. There is an extensive library, an archive containing over 1,600 items, a collection of approximately 1,000 rolls, discs, et cetera, for mechanical instruments. The sounds of many of the museum's instruments have been transferred to disc (Archiv and Electrola), and the museum has prepared a series on the development of various instruments which has been broadcast on German radio. The booklet, Das Instrumenten Museum, Berlin (Otto, 1958), outlines the historical background of the building and the collection, and describes fifty-six of the instruments in some detail. The list of publications by the museum in addition to the two already mentioned, includes Fleischer (1892), Sachs (1922, 1923), and Berner (1952, 1963).

## 7 Ireland

### 7.1 Dublin:

National Museum. The museum contains some examples of early Irish music instruments, mainly harps and pipes, and also has some important archaeological instruments, for example, bronze horns and rattles.

### 7.2 Dublin:

Trinity College Library. The Library contains the world's oldest harp which is said to be at least 500 years old. It is displayed among the thousands of books and manuscripts in the library.

## 8 Netherlands

### 8.1 Alkmaar:

St. Laurenskerk. The choir organ of this church is reputed to be the oldest in Holland. It was built in 1511 and is still played.

### 8.2 Amsterdam:

Rijksmuseum. This famous museum has a small collection of European art instruments on display. The larger part of the Rijksmuseum's collection of music instruments has been transferred to the Gemeentemuseum in The Hague.

### 8.3 Utrecht:

National Museum "Van Speeldoos tot Pieremont". This must be one of the most enjoyable specialist music instrument museums in Western Europe. It specialises in mechanical instruments, mainly organs, from the 18th to the 20th centuries. The collection ranges from the tiniest of musical boxes with discs and pins, to the large hand driven and electrically operated street organs. Most of the instruments are demonstrated during regular daily guided tours. This collection illustrates a fine example of how instruments must be heard to be fully appreciated and enjoyed. The success of this principle as practised in this museum lies partly in the fact that the instruments are mechanically operated; there are very different problems inherent in trying to perform on these instruments and on humanly played instruments.

9 Scotland

9.1 Edinburgh:

The Russell Collection of Harpsichords, University of Edinburgh. The two dozen instruments span two and a quarter centuries of harpsichord building, and five countries. The collection was the work of the late Raymond Russell. His ideal was finally realised in 1959, just after writing The Harpsichord and Clavichord, when the University of Edinburgh acquired the St. Cecilia's buildings expressly to house this collection. A brochure for the use of visitors to the collection contains details and photos of the instruments. Its title is The Russell Collection of Early Keyboard Instruments (1968). Three restorers are attached to the museum.

10 Sweden

10.1 Stockholm:

The Ethnographic Museum, Department of Ethnic Music Instruments. Dr. Soderberg, a noted specialist in African organology, is curator of this collection of 2,000 instruments.

10.2 Stockholm:

Musikhistoriska Museet. In 1974, the special exhibition which was arranged for the Conference of the Comité International des Musées ... (CIMCIM), was based on the theme of prehistoric music instruments, many of which had recently been uncovered in excavations in Scandinavia. The museum collection itself consists of

about 2,500 art instruments, and another 2,500 instruments which include a considerable number of Scandinavian instruments, especially folk instruments. Basically, the museum's permanent exhibition is divided into three parts: European instruments from the period 1550 - 1859, Scandinavian folk instruments, and Jenny Lind memorabilia. Several temporary exhibitions are scheduled each year on different topics, and most of these are converted into travelling exhibitions within Sweden.

In 1971, the travelling exhibitions drew 31,158 visitors, and exhibitions and concerts at the museum drew 19,976  
(IAMIC Newsletter I:25).

The museum has its own series of publications, the most important organological series today being the publications of the International Folk Music Council Study Group on Folk Musical Instruments - *Studia Instrumentorum Musicae Popularis*, vols. 1 - 5 (eds. Emsheimer and Stockmann). Other publications are by Ling (1967), Emsheimer (1964) and Kjellstrom (1970).

## 11 Switzerland

### 11.1 Basel:

Historisches Museum. Collections of historical music instruments of European origins are housed in a building in the grounds of the Schola Cantorum, to which the museum belongs. The curator is Dr. W. Nef, who lectures in organology at the Schola Cantorum. A catalogue is available: Alte Musikinstrumente in Basel (Nef).

### 11.2 Basel:

Museum für Völkerkunde und Schweizerisches Museum für Volkskunde. This is one of the more important collections of ethnographic material in Western Europe; it contains a diverse collection of approximately 2,000 instruments, most of them from New Guinea. Dr. C. Kauffmann and Professor S. Schuster are in charge of the collection and research in this area. The museum is active in mounting exhibitions, many based on the results of field research, and there are several publications associated with the various temporary exhibitions. Two of these in particular are worth mentioning: Anfänge der Instrumentalmusik: zur Akustischen Kommunikation bei Naturvölkern (Ramseyer, 1971), and Klang Zauber, Funktionen Aussereuropaischer Musikinstrumente (Ramseyer, 1969).

### 11.3 Neuchatel:

Institute of Ethnology, University of Neuchatel. Over 1,000 instruments, mainly non-Western music instruments, are found among the general ethnographic collections, including a fine collection of African membranophones. The work of Dr. E. Lichtenhahn and Dr. U. Ramseyer of the Institute of Musicology have contributed to the expansion of the African collection of instruments and field recordings. The museum musicologist has been active in preparing a complete catalogue using the experimental ICOM-CIMCIM catalogue cards.

### Conclusion

Having indicated the type of observations made in Europe during my study tour of music instrument collections in museums, and having made some general remarks about the museums visited, chapter two takes up an in-depth examination of what museums in general aim to do, and discusses how effective museum instrument collections are within that realm.



## CHAPTER TWO

### MUSEOLOGY AND MUSICOLOGY:

#### SUGGESTED THEORY FOR THE MUSIC INSTRUMENT COLLECTION

Several factors, such as a survey of the available literature, information obtained in discussion with specialists, personal observation, and practical experience in several instrument collection in Western Europe, indicate that the precise nature and purpose of the music instrument collection in the context of the museum is not clearly defined.

It appears that museology has simply ignored music, while musicology, for its part, has ignored the needs of the museum. Although this state of affairs is difficult to explain in view of the knowledge and expertise that was available in the early part of the twentieth century, it is even more difficult to understand why this contradiction has continued to exist, albeit to a lesser extent, over the last two decades.

In an effort to describe the nature and purpose of the music instrument collection in the context of the museum, this chapter discusses the features of the museum in general, and makes

an evaluation of why it is an appropriate setting for a collection of music instruments. This view has been taken because, in essence, the museum instrument collection shares much the same responsibilities, role, objectives and methods as the whole museum in general.

It is suggested that from this fundamental position of the museum in general, the museum instrument collection should develop its own particular principles and practices. The attempt to define the theory of the instrument collection in more specific terms, has involved an examination of the relationship between musicology and museology from an historical and an analytical perspective.

### THE ROLE OF THE MUSEUM IN SOCIETY

General museological literature seems to indicate that one of the ever present goals of museums appears to have been to survive the struggle to become, and remain, an effective social force within the community. Even today many think that the only justification for museums in society rests on whether or not they effectively reach out to that society and touch it visibly.

While everyone within the museum profession is always ready to defend the museum as an institution worthy of merit and support, governments and the public in general have often proven themselves to be at variance with this view. The fact remains, however, that in spite of opposition of varying degrees throughout museum history, museums are still found on every continent and in every country. Furthermore, new museums are being built each decade while others are being planned. One can only assume, therefore, that museums must have an inherent, perhaps even an undisputed, value for some sectors of society. In other words, the museum is a recognised feature of everyday society.

After all, the art of the past makes a living contribution to the practice and appreciation of the arts of the present day. It is indeed arguable that for very many people the only satisfactory avenue of approach to artistic appreciation is through the arts and crafts of the past (Francis, p. 90).

There are as many ways of defining the role of the museum in society as there are views both for and against its

existence altogether. But it seems that the principal problem regarding this issue revolves around the effectiveness of the museum in its witness of the past, for the present and for the future of man and his world.

#### WHAT IS A MUSEUM?

A better understanding of the context of the music instrument collection in the museum can be gained from historical perspective as well as from a knowledge of the function and objectives of a museum. Accordingly, the following widely used definition of a museum is offered as it appears in the Statutes of the International Council of Museums (ICOM):

A museum is a non-profit making, permanent institution, in the service of society and of its development, and open to the public, which acquires, conserves, researches, communicates and exhibits, for purposes of study, education, and enjoyment, material evidence of man and his environment  
(ICOM Statutes, section 11, article 3).

Naturally, in a broad definition like this an ideal is set forth. Such an all-encompassing definition makes it difficult for many of the institutions professing to be museums to approximate this ideal.

The term, museum, as used and defined by ICOM, is a convenient way of discriminating between numerous kinds and sizes of collections of music instruments for, if one accepts that a museum collection should comply with this definition, then certain types of music instrument collections, as will be demonstrated, are automatically excluded. ICOM's definition is therefore used

in this study as a means of determining the terms of reference; it also provides a logical base for evaluating the functions and objectives of any instrument collection within the museum.

It is highly unlikely that private collections, for instance, can be considered museums in the same sense as that used by ICOM. Such private collections belonging to individual persons, music clubs and societies, and commercial music instrument manufacturers, for example, are in no position to possess more than a few of the functions as defined by this definition to be officially classed as museums. In fact, they may not necessarily desire to be so considered.

Sections of this definition may be taken separately to illustrate this fact very quickly: "... open to the public..." - not all music instrument collections are open to the public; they exist as private collections in every sense of the word. Similarly, the only interpretation which can be placed on the phrase "... in the service of society and its development...", is not applicable to private collections, since they are not made with this as the primary intention. Nor do many instrument collections "... conserve, research, communicate and exhibit for purposes of study...". This last phrase quoted must be emphasised as particularly relevant in the argument since two of the most important functions of a museum are conservation and research. It is these two qualities which help to set the museum apart as a collector of items of any kind.

This is not intended to denigrate private collections, for they make an invaluable contribution to music scholarship.

A clearer understanding of what a museum is, can be gained from a closer examination of what it aims to do, and of what it actually does in practice.

#### THE AIMS OF MUSEUM INSTRUMENT COLLECTIONS

The criteria by which museums are judged are listed below. These may be usefully applied in assessing the meaning and purpose of the music instrument collection in the museum context.

The aims of museums in general, which have been clearly defined by the Report of the Committee of Inquiry into Museums in Australia, 1975, are:

- Museums should preserve those objects which merit safekeeping for aesthetic, scientific or historical reasons.
- Museums should classify and arrange their exhibits with boldness and caution, conscious that a way of arranging knowledge can be illuminating in one era and stultifying in another era.
- Museums should satisfy curiosity and arouse curiosity.
- Museums should educate formally and informally.
- Museums should extend the front-lines of knowledge.
- Museums should enable curious spectators to visit those front-lines and understand how some of the battles to extend knowledge are fought.
- Museums should give play to the magic provided by the rare or unique object...

- Museums should harness the skills of all the relevant arts and crafts and sciences in conserving those rare objects for generations to come.
- Museums should be both art-form and theatre, attempting to improve the quality and variety of messages which that art-form is most fitted to send forth.
- Museums should entertain people of all ages  
(Piggott, 3.6:6).

These aims may be divided into four different areas.

These form the central objectives of any museum, which are

- 1 collecting
- 2 preservation and conservation
- 3 research and conservation
- 4 education

Each of these central objectives will now be examined with special reference to instrument collections in museums.

## 1 Collecting

Often when objects are collected, little or no thought is given to the purpose of the collection. It is without further overtones. Objects are gathered together, and a collection is assembled.

More often, the urge to collect things will be borne out of a current need of some kind which is itself culturally determined. This is so in the case of music instruments. Thus, one aim of the instrument collection in a museum can be said to be like that of all the different collections in a museum: to collect specimens valued for one characteristic or another.

Collection, or acquisition of items is the first responsibility undertaken by the museum for the society it serves. If this function is not carried out, successive functions are automatically rendered superfluous. The realisation of conservation, research, communication, exhibition, entertainment and education depends on the acquisition of individual objects to make a collection.

Part of the responsibility with which the museum is charged in collecting lies in the process of selection to be exercised. The acquisition of objects has often managed to give a museum a disputed reputation. Wise acquisition, which may involve at one time, caution, and at another time, boldness, is a difficult task that requires considerable skill, knowledge and training on the part of directors and curators. The assemblage of a "good" collection alone does much to bolster a museum's reputation in the eyes of all outside that museum, quite apart from its activities in any other sphere of museum work.

Invariably, the characteristic qualifying an item for entrance into a museum is its authenticity. This is the case for music instruments. There appears to be a preference for "uncontaminated" specimens, i.e. the truly old and original. Reproductions that are collected are not nearly so highly regarded as authentic items. While this is only natural, preoccupation with authenticity may become an obsession with some museums.

Objects may be selected in two ways: by purchase, or by donation. The purchase price or market value of an object can help to make it either a more attractive proposition for acquisition, or



a prohibitive proposition altogether. When an object comes into the collection by donation of its owner, it is given either as a private gift, through a deceased estate, or through transfers from other collections.

## 2 Preservation and Conservation

All museum curators nominate as their prime aim the preservation and conservation of collections in as constant a state as feasible.

Museums are conservation. Their role is to acquire and conserve ... The ultimate rationale for acquisition and conservation - national sentiment, display, education, or scientific research, depends utterly on preserving the material in an undamaged, stable state (Ling).

This objective, so highly regarded by curators and museums in general, is to preserve objects not only for present day admiration and study, but for countless future generations. Curt Sachs said that "Aucun musée n'a le droit de posséder des objets qu'il n'est pas en état de conserver" (Sachs, 1934:10).

In museum instrument collections, impetus for the work of preservation and conservation is partly given by the music scholar who is alert to the search for deeper insights into the interpretation of music.

Preservation and conservation of instruments in collections are interrelated with restoration. These are highly controversial topics in the field of curation, generating some disagreement about the degree and manner of restoration. A look at any of the journals concerned with music instruments shows that reports and correspondence

about restoration are much debated issues. Conservation and restoration are more hotly debated topics within the museum world than most other topics today.

The numerous articles appearing in musicological journals, and the number of current journals especially devoted to conservation and restoration of musical instruments, exemplify the increasing amount of interest these issues have stirred since the 1950's. Museums have not been alone in taking time to study these areas. Private collectors and researchers and other public institutions, such as conservation laboratories, have contributed a great deal to contemporary scholarship on conservation and restoration.

### 3 Research: Museum-Oriented Organology

In numerous instances no better proof for hypotheses about certain aspects of music history and interpretation exists than in terms of concrete examples of the instruments themselves, the very same instruments which played the music in question. A baroque guitar with a certain course of strings, to use a simple illustration, bears witness to a particular manner of execution to produce a sound peculiar only to that instrument and to that type. Where little or no evidence can be deduced from having recourse to secondary sources, the instrument itself becomes an invaluable piece of information.

Conversely, discovery of a manuscript containing unusual markings and directions can be interpreted more accurately with a knowledge of the instruments for which it was originally intended. A highly prized function of a museum collection is the protection which it affords to learning of this nature. There can be no substitute for research into original sources.

Music instruments have been demonstrated to be a precious asset to music scholarship when collected and cared for by a museum. Concepts of musical interpretation and style have been re-discovered through a thorough study of the instruments which played the original sounds and produced the original music. This is largely so because it has been observed that composers often wrote in a style and in an idiom suggested by the potentialities of the instruments, rather than by the limitations of the instruments.

An additional factor is that the same instruments upon which initial studies have been based, remain in museum collections for future reference. In some instances, later findings have been known to re-interpret earlier findings. A renowned example of a re-interpretation by others, later in time than the original research, is the restoration work and the development of theories on harpsichords and other instruments by Arnold Dolmetsch towards the end of the nineteenth century. His contribution to organological research on harpsichords was revolutionary at the time in which it was made. From newer and more advanced research, and more extensive evidence, however, much of that initial contribution by Dolmetsch has been superseded. Organological studies like this owe their value to the continued existence of the very same instruments.

The work of Dolmetsch on instrument restoration has been usefully employed to make subsequent later studies possible. Scholarship does not stand still: the music instruments themselves do.

#### 4 Education

##### 4.1 Transmission of Knowledge

Another basic function of the music instrument collection in the museum is education. A museum attempts to cover an extremely broad field of activity which no other private or public institution can claim, or would presume to cover. It ranges from research to entertainment, "...casually including, by implication only, the entire territory of education..." (Parr, p.20). The same writer defines education in this particular context as being for the purpose of "...communication of systematised knowledge and understanding from teacher to learner by any method of transmission that will not unduly distort, dilute, or defeat the intent of the process" (Ibid, p.21).

Professor Geoffrey Blainey was quoted as saying that, "as places of education, museums have excellent but rarely defined advantages" (Blainey)<sup>1</sup>. These are:

- (i) that while the whole stream of education is alienated from the world's objects, the museum allows for the ability to equate an object with what is read or studied about it;
  - (ii) a museum can dispense with "layers of interpretation which, in most media, separate an object or evidence from the audience...";
  - (iii) a museum has the rare advantage of allowing its audience to "...halt and dawdle..." where it wishes;
  - (iv) museums are capable of instructing people from every occupational group and age-group in the same gallery
- (Piggott, 4.17:12).

1 Opening address to the Museums Association of Australia Annual Conference, Ballarat, 23rd October, 1975. Further development of this theme can be located in Piggott et al, 4.17:12.

One hundred and twenty years ago, Frederick McCoy said much the same thing when he wrote: "...under proper direction... museums become the most ready and effectual means of communicating the knowledge and practical experience of the few to the many" (McCoy)<sup>2</sup>.

#### 4.2 The Museum and the Public

Piggott was quoted earlier as saying that museums are capable of instructing people from every occupational group and age-group in the same gallery. This raises the question of the difficulty of catering to such an amalgamation of people. Herein lies both a challenge and a drawback.

One of the fundamental aspects of education is that the teacher has some knowledge of his pupils' abilities and experience. Knowing the audience in a museum would therefore seem important in trying to achieve effective instruction and entertainment. At what level, and at whom, does the museum instrument collection aim its instruction?

To my knowledge, there has never been a survey of the audience of museum instrument collections in Western Europe which has been made available for the use of these museums. There is no indication of just who comprises the public which visits museum instrument collections, and so it remains an unknown factor. Until surveys show the make-up of visitors to the halls and galleries of these collections, the only way they can ascertain for whom they

2 McCoy, quoted verbatim in an unpublished paper delivered to the Museums Association of Australia Annual Conference, 1975, by E. Rosander, "Regional Museums - Overseas Models for Australia".

mount exhibits, and with whom they are communicating, is by analysing general museum audience surveys where these have been carried out, or by conducting their own surveys.

Until now, museum instrument collections have not been too concerned to know their particular audience. Perhaps one reason for this is that museums have the ability to instruct and entertain, but in a manner that is different from that of the traditional school system. A better knowledge of the composition of museum visitors has not seemed as pressing a need to the museum, as is a knowledge of the composition of students in the classroom to their teacher, because, like the concert hall, the theatre, or the public park, the museum must remain a private environment in the midst of a communal sphere, and it must remain a personal experience no matter how greatly it may be shared with others.

The gentle, persuasive approach peculiar to its displays and its atmosphere is a cornerstone in an experience in which all learning is practically a voluntary thing. The museum is able to counteract the effect produced, where music, strongly identified as a cultural activity, has been placed beyond the reach or comprehension of certain persons in society because they have had little or no exposure to it. The mystery surrounding the unknown, in this case music, is a discredit to our educational systems and to the wider community which foster this type of attitude.

In any museum exhibit there are opportunities for breaking down apprehension and awe of the unknown. This is because visits to a museum are not forced (with the possible exception of school visits); there is no limit to the amount of time taken in the learning process;

the permanency of major exhibits means that multiple re-visits are possible; and, how much, or how little detail is taken in, and exactly what parts of the displayed information and material are taken in, is a matter for the individual to decide (putting aside how such choices are influenced by presentation of material).

#### 4.3 Non-Verbal Education

If one were to ask for a summary of what contributions the museum could make to the intellectual and social development of society that cannot be done as effectively in any other way, then the answer would be that

In a museum, one is confronted with a special kind of silence - one in which there is communication from the object, but of a non-verbal kind. This silence is part of the constancy of an object which is not altered however many thousands may look at it, yet it is seen slightly differently by each one

(First Australian I.C.O.M. Seminar, 1971:24).

Music instruments confront the observer in exactly the same way in the museum. The value of the constancy of music instruments in witnessing to the past has already been alluded to with reference to research. This constancy is achieved through many different means, one of which is the atmosphere of the museum which, in one sense, evokes a transcendence of time.

The museum is good at allowing its visitors to transcend time precisely because of this form of 'non-verbal' communication which people experience in it. Imagination may be given full reign by visitors who view exhibitions and displays. Skilful museum exhibitions can help to awaken the resourceful and inventive

capacities in every person by conveying the same meaning through an infinite range of possibilities or emphases. In a music instrument display what is significant for one visitor is absurd or non-existent for another. Verbal communication could be an encumbrance.

But one thing is certain: visitors to music instrument galleries often wonder and imagine how instruments would once have sounded. The non-verbal communication experienced between instruments and visitors can be enhanced by allowing visitors opportunities to hear the sounds of instruments, whether these sounds be recreated on sound recordings, or produced in reality - on the original instruments, or on reproductions of those instruments. There can be no doubt that restored instruments, for example, which can be heard, make a better contribution to communicating reasons for their existence than visually attractive, but silent instruments.

The ability of music instruments to produce sounds, has important educational implications, which unfortunately, are not sufficiently exploited by a lot of museums. Implications for entertainment are just as great, if not greater. To make a real display of any music instrument for the 'average visitor', where he exists, means that it must be heard in some form if that is at all reasonable, the operative word being "reasonable". This does not imply that every instrument should be, or could be restored to playing condition, for many instruments that have been re-built would have been better left alone for organological reasons. What it means is that music instruments can increase the ability to transmit that knowledge gained through non-verbal communication



by giving visitors an acquaintance with the full potential of some instruments in the collection.

Museum instrument collections should ideally aim to inform aurally as well as visually through at least some instruments. As anyone who has experienced this will agree, instruction in the sound of an instrument is also entertaining. It is worth remembering that entertainment too, is a necessary objective of the museum. After all, the majority of people assess museums on what they see of them when visiting them, and on the way in which they communicate ideas and information from the objects they contain.

#### 4.4 The Museum and the Specialist

Besides being of interest to the public at large, education in a museum instrument collection is of interest to the specialist and the keen amateur. With respect to the museum's educational function, a specialised collection inevitably attracts those who are already well-informed in its sphere of activity. For these people, the museum collection can only augment their knowledge and enthusiasm. It promotes the desire for a more intimate intellectual or aesthetic understanding of the instruments on display.

Too often in the past, this select group was singled out for criticism and condemned for the reason that their "narrow" interests were being accommodated with public assets. In the judgement of others who saw no value or rewards for a wider number of people, pandering to this élite was not acceptable. This view they justified on the historical grounds of changing class distinctions caused by educational standards. These rising

standards dictated that an equal opportunity and an equal share in educational resources was their due. As such, the interests of the majority rather than the minority, were to be catered for.

This cannot be accepted as a valid argument because it fails to recognise that specialists and keen amateurs who form this élite actually contribute a lot to collections. The value of catering to a category of people who are likely to be drawn to a specialised collection, regardless of how good or how poor an exhibition is, cannot be dismissed lightly.

It is these people who are well-versed in the qualities and characteristics of a part or of the whole of the collection, who in turn provide the museum with the satisfaction of knowing that its existence and efforts are worthwhile. They stimulate the museum as an institution, and cause it to continue to provide details of information and of research that ultimately add to public knowledge.

#### THE EFFECTIVENESS OF THE MUSEUM

From the preceding discussion on the central objectives of the museum instrument collection, and illustrations of the many advantages offered by the museum, one might assume that the museum in general has remained an effective social force. On reflection, however, it has never had as much competition from other communicators of knowledge as it has in this day and age.

The subtlety, variety and technical perfection of modern communications media provide tough competition for the leisure and appetite of today's community. Added to this is the improved general education of a greater number of people than ever before. All of these things combine to confront the museum with a sophisticated society.

It is characteristic of the society in which we live that, if the choice of media material be left to that society, it will choose to be entertained rather than educated (Butler).

Notwithstanding the undeniable fact that radio, television, glossy publications, films, etc., are particularly popular sources of information and entertainment, they have great disadvantages: the audience is unable to verify what is presented to them. The strength of the museum, on the other hand, is in the role of offering the real thing, the "genuine" article, with no layers of interpretation, or photographic distortions; the museum specimens are intrinsically more powerful and authoritative than mere second-hand "facts". The emphasis in the museum is clearly on the objects themselves. This is one reason why many people come to see music instruments in museum galleries.

It stands to reason that it is easy for society to be critical of the museum simply because so much is demanded of it. While it is plain that it cannot "be all things to all men", the museum's role in society is not covered by any other single institution. The broad range of its activities cannot be covered by another body because there are so many aspects of this role that have grown to be so peculiar to this institution.

Museums are expected to satisfy a wide variety of objectives and, as demonstrated, most, if not all of these, can be accommodated by individual collections within a museum.

The museum itself, which is a corporate body of collections, must rely on each of these collections to attain these objectives to the fullest extent in order to achieve their universal potential. For collections of music instruments, it would seem that greater attention to existing ideas within general museum theory needs to be made for this potential to be realised.

Having looked at the aims of the museum and its respective advantages and disadvantages, the next part of this chapter moves to a more specific analysis of instrument collections by discussing theory and practice in both museology and musicology, which have had some influence on the outcome of instrument collections as they exist today.

#### THE ROLE OF MUSEUM INSTRUMENT COLLECTIONS: AN HISTORICAL PERSPECTIVE

During the twentieth century, the study of music instruments has increasingly become a more important area of study in musicology. A major role in this trend has been played by museums which have fostered collections of music instruments. The mere existence of these various collections in public museums has tended to act as a catalyst for numerous organological studies. During the same period of time the number of private collections has steadily increased, so private museums have provided an alternate source for studies in organology.

From about 1950 onwards, the number of private collections increased significantly, but this increase can be counterbalanced by the considerable growth in museum collections in the first part of this century. The sources for many of these collections stemmed from private collectors, who, for one reason or another - such as greater accessibility to a wider public, more suitable accommodation for instruments, increased likelihood of care for instruments, concern for the continuation of collections after the decease of their collectors, and so on - dispersed their collections.

The final dispersion of many private collections, assembled by visionaries for humanitarian reasons, proved, in the case of many of the world's foremost music instrument collections, one of the most opportune events that was to occur in their history. The inspiration for many contemporary museum collections, e.g. Brussels, Paris, The Hague, arose out of such transfers of private collections to museums. The transition anticipated the direction and the mood that music instrument collecting would take in succeeding years.

What proved particularly attractive to many private collectors in the early part of this century, were the comparative developments being employed in museums. Many of these developments were relevant to the proper maintenance and organisation of instruments in collections. Museums offered the incentive of such new advances as large areas for storage of objects in specially designed galleries, scientific cataloguing and recording of related information, maintenance of collections under constant humidity and selected temperatures, specialised libraries suitable for research, and a full-time staff headed by a curator who was often a musicologist.

With few exceptions, these opportunities had generally been unavailable to private collectors. In addition, museums theoretically had more funds available to them for achieving and increasing such opportunities. All of these things helped to induce some private people to transfer their collections to museums, either on a loan basis, or on a permanent basis.

Once museums found themselves with the nucleus of a substantial collection of instruments, many of which were acquired through the above means, the way was opened for scientific investigation. The great catalogues of music instrument collections were the fruits of such research and study at this period, e.g. Mahillon (1880 - 1922), Schlosser (1920), and Sachs (1922).

#### The Ideology of Instrument Collections

Today, the content, shape and design of music instrument collections indicate something significant about the musical ideas, beliefs and practices of the age in which they were assembled. These provide clues to the taste and circumstances of the time, for the deliberate choice to include or omit particular instruments in making a collection for example, communicates something definite about the age itself. In short, all collectors operate within the constraints of the ideology of the age.

Museum collections can give an overall indication as to the importance and relevance of certain genres of music in the same way. They also tell us how people of the nineteenth and twentieth centuries, particularly those responsible for building up collections, placed certain values and interpretations on music, not only the music

of their day, but that of preceding years. The prevailing ideology has inevitably expressed itself to a considerable degree in the collection of instruments. This can be seen with direct reference to the design and manner of collecting, documenting, exhibiting, and ultimately in the organological studies which have been based on evidence of these three-dimensional instruments in museums. Personal taste and sentiment, finance, and most importantly, availability, were guiding factors in making a collection. This is not to say that the collections made in years gone by were made unsystematically, or that they were designed unscientifically, but that the approach, and the results obtained, were conditioned by certain theoretical concepts.

The issue stressed, and already mentioned elsewhere, is that in collecting anything at all, some process of selection is exercised. The same process is used today by museums all over the world. Is it valid to infer from a collection made in the past that the evidence of such selection can give us an insight into musical theories, practices and beliefs of the period of the collection's formation? The reply must be in the positive, because selection automatically implies elimination of particular instruments, duplication of others, and so on, for very specific reasons.

MUSEOLOGY AND MUSICOLOGY

Despite continuing advances in museum-oriented organology, museums consistently failed to show scholarship comparable with that of private collectors. Any list of scholarly books on music instruments will show that it is private collectors and researchers who have been largely responsible for them. In most cases, more was published about collections while they were still in private possession, than after they became absorbed into public collections.

One hypothesis that may explain why museums have published less basic research material on instruments than private collectors or even commercial firms, is that work carried out in museums does not seem to have been evaluated critically. Museum curators failed to continue the important role of private collections because they did not perceive the full extent of the role research should play in the museum: to seek knowledge and understanding of the instruments to which the organologist/museologist brings his specialist training, and to convey this to others.

While this hypothesis gives some explanation, it perhaps does not provide a completely fair one, for it has not taken into account other deficiencies with which the museum has had to struggle in reality, such as inadequate training of personnel for specialist tasks, insufficient funding for proper conservation, lack of museological information pertaining to music instrument collections, and so on.

Another criticism which might be directed at research in museums is that the research which has taken place in music instrument collections housed in museums, has, by its unsuitable designs, forced curators to cope as best as they could with inadequate, and often inappropriate, methods and techniques.



Research subjects chosen by both those inside and outside the museum were seldom of the kind that would lend themselves to immediate practical application there. Furthermore, new insights gained in research were rarely brought back into the museum.

Over the years, isolated reports have been published, often as not, without any real attention to, or care for, integration of the results of research into a larger framework of wider application or usefulness from the museological viewpoint. Such reports have done little, for instance, to facilitate successive procedures and methods of research within the museum.

An additional shortcoming of research is that the dissemination of the results of research on instruments has been limited to museum displays or to temporary exhibitions. It is valid for museum collections to provide visitors with the answers to their questions and problems in this manner, yet, ideally, the museum exists also to extend the fruits of its research beyond museum walls, instead of remaining within them, in the effort to 'expand the existing frontiers of knowledge' (Piggott, 3.6).

Because topics of research have traditionally been strongly oriented towards organology, they have been viewed as an entirely separate and unconnected feature of all other work in the instrument collection. This may be partly explained by the notion that pursuit of this type of investigation was perceived as being more valuable than other avenues. For too many years, musicologists have carried on investigations which were divorced from the reality of the surroundings of the museums in which they have worked, and in which the instruments are housed. There has been an ignorance of, and

perhaps even some indifference, to the fact that development of musicological theory, and the practices that could result from it, might have some bearing on the outcome of research on any museum instrument collection.

For it is only by theoretical study,  
practical work, and presentation of  
results that a new specialisation will  
be born (Jelinek, 1974:87).

We see that the museum is not alone in neglecting its responsibility to applied research in favour of more lofty subjects; musicology has reacted to selection of research topics in much the same vein.

There are several instances which could be cited in musicology to illustrate the above. One of the better known subjects of musicological research in museums is the classification of music instruments. While basing their research on the Mahillon collection of instruments in the Brussels Conservatoire Museum, the prime focus of Hornbostel and Sachs in this unique classification, was not directed towards museum expedience. While this classification remains more widely used than any other classification system throughout the world, it is not surprising to discover that modifications of varying orders are required to make it relevant for museum classifying tasks.

Since organology is, by definition, the scientific study of music instruments, it seems the appropriate focus of study for music instrument museums. But is it necessarily the only focus? I believe that the answer is no, for when one is faced with the question of the validity of the existence of the instrument museum, one finds that it is both a museological and an organological

question. It is apparent that the museum instrument collection does not exist for organology alone.

The definition of a museum with which this chapter began, said in part that the museum - the instrument collection exists within this framework - is an "institution in the service of society... and open to the public, which acquires, conserves, researches and exhibits, for purposes of study, education and enjoyment..." (ICOM Statutes, section 11, article 3). As illustrated in the definition, study and research form only two of several other functions which the museum performs in its service of society. If an instrument collection acquires, conserves, and exhibits for purposes of enjoyment, for example, then it is obvious that it can exist with a focus that is, strictly speaking, quite apart from organology. Organology is only one focus; acquisition, conservation, and exhibition are other areas that are able to maintain independent and valid recognition of their own accord. Each has intrinsic merit as one aspect of the museum, and it is the alliance and expression of all of these functions which make an instrument collection fall within the definition of a museum.

While musicology has not contributed many concrete results of its research to the museum suitable for direct application, there are other reasons (see below) to account for the lack of the availability of public information in museology which would help to answer appropriate questions and problems raised within instrument collections. Although general museological theory and practice was considerably well-established, curators of instruments do not appear to have maximized the use of this.

There exist throughout the world many well-prepared and functional contributions about music instruments in collections in the form of museum guides and catalogues: some go to great depth and detail in explaining collections, giving considerable information about selected instruments within them, although instruments selected are usually the more <sup>un-</sup>usual and rare examples.

Published information about collections tends to be restricted to the shallow exposé usually found in the introduction to catalogues of the respective museums, where catalogues are in existence. This type of information spreads no further than over the first page or two, since a catalogue is destined primarily to serve as a record of the music instruments themselves. They are not intended as a source of museological reference.

There is clearly a need for greater scope in information about this aspect of the world's music instrument collections. Fundamentally, the lack of public information about museology in this area may be attributed to a combination of three simple factors.

Firstly, the number of specialised collections of music instruments throughout the world is small when compared with specialised collections in areas like ethnography, paleography etc., and so, until recently, there has not been a demand for any public communication or for any published information apart from musicological material.

Where some demand may have been generated from within collections, this has not been met, mainly because the nature of specialised collections, like music instruments, meant that they

had been preoccupied with more immediate, basic demands which limited their ability to initiate professional contact with other collections on a large scale. The relatively late foundation of professional organisations for instrument curators and staff, such as CIMCIM, is indicative of both aspects of this first factor.

Secondly, the limited number of trained staff has always been, and continues to be, an extremely restricting factor; for instance, access to collections, even for bona-fide researchers, is often not possible because of lack of staff, as is conservation beyond rudimentary techniques; similarly, research for more detailed conservation or restoration is limited.

Thirdly, there has been an emphasis on collecting and researching. Initially, collecting items seemed to be the main purpose, or the end in itself. The era in which the formation of private and public collection became widespread in Europe and the United States of America, was one of the new "scientific" age: scientific foundations were being sought for the existence and functioning of numerous phenomena, including man and all the objects which he made for his own use. The search for man's cultural focus was as much a part of this as was the search for his technical focus:

For it is in the scientific, technical  
and artistic fields that man takes over  
the raw material of nature and transforms  
it and uses it for his own purposes  
(Lahbabi).

The means with which man makes music are therefore very much a part of the expression of man's presence in a specific natural

environment, and of his response to this environment, The collection of music instruments was therefore a natural consequence of such thinking.

The other purpose that was highly regarded at this same time lay in the essential aim, to uncover and interpret all of the knowledge that was locked inside collected objects.

We are accustomed to considering the museum as an institution whose purpose is to exhibit its collections. Whereas in reality we should regard it as an intelligent instrument which provides us with answers to our questions and problems or at least helps us to find such answers for ourselves (H. de Varine-Bohan).

But unfortunately, in concentrating on collecting and researching, other areas of equal validity were often neglected: basic organisation of collections into some ordered categorisation or system; conservation, preservation and restoration; cataloguing; display; and education.

### CHANGING ATTITUDES IN MUSEUMS

Over the last 20 years, three important changes have been taking place in the areas outlined above which have added to the growth of museology.

Firstly, the high degree of isolation of music instrument museums has focused on the need for a more unified approach among all museums. Together, the relatively small number of instrument museums have been able to achieve more in museology, and as a result, in musicology as well, in these two decades than in the preceding four to five decades. The resources available for music instrument curating - which is largely the sole province of museums, and museum-oriented organology, are insufficient to meet the normal requirements of each museum working on its own. Through this integrated approach, whereby museums have looked more towards each other for progress, common experiences, problems and knowledge have been shared in order to economise on scarce resources.

Secondly, the small number of professional staff qualified to deal with the activities and problems of both musicology and museology remains of concern. Reappraisal of this concern has resulted in a change of attitude about the way in which personal and institutional resources have been used traditionally. Curators and directors have had to interpret their situation in a realistic way. Institutional and personal resources are no longer enclosed within one museum. The distinctive services, facilities, skills and knowledge contained within each particular museum are exchanged and shared where possible. Although this new interpretation is the goal of many museums, the practice of these ideas is still far behind theory. These are very much ideals to be striven for in the

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majority of museums. The tendency to open museums, universities, and other similar institutions, however, is a welcome one. The exchange of information and services both through professional organisations such as CIMCIM, and FOMRHI (Fellowship of Makers and Restorers of Historical Instruments), and through personal contact, has continued to increase. In these circumstances, the possibility of duplication of resources has been severely reduced by a simple and effective change of attitude.

The third factor which is partly responsible for increasing knowledge about museology for instrument collections concerns the museum's research role. The emphasis on undertaking research in the collection has been shifted some degree from being the sole important function of the collection. Research has been given a less intrinsic, and more equal position with other concerns, many of them museological, e.g. history and purpose of the museum, organisation and administration, maintenance and storage of collections, education, conservation and restoration, and public relations. Where these matters had been widely ignored, attempts have been made to incorporate them more actively into the museum's programme of work. This is not to say that research is not as important as it has been, nor that the amount or quality of research has deteriorated; simply, that other issues, mainly of a museological nature, have been given more prominence.



## CONCLUSION

A number of different theories have been advanced about the nature and purpose of the museum instrument collection. Many aspects of these collections have been criticised for falling short of the expectations of a museum, and in one sense, this is understandable because many demands are made of the museum.

In conclusion, two things emerge clearly.

Firstly, museum instrument collections have not taken advantage of general museological theory. This is obvious from looking carefully at the role of museums in general, and from analysing the principal objectives of museums. Museological theory has much to offer that is of benefit to those who are responsible for music instrument collections in museums. Perhaps such theory will require adaptation to make it appropriate for the circumstances and condition of instruments, but it is available to be used. A greater awareness, and a greater implementation of museological theory would prove expedient to such collections in general, and to musicology which is museum-oriented in particular.

Secondly, musicological practices within museums have not been focused on the requirements of those who work in museums to acquire, conserve, restore and research music instruments. On the one hand, insights gained in museum-oriented organology were seldom brought back into the museum, while on the other hand, research undertaken was seldom directly applicable to museum needs.

Despite the many problems evident in museum instrument collection, the significance of having music instruments in the museum should not be underestimated, as is apt to happen when the

question of the value of museums is discussed publicly.

The subtle approaches which the museum so uniquely offers in 'bringing the unknown to the many', are distinctive to it. Music instruments when placed in the museum, are therefore able to educate and entertain, contributing to the development of a society in which large sections are alienated from the arts and from culture in general. But museum collections will be more effective in all respects if a better understanding of their nature and purpose were to be acquired by those working within them. This is essential to set standards that will ensure the success of future acquisition, conservation, restoration, research, communication and exhibition.

To understand the nature and the purpose of the museum instrument collection is to acknowledge the need for a more successful integration of museology and musicology.

### CHAPTER THREE

#### AN ANALYSIS OF A MUSIC INSTRUMENT COLLECTION:

##### THE GEMEENTEMUSEUM, THE HAGUE

The various aspects discussed in the past two chapters will now be described as they appear in one particular museum, keeping in mind, however, that the conclusions reached regarding the suitability of the museum as a place for music instruments were based on ideals rather than reality.

Concentration on one museum in this chapter allows a more detailed view to be presented than would be possible if several museums were to be examined. It is expected that this exposé of some of the contemporary philosophies and practices found in the Gemeentemuseum will provide an insight into a museum which may be said to be a representative example. That is to say, that while better examples exist, less substantial ones may also be found.

The Gemeentemuseum in The Hague, Netherlands has been selected because this is one of the museums in which I worked in 1974. Three additional reasons for restricting discussion to this museum are that (a) it is an example of an instrument collection in Western Europe, and this thesis is largely based on experience

of collections in that part of the world; (b) it is a collection that is fairly typical of a great number of museum collections; and (c) in many respects this museum surpasses others.

I have relied extensively on data obtained during the study tour of this and other museums made in 1974 and 1975. Some information recorded here has been supplemented by material from historical catalogues, journals, and books located in these museums. In many cases this material is difficult to obtain elsewhere.

Since most of this material was gathered through first-hand experience in various museums, personal opinions and impressions have been included, emphasising the value of first-hand observation and experience: what museums say they do, and what they believe they do, is often at variance with actual practice. Every museum has philosophies that are either implied or explicit. Where they are implied, personal observations and experience can often be relied on to corroborate them.

The collection of music instruments in the Gemeentemuseum in The Hague forms a separate department in the museum. Known simply as the Muziekafdeling, the music department owns the extensive collection of instruments to be examined here from the museological point of view.

This department manages its own affairs and is responsible for all decisions relating to the curation of music instruments and related items, such as books, scores and manuscripts, and prints.

## HISTORY AND BACKGROUND OF THE COLLECTION

As is the case with many existing collections of music instruments in museums today, the origin of the Gemeentemuseum's collection stems from private initiative. The core of the present collection is the result of the work of Daniel François Scheurleer (1885-1927). Scheurleer was a private banker in The Hague. By 18 years of age he had developed an interest in rare books and music instruments which he began to assemble as a hobby.

Twelve years later he published a catalogue of his music library and music instruments which listed about 100 European and 70 non-Western instruments (Scheurleer 1885). Even at this early stage his private collection was of great diversity, showing the way for the future direction of the larger collection now in the Gemeentemuseum.

The rapidly growing collection soon acquired international interest and importance. In 1893 the Painting Society Pulchri Studio in The Hague devoted a large section of its exhibition to Scheurleer's collection (Pulchri Studio, 1893). The printed catalogue of this exhibition lists a total of 612 objects, 355 of which are music instruments (Ibid).

During his lifetime several catalogues of the collection were published. The largest of all, and the final one, was published in 1923 - 25, as a two volume edition: Muziekhistorisch Museum van Dr. D. F. Scheurleer. Catalogus van Muziekwerken en de Boeken Over Muziek. The value of this catalogue, which was written by Scheurleer himself, is testified to by its constant use at the Gemeentemuseum's library for locating books and scores in the collection; it remains today a most complete source of

reference for the library. Examination of this work gives some indication of the thoroughness and devotion which must have gone into the collection itself.

By the time that Scheurleer stopped adding to his collection, the number of items he had assembled had already well outgrown his household space. The library alone took up more than two rooms from floor to ceiling, requiring the construction of a new museum at the back of Scheurleer's garden. Judging from the plans of his home in 1921, this private museum was larger than the private residence, consisting of nine very large rooms displaying music instruments, and several other rooms for the book and print collection.

After Scheurleer's death in 1927, the museum was cared for by his long-time assistant, D. Balfour. In 1935, largely through Balfour's efforts and persistence, the municipality of The Hague purchased the collection in its entirety.

But for the reasonable purchase price, the Gemeentemuseum would never have had a music department at all. The plans for the new museum, then under construction, did not incorporate suggestions for a section devoted to music. Balfour who had been curator of "The Music Museum Scheurleer", became the Gemeentemuseum's first director and curator of music.

### THE COLLECTION

As stated in the introduction to the thesis, the primary concern is to elucidate collections from the standpoint of museology rather than museography. This principle is followed here; appropriate museographical accounts of the Gemeentemuseum's collection can be found in the museum's own publications (Plenckers, 1970, Leeuwen Boomkamp and Meer, 1971, Lievense, 1971, Ligtvoet, 1972, Acht (ed.), 1974, and Klerk and Mensink, 1975).

It is relevant to remark that this is one of the few museums which treat European and non-Western instruments in an equal manner. With reference to the European instruments, suffice it to say that the collection itself, while not comparable with collections such as those of the Kunsthistorisches Museum, Vienna, and the Musée Instrumental de Conservatoire Royal de Musique, Brussels, is reasonably representative, and good from about the period 1690 onwards. One particular instrument in the European collection worth commenting on, because of its uniqueness, is the Dordrecht recorder. This fourteenth century specimen belongs to the most important archaeological finds in music, more particularly because it is in good condition. The Dordrecht recorder has been on loan since 1942 from the municipality of Dordrecht (see Weber).

Today, the collection has more than doubled in size, from about 1,000 instruments in 1935, to over 2,500 instruments. Together with several additions through purchase,

and several loans, the Scheurleer collection presents an extensive range of music instruments of all types, from the fifteenth century to the present.

In 1952, 150 music instruments were loaned to the Gemeentemuseum by the Rijksmuseum in Amsterdam. This important loan included the collection of music instruments of J. C. Boers (1812 - 1892), a musician from Delft. The instruments of the Koninklijk Oudheidkundig Genootschap (Royal Historical Society) were likewise included in the Rijksmuseum loan.

More recently, the Gemeentemuseum acquired the private collection of instruments from the Dutch cellist and viol player, Carel van Leeuwen Boomkamp. Consisting of about 120 instruments, it has been shown in the Gemeentemuseum since 1974, and is one of the most important collections of European string instruments. It is widely known as a collection because of its catalogue (Leeuwen Boomkamp and van der Meer, 1971), which may be regarded as an example of an impeccable catalogue - both museologically and museographically. The collection comprises mainly string instruments, bowed and plucked, with a rich collection of various bows spanning three centuries.





illustration 1 Part of the Carel van Leeuwen Boomkamp Collection of Musical Instruments on display in the Gemeentemuseum.

#### THE MUSIC LIBRARY

The music library of the Gemeentemuseum deserves special mention because of its relationship to the instrument collection itself. One of its primary functions as a specialist library is to complement the museum's instrument collection. The library, which is open to the public, is one of the most important centres of documentation about music instruments in the Netherlands, not only because its holdings are extensive in terms of the number of volumes held, but also because of the rich variety and the diversity of materials and areas included.

In addition to the main corpus of material, the library and archives contain three separate collections: (1) the Scheurleer collection, by far the largest part, (2) the opera repertoire of the eighteenth century French Theatre, as performed in The Hague, (3) the music library of the Royal Court Theatre.

Again, the inspiration of Scheurleer's original collection laid the foundation for the existence of the library together with the museum's instrument collection. His foresight and wide-ranging interests in musicology led him to collect in the following areas of music: bibliography, journals, dictionaries, aesthetics, general theory, history, dramatic music, music instruments, folk music, church music, instrumental music, vocal music, prints and drawings about music which includes a wonderful collection of caricatures, autographs, letters of correspondence between musicians and composers, and original manuscripts. Of particular interest is the excellent archive of seventeenth and eighteenth century music scores and books from the Netherlands.

The Gemeentemuseum library carries on this tradition of collecting in each of these areas. The library prides itself on the extent and depth of its holdings, and the great value of many items in it.

The archives contain some eminent and priceless early music treatises on both music theory and music instruments. The oldest with information on various instruments of the time is the manuscript by Henri Arnaut Zwolle, dating from the year 1440.\*

\* Facsimile edition.

Others among the collections are Martin Agricola's Musica Instrumentalis Deudsch, 1st edition, 1528, and Michael Praetorius's Syntagma Musicum, part II - De Organographia, 1619. A fourth invaluable treatise which the library owns is Marin Mersenne's Harmonie Universelle, 1636.

The library has a large budget, for its philosophy is to maintain pace with the publication of current books, scores, and prints. Personal biographical material is, on occasion, offered to the museum. This material would be of the kind that may once have been the property of composers and musicians in the Netherlands.

#### THE PRINT COLLECTION

The unusually fine collection of prints and drawings founded by Scheurleer date from the sixteenth century to the nineteenth century.

It is concerned mainly with European instruments of music, and provides valuable information about instruments of different eras, their construction, music at both indoor and at outdoor occasions, and allegorical and Biblical representations. Copies of European music instruments on 600 of the prints and drawings in the Gemeentemuseum collection are available in microfiche form (RIdIM, Musicology SAI/1972).

As well as the drawings and prints dealing with European instruments and music, there is a collection of several thousand portraits of composers and musicians. In some instances there are more than a half dozen prints of the same composer, each representing the person in quite a different light. Such material

represents exceptional source material for historical musicology.

The collection of Japanese prints about music is small, yet unique. Most of these prints are from the late eighteenth and nineteenth centuries. The museum published an illustrated book of Japanese woodcuts from this collection in 1975 (Klerk and Mensink).

The iconographical material owned by the Gemeentemuseum is thus of exceptional scope, and is often used in exhibitions of its own, in addition to being incorporated in exhibitions and displays of instruments, both inside and outside the museum. Illustration 2 shows how a print, made from an engraving (left), and a painting (right) are used to show the manner of playing the instruments which are displayed alongside. Unfortunately, the painting is not clearly visible because of glare and reflection.



illustration 2 Part of the permanent exhibition area of European instruments, showing the use of iconographical material from the Gemeentemuseum's own collection.

This section of the library concerned with prints and drawings has its own curator. The library itself is staffed by three full-time librarians, each of whom has tertiary qualifications in music, as well as library qualifications.

#### RESTORATION IN THE GEMEENTEMUSEUM

Of all areas of work carried out in a museum instrument collection, among the most important are conservation and restoration. The philosophies and practices of conservation and restoration are, more often than not, responsible for great debate and disagreement amongst museums, conservators and restorers of all kinds, and the practices of the Gemeentemuseum are not exempt from this controversy.

In reviewing the recent Gemeentemuseum publication, Old Harpsichords, Their Construction and Restoration (1977), John Barnes, the keyboard restorer, and curator of the Russell Collection in Edinburgh, wrote

that most general museums in European capital cities would reveal practices worse than those of the Gemeentemuseum if they were to focus attention on themselves (Barnes, 1978:69).

It is good to bear this statement in mind in the following report on some of the principles of restoration practised by this museum.

The Gemeentemuseum was one of the first of the European museums to commence an active restoration policy for its collection of instruments, when in the early 1950's, a restoration workshop was opened in the museum itself, and the services of a full-time keyboard restorer were engaged.

Most of the keyboard instruments in the Gemeentemuseum's collection, including its Flemish harpsichords, are in playing condition. Many other non-keyboard instruments in the collection have also been restored by the museum's restorer during this period, for both conservation and restoration are on-going processes.

The museum's philosophy is to restore as little of each instrument as possible: the less that is done to each one, the better it is for that instrument. Museum policy dictates that it is preferable to make an instrument playable providing it is in reasonable condition. The principle with all restoration work is that compromises are usually necessary to achieve this balance in actual practice.

If instruments are extensively damaged, or when the overall condition of instruments is poor, restoration is not usually carried out. The restorer and the curator of the music department see little point in restoring instruments which are in this condition because such an undertaking would probably lead to rebuilding, and often, to reconstructing the whole instrument from entirely new parts. In these instances, the finished product is not regarded as an original instrument but only as an example, either a good or a poor example, of an original work of craftsmanship of the era in which it was made. Unrestored instruments are valuable as illustrations of a particular style of building and construction, and they are better left unaltered. It is important to acknowledge that some instruments simply defy restoration.

In keeping with this policy, old parts of restored instruments, and parts of damaged instruments, are never discarded. These should be kept for some possible future reference in research, and for attempts to reconstruct or copy the original instrument.

With each piece of restoration work carried out in the Gemeentemuseum's workshop, detailed reports are made. These include photographs taken from all angles, and drawings and measurements of various parts of the restoration process. Thus, a complete series of photos is kept as a record of the whole restoration at different stages of progress. This visual material is used to supplement the written report of the restorer. Detailed information of all work executed on the instruments, together with information relating to research findings made during this time, provide worthwhile means for checking any aspect of work that was done years beforehand. The restorer, among other experts, is able to check with great accuracy what materials were used, what work was affected, and any specific findings that were made at the time. All this can be certified at any time after the instrument has been restored and completely reassembled. Theoretically, it should be feasible to reverse all of the processes carried out in any restoration work that has been done on any instrument. The aid of such restoration reports in the museum is of inestimable value, particularly in cases where newer research leads to the necessity for any reversal to take place.

The fundamental principles laid down by most museums,



including the Gemeentemuseum, are that an instrument must be restored in such a way that a very close approximation to the original construction is achieved. The wishes and design executed by the original craftsman must be respected regardless of the problems faced in order that the instrument retains as closely as possible the sound it had during the time it was in regular use. Precisely how any historic instrument may have sounded, however, must always remain speculative. What is certain is that reconstruction of instruments will not yield as close a sound to the original as will restoration of original instruments. This is held to be so by many instrument restorers and scientific laboratories that are concerned with restoration and conservation of materials.

When an instrument has been modified in the years following its original construction, the restoration philosophy is that the instrument should be made to sound as it did when last modified. For example, where a manual has been added, or where stops and keys have been added, these alterations or modifications must be left, and the instrument must be restored to sound with these later alterations to the original specifications.

Various circumstances dictate whether or not this procedure is followed in the frequent instances where instruments have been modified during the course of their existence. The ultimate decision is always taken by the specialist - the restorer himself - after careful deliberation and consultation with the curator and consideration of the available historical evidence.

After restoration, and when on display in the museum,



instruments are not tuned to correct pitch. Tension on the strings cannot be supported at this level permanently without doing damage. In the Gemeentemuseum all keyboard instruments, and generally most other instruments with strings, are tuned about one tone lower.

A more detailed exposition of some of the Gemeentemuseum's other practices of restoration can be found in the book by the museum's restorer, Wouter Scheurwater, written in association with the museum's assistant curator, Rob van Acht (1977). The reader is referred to this book with the proviso that it be read in the following light: "with the best of intentions, the Gemeentemuseum has produced a guide to the way restorations were done fifteen years ago" (Barnes, 1978:69).

#### PERMANENT EXHIBITION OF INSTRUMENTS

The permanent exhibition area of the Gemeentemuseum that is devoted to instruments of music takes up a substantial part of the ground floor of the building.

There are two large and separate areas for instruments: one for European instruments, the other for non-Western instruments. The museum has no display which shows both European and non-Western instruments together, as often happens in the displays of other museums. This is a deliberate policy of the Gemeentemuseum in that the intention is to illustrate the separate historical development of music instruments in different parts of the world.

### Design of the Exhibition

Permanent displays of the Gemeentemuseum are well designed with the instruments exhibited at spaced out intervals. Displays are clear, well-lit, thorough, uncluttered, attractive, and informative. In other words the museum displays inform as well as entertain.

The overall plan of the museum is such that the visitor is given enough items to observe and these are presented in a logical order, i.e. by countries or by historical periods. At the same time, sufficient opportunities are presented to rest the eyes and the mind from the material at hand. "Breathing spaces" for the visitor are extremely important, and help to maintain interest levels, especially for the infrequent visitor. The diversity of items created by the iconography included in the displays adds to this feature.

The European instruments are displayed in one large area which has been divided into smaller sections by the use of panels. These extend vertically from floor level to within about one meter of the high ceiling. The panels have been erected between the large supporting pillars in the room, effectively making several smaller interconnecting areas.

Instruments are exhibited according to chronological order, and where practical, are also grouped according to family type. While organological grouping and exhibition of instrument series according to their development is undeniably valuable and instructive for the specialist, such an arrangement means less to the average visitor than an historical or chronological grouping.

This latter principle of historical or chronological grouping is also employed in the instrument museums of Leipzig, Brussels, Copenhagen, Rome and Nuremberg (Meer, 1978:22). In the Gemeentemuseum, early keyboard instruments are exhibited side by side; a complete family of instruments by the same maker may be viewed in the same showcase; all woodwind instruments are displayed together, as are all brass instruments; and viols of the same period are grouped together.

The combination of chronological and family grouping means that in some instances an instrument will be displayed with other instruments to which it belongs by virtue of its chronology rather than by virtue of the family grouping. Illustration 3 gives an example of this principle, while illustration 4 shows several different string instruments in the European collection belonging to the period 1700 - 1750.



illustration 3 Instruments of the viol family exhibited according to family grouping in which the trombone is displayed by virtue of its contemporary chronology.



illustration 4 Part of the European collection exhibited in chronological order representing part of the display of instruments of the period 1700 - 1750.

It is relatively simple for the visitor to the music department display to follow the chronological development of wind instruments, for example, just by looking at one section of the exhibition as in illustrations 5 and 6.

Apart from the instruments that are exhibited chronologically, the Carel van Leeuwen Boomkamp Collection mentioned earlier, (p. 83, also illustration 1, p. 84) is





illustration 5 Part of the Gemeentemuseum's display of brass instruments.



illustration 6 Woodwind instruments are attractively displayed on open wall panels to illustrate chronological development.

displayed as one unit in one section of the area devoted to European instruments. It is kept as a separate collection since it deals mainly with the history and development of string instruments, including bows.

As with European instruments, the whole display area devoted to non-Western instruments consists of one large room that has been divided into smaller sections, making a series of interconnecting areas.

The general design and layout of the exhibition area of non-Western instruments, however, does not follow the plan of the European exhibition area. Firstly, non-Western instruments are set out according to the country of origin, and secondly, according to the particular instrument classification to which they belong.

Instruments from all African countries, for instance, are exhibited according to countries from which they originate. All of the instruments from particular countries on that continent are exhibited side by side. Instruments from Zaire, the former Belgian Congo, are set together, for example. Those of the Cameroun are displayed next to them, and those from Angola, Madagascar, and so on, are each in turn displayed adjacent to each other. Instruments from each of these countries are then arranged in the display according to the four main classes of the Hornbostel-Sachs classification of instruments - idiophones, membranophones, chordophones, and aerophones.

Some exceptions to this general plan are made for various reasons. In some instances, several types of instruments from one country may be exhibited together according to usage. This is the case with certain instruments from India, China, and Japan: although they belong to different classes, the instruments are still grouped together to illustrate musical and social utilization. The Indian grouping includes a sarangi, a sitar, tamboura, and tabla, in illustration 7, showing the instruments in the classical orchestra. It is worth noting here that the sitar and sarangi are never used together despite the museum's display. The rare exceptions might be where these two instruments accompany Kathak Dance, or in modern orchestras which are influenced by Western tradition. The Chinese grouping in illustration 8 displays instruments which are used in religious music, and instruments which are used in processions. Similarly, the relevant instruments for the Japanese Noh theatre ensemble are grouped together, as are those of the Gagaku orchestra.

A sketch of the floor plan of the non-Western instrument display, given below, shows how instruments are grouped according to each of these principles (figure 1A and B). The sketch is not to scale.

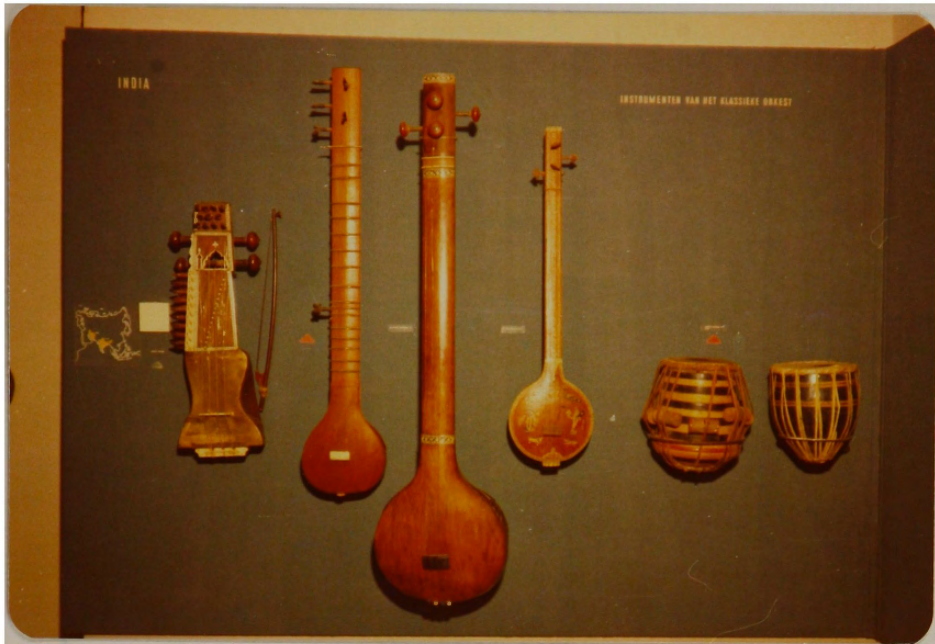
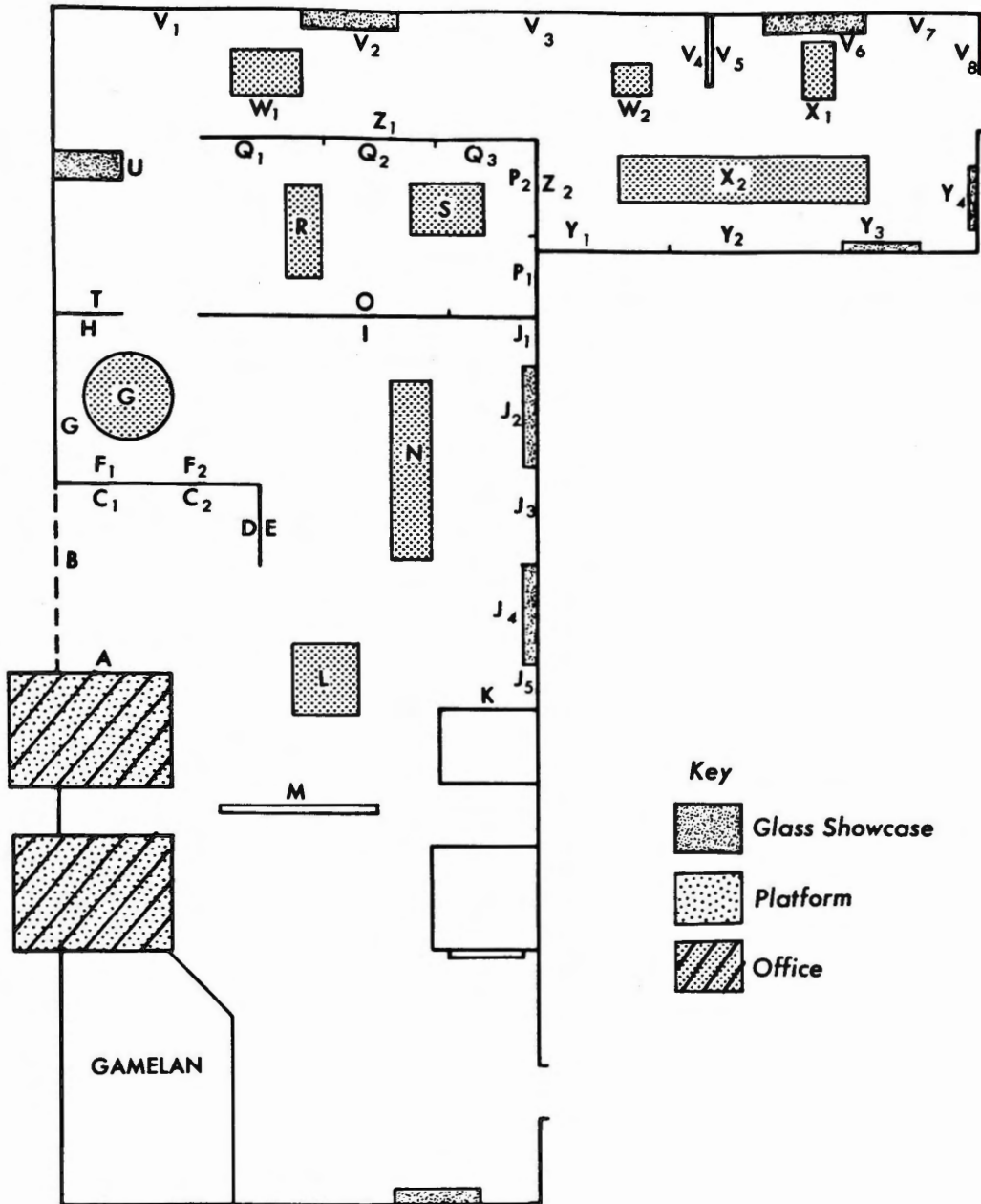


illustration 7 One of the methods of display illustrating a group of Indian instruments.



illustration 8 Chinese instruments used in religious music and in processions, exhibited in a recessed glass showcase.





**Fig. 1A Floor plan of exhibition area of non—western music instruments  
Gemeentemuseum, The Hague, Netherlands**

(Sketch only — not to Scale)

B: Key to Floor Plan of the Gemeentemuseum, Non-Western Music  
Instrument Display.

<u>Japan</u>	<u>A</u> , <u>L</u> , <u>M</u> instruments of the Gagaku orchestra <u>B</u> , <u>C1</u> solo, ensemble and melodic instruments <u>C2</u> idiophones, chordophones, aerophones, membranophones <u>D</u> instruments of the Nohgaku orchestra
<u>China</u>	<u>E</u> solo instruments, and instruments accompanying song <u>J2</u> instruments used in religious music and in processions <u>J3</u> , <u>J5</u> , <u>K</u> , <u>N</u> idiophones and chordophones <u>J4</u> instruments used in theatre music
<u>Tonkin</u>	<u>F1</u>
<u>Vietnam</u>	<u>F2</u>
<u>Laos</u>	<u>G</u>
<u>Cambodia</u>	<u>H</u>
<u>Burma</u>	<u>I</u>
<u>Tibet</u>	<u>J1</u>
<u>Iran</u>	<u>P2</u> idiophones and chordophones <u>S</u> membranophones
<u>India</u>	<u>O</u> chordophones and membranophones <u>P1</u> an ensemble of Indian instruments <u>I</u> aerophones, idiophones and chordophones <u>R</u> membranophones
<u>Islamic Areas</u>	<u>U</u> membranophones and aerophones <u>Q1</u> , <u>Q3</u> chordophones <u>Q2</u> chordophones and aerophones
<u>New Guinea</u>	<u>W1</u> , <u>Z1</u>

fig. 1 B continued:

<u>Australia</u>	<u>V1</u>
<u>South Seas Region</u>	<u>V1</u>
<u>North America</u>	<u>V1</u>
<u>South America</u>	<u>V2, V3</u>
<u>East Africa</u>	<u>V4, W2</u>
<u>South Africa</u> )	
)	
<u>Malagasy</u> )	<u>V1</u>
)	
<u>Angola</u> )	
<u>West Africa</u>	<u>V5</u> chordophones
	<u>V6, Y4, Z2</u> chordophones, idiophones and aerophones
	<u>V8</u> membranophones and chordophones
	<u>X1, X2</u> membranophones
	<u>Y2, Y3</u> idiophones

### Documentation of Exhibitions

Three types of documentation are used in the Gemeentemuseum's permanent exhibitions: visual, e.g. prints and drawings, written, and audio-visual documentation.

With the exception of individual instruments in the collection, displays themselves are seldom changed. Iconographic material drawn from the museum's music library print collection, is alternated, however, at regular intervals. Regardless of precautions taken, light of any kind can be particularly damaging to such material, and hence the need to change it from time to time.

Written documentation about the European instruments is limited to small printed labels. These are situated on the floor of each showcase, immediately below or in front of each respective instrument, giving information about the instrument maker, the date of manufacture, place of origin.

For each non-Western instrument, the vernacular name is generally the only piece of information displayed alongside the instrument itself, apart from its general area of origin. This is mainly because museum records and museum research have been unable to supplement existing information.

Where non-Western instruments are concerned, labels are made of small rectangular plaques of transparent plastic with the words painted on them in white letters. This differs a little from the printed labels of the European instrument exhibition, but seems to be for purely practical reasons of display only. The transparent plastic plaques lend themselves to the mode of

display of non-Western instruments, whereas the printed paper labels of the European instrument display would appear to be less effective with the display techniques employed in the non-Western instrument exhibition. These plastic plaques are fixed permanently to the wall panels beside each of the instruments, as seen in illustration 7.

In addition to the above documentary information, a cassette player with a recording explaining the exhibition is available to interested visitors. The recording takes the visitor through the European exhibition in about 20 minutes, and small excerpts of music from the instruments themselves, or from other instruments of the same type, are heard. Naturally only selected instruments are discussed on this guide for the visitor.

Some historical background information is given before each excerpt of music is heard. A total of six cassette recorders is available for visitors on payment of a small deposit. Although ear-plugs or ear-phones are not supplied, the volume of the recorders is just sufficient enough to enable the visitor to listen without disturbing the other visitors who may be nearby.

#### Display Techniques

About half of the European instruments are exhibited in glass showcases: less than a third of the non-Western instruments are behind glass.

Most of the string instruments, and some of the wind instruments are in glass showcases for two reasons: for protection from the public, and as a precaution against dust and grime.

While all showcases are kept locked, none of them is sealed off completely, for the space where the sliding doors of the cases overlap each other allows air to circulate, as does a small slit of about 8 cms. width along the top of each case.

Glass showcases, approximately 60 cms. in depth, have proven to be a practical size for displaying music instruments. The relative narrowness of the cases has a further advantage in that it allows visitors a close-up inspection of the instruments. There is no difficulty in viewing details of fine craftsmanship on instruments, and no need for straining one's eyes, or for craning one's neck. The glass doors separating the visitor from the instruments seem almost non-existent in this regard, and add to the attractiveness of the displays.

As well as the suitable depth of showcases, their height is such that the floor of each case is about knee level of the average adult, and extends vertically to just above eye level. Displays are just as accessible to the child as to the adult. Again, this means that no effort needs to be expended in order to view each of the instruments exhibited in the museum. Examination of illustration 1 will show the design of glass showcases and how instruments are displayed within them.

Lighting in the Gemeentemuseum is concealed along the top front of the complete length of each showcase, allowing instruments to be seen without obstruction. Because of the dimensions of the showcase, the light is cast most effectively within them. There are no problems with long shadows being cast in the case, which is often a difficulty with museum displays. As well as this, each showcase is filled in a sparse manner.

This is markedly different from the older concept still witnessed in many contemporary museums, of cramming as much as possible into each inch of space.

Spotlights, fixed in groups from two to six or seven lights are also employed to highlight particular parts of the total display. Because of the design of this section of the building of the Gemeentemuseum itself, no daylight is admitted to the area where European instruments are exhibited. This feature is a planned part of the conservation process. The artificial lighting used has been especially selected so that as little ultra-violet rays are emitted from lighting as possible.

Those instruments which are not exhibited behind glass are firmly fixed to specially designed attachments on wall panels used in displays, as in illustrations 6 and 10, or to floor fixtures, as in illustration 9.

Instruments displayed out of the protection of glass naturally run greater risk of damage from such things as dust, museum cleaners and the public. The Gemeentemuseum believes that this risk is outweighed by the advantages offered by the more apparent three-dimensional results of open display. To help counter-balance the possibility of damage, extra guards are employed for the music department's displays, purely as a precautionary measure. More often than not, instruments which are in the position of being touched by the public are duplicates of other instruments held in storage, or less valuable examples than other instruments which could be displayed.

Where larger instruments are openly displayed, such as



illustration 9 Bassoons and a bass clarinet are exhibited on specially designed floor fittings.



illustration 10 Part of the exhibition area showing New Guinea drums, a raft pan-pipe, and shells attached to wall panels by specially designed, fitted brackets.



bassoons or double basses, they are placed in positions that afford most protection from visitors walking past them, yet allows them to be viewed from several angles. Special functional fittings are used here also. Illustration 9 shows a display technique whereby woodwinds are exhibited on stands on the floor immediately in front of a wall panel.

As in glass showcases, lighting for wall panel displays is provided by lights concealed in pelmet boxes above the panels, as seen in illustration 6, and by ceiling spotlights.

Instruments which are too large or cumbersome to be displayed with the aid of specially designed fixtures - for example, African drums and the larger New Guinea drums, are exhibited on raised platforms of varying sizes, as seen in illustrations 11 and 12.

These are located in the centre of the appropriate areas of the exhibition space that contain other instruments from the same countries. This feature has the attractive advantage of showing off all sides of the instruments, and of allowing ready comparison between various instruments to be made. The viewer has the opportunity of seeing the whole of each instrument merely by walking around the platform. None of these areas is enclosed by glass, or is cordoned off in any fashion, adding to the atmosphere of informality in the display.

Even though these points are small things to think about, their design and intent has the essential function of bringing the uninitiated, the interested, and the extremely curious, closer to that which they have come to see.

The museum should be careful to make it as easy as possible for people to look at its objects, without asking too much of them in the way of effort. The business of each and every museum is to sell itself to the visitor, so that he will be interested in coming back on repeated occasions. For this reason it is highly important that displays be as attractive as possible but in as subtle a way as possible: the visitor must not feel that he is being unwillingly enticed to view objects, or that he is being coerced into learning something.



illustration 11 African drums exhibited on a raised platform allow viewers close inspection from all angles.



illustration 12 Instruments from Islamic areas of the world exhibited together in one part of the non-Western instrument display.

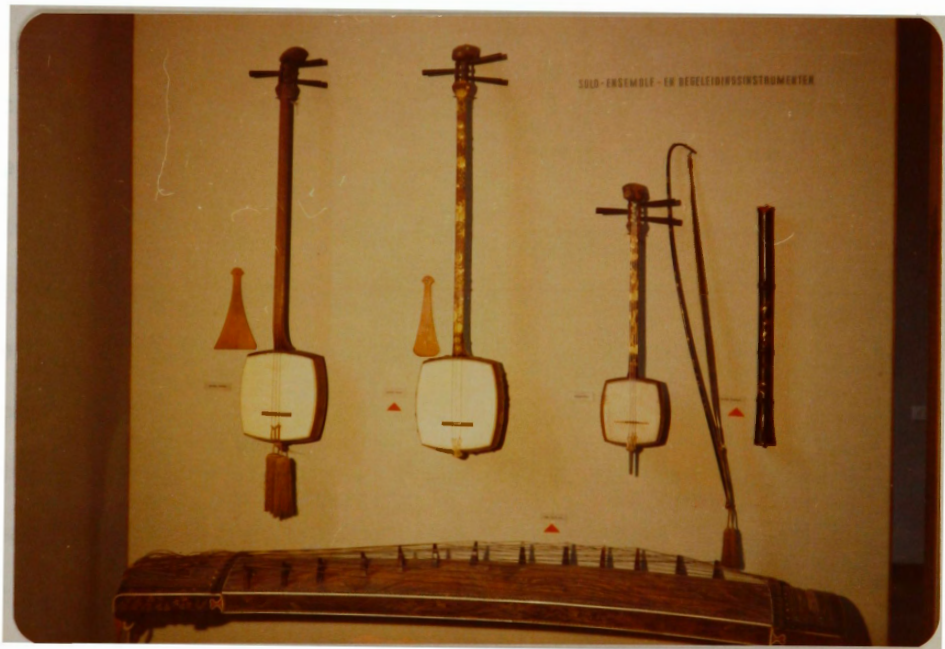


illustration 13 Part of the display of Japanese instruments, showing that the koto is viewed from the player's side of the instrument.

### Musical Accuracy in Displays

While most museums are concerned about designing exhibitions that are accurate in the kind of knowledge and information they convey, and the way they convey it, many do not always achieve the standard of accuracy that should be the norm in these institutions. This applies particularly to small errors which may be made in the actual manner of displaying an object. Museums are thought of as specialists in their fields of operation, and hence it would seem to be inexcusable for a museum to display objects incorrectly or inaccurately. When this occurs, a false impression may be given to the visitor.

The best guide for displaying instruments of music in their right position, and there is a right and a wrong position for each one, is to recall their playing position angle. Some instruments for instance, are played by different people at different angles, and at different positions. A folk musician may hold a violin or fiddle at a different angle and in a different manner from a classical Western musician, or from a musician from India. This highlights the problem of musical accuracy. A display of instruments from India, for example, should make the difference between playing positions and playing angles quite clear, especially in cases where similar types of instruments are used in different parts of the world. Nevertheless, exceptions to this rule are of course not only acceptable but usually necessary in the museum.

In the Gemeentemuseum very few of the instruments are displayed at the playing angle, largely because it is impractical and may cause damage to instruments.

Some practical considerations faced by the Gemeentemuseum, and indeed, all instrument museums, in the display of instruments at their playing angle are partly that too much space is taken up, and partly that suspension or exhibition of instruments at such angles is likely to put unacceptable strains on instruments. Woodwinds, for instance, can be more safely exhibited vertically, standing and not suspended, than horizontally, as in illustration 6. Brass instruments can seldom be exhibited at playing angle because of their point of balance. Violins and guitars, by contrast, can be more safely exhibited at playing angle.

Non-Western instruments often present the same problems for display as do European instruments. There is no logic in displaying a slit-log drum from New Guinea in a vertical position. Likewise, a Japanese koto should be presented in a horizontal, playing position. Double-headed membrane drums from India should be displayed illustrating how they are held while played. Illustration 12 gives a clear view of the application of this principle to the latter example; the double-headed pakhawaj drum is visible in the lower left corner of the illustration.

A further note is that, if possible, an instrument is generally displayed with the viewer standing where the player would sit or stand, as seen from the koto in illustration 13, and the ch'in in illustration 8. This means that the right and left of an instrument is always from the player's view.

In catalogues of instruments, the same principle of player position should be applied. This is particularly important in the description of keyboard instruments, for example, where the manual of a virginal may be positioned to the right or to the left. The writer of the catalogue must make quite clear his intentions if he wishes to depart from this. The pursuit of another set of guidelines is permitted, provided the writer states what these are and their use remains consistent.

In displays exceptions are considered to be when the reverse order, i.e. not according to the position of the player, would be of more advantage in illustrating noteworthy decorative features, for example, or when valves and keys of wind instruments would not otherwise be visible, and other similar cases.

Besides the display techniques already discussed, the Gemeentemuseum also ensures that all of the instruments which go on exhibition in its galleries are complete visually. This means that all strings must be attached on string instruments, and in the manner in which they would have been fixed to the instrument when it was first made; reed instruments must be displayed with their reed mouthpieces; bridges and pegs of string instruments must be included on these instruments; mouthpieces for brass instruments must be the correct type and of the style appropriate to the date of the instruments' manufacture. These are examples of the way in which exhibitions of instruments can be made musically accurate. If instruments



are complete in all their details, then wrong impressions can be kept to a minimum in a display. Museums have a responsibility to society to ensure that their exhibitions always aim at what is historically correct in every detail.

#### CATALOGUING IN THE GEMEENTEMUSEUM

The Gemeentemuseum is perhaps typical of many museums throughout the world in its manner of cataloguing instruments of music. Although the next two chapters are specifically concerned with cataloguing and classification of instruments for museum application, a few remarks are made here to indicate the manner and method used by the Gemeentemuseum.

The present cataloguing system, which is applicable to all kinds of objects in the Gemeentemuseum, was established in 1954. The system really performs the function of an inventory. The basis of it is that for each object, including music instruments, a card is completed together with a second card with duplicate information. Figure 2 represents a copy of one side of the catalogue card used by this museum. Only the front side is reproduced since it is of major concern here. The reverse side seeks information relating to restoration and any loans of that particular object. The key shows the type of information sought, and which is normally included in museum registration of objects of any kind.

1a		FOTO NR.	CLICHE NR.	CATALOGUS NR.	INVENTARIS NR.	C
1	maker	1		3a	3b	
1a	name of object				I	
3	description	3		3b	3b	
3a	date			II	III	
3b	identifier			3c		
I	locality			7		
II	country			9		
III	region					
4	measurements			12	13	
7	condition			15a	15b	
9	marked/signed	4			17	
12	purchase manner					
13	" date					
14	" from					
15a	price	14		203		
15b	tax					
16	conditions of purchase					
17	where stored	18				
18	notable features					

B-I	
E-VII	
COLL.	DIR.

MUZIEK INSTR. MODEL S.I DSK 914 - Gem Drukk. 621296

figure 2 Copy of the front of an uncompleted catalogue card of the Gemeentemuseum



One card belongs to the museum's central inventory system, and the duplicate card belongs to the music department.

In the music department, cards are catalogued according to, what is for this particular museum, the most practical system: for non-Western instruments, according to continents and countries, and for European instruments, according to instrument classification, i.e. the four classes recognised by Hornbostel-Sachs - idiophones, membranophones, chordophones, and aerophones. This practice followed by the Gemeentemuseum reveals that catalogue cards are really an administrative convenience more than anything else. The catalogue of music instruments is definitely not intended to parallel any kind of organological system of the kinds suggested in the next chapter.

The examples of completed cards are below; one card represents the 1627 harpsichord by Andreas Ruckers, in figure 3A, and the other represents a zither from Burma, in figure 3B. Only one side of each card, as represented in figure 2, is given.

Chapter five looks further at the question of the design of museum catalogue cards specifically for music instruments, and touches on the design of this catalogue card.

1a	FOTO NR.	CLICHE NR.	CATALOGUS NR.	INVENTARIS NR.	C
klavecimbel	13 - 73			Ec545-1933 oud 836	A
1 Andreas Ruckers		3a 1627	3b I Antwerpen		
3 De klankkast is donkergroen geverfd. In de binnenkant van de deksel het opschrift "Sic transit gloria mundi". In de zangbodem een verguld rozet voorstellende een harpspelende engel met ter weerszijde de initialen A.R.. In de buurt van het rozet het jaartal 1627. Drie registers.		3b II	3b III		
		3c			
		7 goed			
		9 In de sierlijst Andreas Ruckers me fecit Antverpiaae.			
4 hoog 92.4 cm breed 69.7 cm		12 aankoop	13 1933		
		15a	15b f.35000,-		
14 collectie D.F. Scheurleer			17 Europese afdeling		
		203			
18					

MUZIEK INSTR. MODEL S.I DSK 914 - Gem Drukk. 621296

B-I	
E-VII	
COLL.	ow.

figure 3A Copy of catalogue card of a harpsichord in the Gemeentemuseum

1a	FOTO NR.	CLICHE NR.	CATALOGUS NR.	INVENTARIS NR.	C
krokodil cither	78-1977 Ax 1 - 1977			AZC 1 - 1977	
1		3a	3b I Birma		
3	Een houten resonantiekast in de vorm van een krokodil. Houtsnijwerk, oranje/rood, groen en zwart gelakt. 11 frets.	3b II	3b III		
		3c			
		7	uitstekend		
		9			
4	hoog 34, breed 20, lang 120cm	12 aankoop	13 21-1-1977		
		15a f3.500.-	15b		
14	De Heer Kreuzer Schaarsbergenstraat 36, Den Haag	FG 72 - '77	17 kelder T		
		203	Weth. 29 -'77 nr.(F 193) 1103.77/G		
18	snaren ontbreken, en stemschroeven				

B.I	
E.VII	
COLL.	DIR.

MUZIEK INSTR. MODEL S.I DSK 914 - Gem Drukt. 621296

figure 3B Copy of catalogue card of a zither in the Gemeentemuseum

## CONCLUSION

The Gemeentemuseum is well-established in the field of music instrument curating, and today, it continues to be a respected Western European collection.

In this chapter, space has been devoted to many of the smaller elements of the organisation and practices of the Gemeentemuseum's music department, which in themselves, may seem rather unimportant. It is in these small aspects, when combined with the principles and practices of the larger factors, that a good museum may be differentiated museologically from a poor museum. A successful museum, i.e. one that is effective in carrying out its tasks, leaves no aspect of its performances to chance, no matter how minute that may be.

Naturally, there are some features of the practices of the Gemeentemuseum that can be criticised, e.g. its restoration practices, for no museum anywhere is ideal in all respects of its practices. In general, however, the Gemeentemuseum in The Hague presents a satisfactory standard for museum instrument collections which could be emulated by other instrument museums.

## CHAPTER FOUR

### THE CLASSIFICATION OF MUSIC INSTRUMENTS WITH REFERENCE TO MUSEUMS

#### THE PURPOSE OF CATALOGUING AND CLASSIFYING: INTRODUCTION

The purpose of cataloguing and classifying anything in the museum, and some problems involved, are best summarised in the following statement.

In order to be able to interpret and communicate knowledge effectively, a museum must first have detailed and accurate information about the objects in its collection ... The enormous backlog of cataloguing which has built up at many museums has led to a widespread deficiency of basic information on which research and external communication depend ... The outcome of this is that many existing collections are not being used to their full potential. The immediate need is for staff to undertake basic cataloguing. However, the initial stages of the cataloguing process involve physical identification and research.

(Provincial Museums and Galleries Report,  
pp. 36-7).

The views presented in this report of the Provincial Museums and Galleries in England are applicable to museums worldwide, where systematic cataloguing and analysis of collections

of music instruments has yet to be undertaken. The need for cataloguing and analysis of these collections has been hampered by lack of sufficient knowledge about, and interest in these collections, lack of qualified specialists in the field, lack of suitable cataloguing guides for curators, and lack of a universally applicable classification for music instruments.

The difficulties presented all over the world in cataloguing music instruments, centre largely on their classification.

"Organologists have long realised the limitations which a taxonomic approach to the classification of musical instruments imposes..." (Ramey, p.1).

The various classifications of instruments which have developed from antiquity, present organologists with one of the most interesting, yet problematical areas of research. The history of these classification systems is recounted in many other publications, the most recent useful one being summarised in chapter 2 of A Classification of Musical Instruments for Comparative Study, by M. Ramey.

The ideal of any classification system, universal application, is not successfully met by any of the taxonomies developed to date. The Hornbostel-Sachs system, which is explained below, comes closest to this ideal. The central idea of classification in the broad sense is the procedure of putting similar objects together into groups, and dissimilar objects into different groups, with the number of groups and the descriptive or discriminant characteristics of the groups known. Underlying patterns discovered are drawn together in the classification.

Museum experience implies that classification of instruments is an administrative convenience as much as it is a scientific reality. This may account for the practices regarding cataloguing observed in many museums in Western Europe. Only the most broad criteria of the particular classification adopted, are generally applied in museum catalogues, for example, the classifications of the instrument collections of Museum Vleeshuis and the Museum für Völkerkunde, in figures 6 and 7.

Generally these criteria do not include the finer details of classifications, suggesting that the use which will be made of any classification depends on the experience and knowledge of the cataloguer and the curator, and that museum experience with classification of instruments has not been fully explored. Compare these suggestions with the following view which states that a full statement of a classification can be expected only in the museum.

A complete statement of a classification of any kind has only one practical use: to permit the organisation of representative objects in space in a museum. Only in this special environment, and for this special purpose, might it be anticipated that all signatures, together with their verbal definitions, would need to be set out seriatim. The systematist confronted with a random collection, or the fieldworker engaged in collecting in a given locality, will usually have no need to use the numerical portion of the signatures; both will be concerned, for the most part, with interrelationships corresponding to terminal digits only (Picken, 1975: 560-561).

Usually, classifications are seen to be compromises of one kind or another, and it has been found necessary to accommodate these in the system selected for the museum. Classifications of music instruments, then, should be recognised for what they are,

especially when designed for or adapted by museums: they are man-made devices based on theoretical analysis and empirical observation, and are designed to more or less facilitate communication.

It is unfair, perhaps, to criticise existing classifications of music instruments without enquiring into the uses to which they are put in the museum.

### THE FUNCTION OF A CATALOGUE

No museum can function without a catalogue, and in almost every museum, the use which can be made of the museum's resources depends largely on the quality of its catalogue. The catalogue, and the way information in it is classified, is an instrument of communication. If it fails to supply information then it fails to discharge its function.

Catalogues generally have in common the fact that they may be used to make inferences and deductions about a group of objects. Underlying patterns are sought, and are drawn together. Part of the function of a catalogue is information retrieval.

### Information Retrieval in Museums

In cataloguing and classifying anything, specificity is important. This is the extent to which the system permits us to be precise when identifying the subject of that which we are processing. The higher the specificity, the more likely we are able to achieve high relevance. If specificity is lacking, we are in fact, reduced to the kind of sequential scanning that is necessary if collections are not organised at all, though of course we have reduced the amount of material that we have to scan



by partially specifying its subject matter. Many of the instrument classifications tend to have low specificity, e.g. Galpin (1956).

To obtain the maximum amount of control over our searching, the system must permit us to be precise in our specification of subjects. Again, in this respect, many of the instrument classifications are vague rather than precise. The greater the precision of specification, the less the number of characters or taxa required in a classification. While over-refined taxonomies have considerable value for organological studies, they tend to be incomprehensible in the museum context. In addition, there is the practical administrative consideration that cataloguing of details and classification of such details are usually burdensome and time-consuming activities, irrespective of how functional the end-product may be. Whatever system is used, there are two persons who must find it expedient: the person responsible for the input, i.e. the cataloguer, and the person trying to obtain output, i.e. the user.

There are important considerations in choosing between different classification systems of music instruments for museum cataloguing: the ease with which the system will give answers to particular questions, i.e. the validity of criteria on which the system is based; the degree of specificity; the amount of time required in the input stage; and the expertise required: Hornbostel and Sachs wrote that "Correct description and nomenclature depend upon knowledge of the most essential criteria for the various types, - a condition which, as a visit to any museum will show, is hardly ever met" (Baines and Wachsmann, 1961:5).

From observations made in museums in Western Europe, and from a study of the literature on the subject, it is evident that the most widely used instrument classification is that of Hornbostel and Sachs which was developed in 1914 (Hornbostel and Sachs). "No other system of classification is more frequently quoted, nor has any later system been able to supplant it" (Baines and Wachsmann, 1961:3). The preference for the Hornbostel-Sachs classification over systems such as Draeger (1948), Schaeffner (1936), Galpin (1956), Montagu-Burton (1971), et cetera, is that, despite the shortcomings evident in it, it remains superior to them.

There are many reasons for the widespread use of the Hornbostel-Sachs classification, and the aim now, is to analyse these reasons, and to expand on its advantages over other classifications in museum application. The classifications of Francis Galpin (1956 and 1965), in figures 4 and 5, have been selected for comparison with the Hornbostel-Sachs Systematik (1914).

Firstly, the Hornbostel-Sachs Systematik is explained. Because it is reasonably well-known as a classification of instruments, the main points have been summarised; extensive details have been considered unnecessary in the present context. Some details containing more specific instances of the use of the Hornbostel-Sachs Systematik have been used for comparative purposes with the other two classifications. A discussion and analysis of the two classifications by Galpin follow the explanation of the Hornbostel-Sachs Systematik.

THE HORNBOSTEL-SACHS SYSTEMATIK EXPLAINED

In 1914, two eminent musicologists, Erich M. von Hornbostel and Curt Sachs, published their classification of musical instruments under the title Systematik Der Musikinstrumente. Ein Versuch. A translation into English of this classification finally occurred in 1961 (Baines and Wachsmann).

Hornbostel - Sachs based their classification on the system which Victor Mahillon used from 1888 for his comprehensive catalogue of the Brussels Conservatoire Museum. The first principle of division used by Mahillon, and adopted by Hornbostel-Sachs, is the nature of the vibrating body. Thus, four classes of instruments are established: (1) instruments whose material, owing to its elasticity and solidity, yields the sounds. Mahillon called these 'instruments autophones', but Hornbostel-Sachs preferred the term idiophones (see Sachs, 1972:195a); (2) instruments in which the sound-waves are excited by tightly stretched membranes, named membranophones; (3) instruments in which the strings, stretched between fixed points vibrate, called chordophones; and (4) instruments in which a column of air vibrates, named aerophones.

Mahillon then subdivided the four main groups or classes into 'branches' differentiated by playing action. Hornbostel-Sachs purposely decided against this subdivision and chose to differentiate classes by different criteria. The taxa distinguish groups sharing few common characters relating to different functions. Because the four main groups are deliberately not divided according to one uniform principle, ranks of a given position within any group do not necessarily correspond with those of other groups (Baines and

Wachsmann, 1961: 9, no. 17). For example, idiophones, 1, are subdivided according to whether they are struck, 11, plucked, 12, or vibrated by friction, 13. Membranophones, 2, are similarly subdivided into struck drums, 21, plucked drums, 22, and friction drums, 23. Chordophones, 3, are subdivided according to different criteria: simple chordophones or zithers, 31, and composite chordophones, 32, while aerophones, 4, are subdivided into free aerophones, 41, and wind instruments proper, 42.

The Hornbostel-Sachs subdivisions are based on features which are readily visible from the exterior form and parts of the instrument, meaning that the instrument itself is not "meddled" with for classification. Features which have a bearing on musical use, or sound production, e.g. the internal diameter or shape of a drum with a membrane at each end of the instrument, go unrecorded in the classification.

Taxa of instruments use general names for daily use, such as flute, harp, drum and rattle. These names for higher taxa are coupled with a number that indicates the hierarchical status of the instrument. Thus, any signature in the Hornbostel-Sachs classification requires a numerical component, which is arranged according to the decimal classificatory system developed by Dewey (1876,1885), and a verbal, descriptive component. The one component cannot be separated from the other in referring precisely to a taxon in this system, for example, 412.132 'Sets of free reeds'. In defining the particular 'species', its local name, its descriptive name and the taxon must all be cited with the number, for example: 412.132. (Sets of free reeds, Reed organ, mouthorgan, accordion.)

Each digit of the number indicates a classificatory position, for the numerical portion of the signature shows a hierarchical value, which in classifications of plants and animals is generally shown by latinized nomenclature. "Taxa in Hornbostel-Sachs may not be equated (however,) with digital positions unless and until each taxon is defined by a number of characters relating to different functions" (Picken, 1975:561).

The Classification of Instruments of Music<sup>1</sup> (Galpin, 1965:231 - 233)

CLASS A: SONOROUS SUBSTANCES

- I Without a keyboard { A Rhythmic (1)
- II With a keyboard (3) { B Tonal (2)
- III With automatic mechanism (4)

CLASS B: VIBRATING MEMBRANES

- I Without a keyboard { A Rhythmic (5)
- II With a keyboard (7) { B Tonal (6)
- III With automatic mechanism (8)

CLASS C: WIND INSTRUMENTS

- I Without a keyboard:
  - A. Flutes { i Vertical or Beaked (9)
  - { ii Transverse (10)
  - { i Beating { a Single { \* with cylindrical tube (11)
  - { b Double { \*\* with conical tube (12)
  - { c Combined with air-reservoir (15)
  - { \* with cylindrical tube (13)
  - { \*\* with conical tube (14)
  - { ii Free (16)
  - B. Reeds { i with conical tube (17)
  - C. Cup mouthpieces { ii with cylindrical tube (18)
- II With a keyboard:
  - A. Flutes, Beating and Retreating Reeds (19)
  - B. Free Reeds (20)
- III With automatic mechanism (21)

CLASS D: STRINGED INSTRUMENTS

- I Without a keyboard { i air-vibrated (22)
- { ii plucked a without a neck (23)
- { b with a neck (24)
- { iii struck (25)
- { iv bowed (26)
- II With a keyboard { i air-vibrated (27)
- { ii plucked (28)
- { iii struck (29)
- { iv bowed (30)
- III With automatic mechanism (31)

figure 4A

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<sup>1</sup> Figures listed in brackets refer to characteristic examples in figure 4B.

1. Cymbals, Castanets, Rattles, Gongs, Triangle.
2. African Marimba and Zanze, Xylophone, Bells, Jew's Harp, Nail Violin, Musical Glasses.
3. Keyed Harmonica, Carillons.
4. Clock Chimes, Musical Box.
5. Side and Bass Drums, Tambourine, Tom-toms.
6. Kettledrums, Onion Flute, Indian Nyastaranga.
7. Not yet in use.
8. Drums attached to self-acting Organs; Phonograph, Gramophone.
9. Arabian Nay, Bulgarian Kaval, Panpipes, Recorder, Flageolet.
10. Nose flutes, Indian Murali, "German" Flute.
11. Syrian Arghool, Egyptian Zummarah, Hornpipe, Clarinet.
12. Saxophone.
13. Chinese Kwantzu, Japanese Hitschiriki, Krumhorn, Racket.
14. Arabian Zamr, Shawm, Oboe, Bassoon.
15. Indian Zitty, Platerspiel, Bagpipe, Musette.
16. Malay Kronee, Burmese Phan, Chinese Cheng, Mouth Harmonica.
17. Bugle, Horn, Cornett, Cornet, Saxhorn.
18. Trumpet, Trombone.
19. Pipe Organs.
20. Harmonium, Reed Organs.
21. Barrel Organs, Orguinettes.
22. Aeolian Harp, Chinese Kite-bows, Air-violin.
23. Musical Bows, Lyre, Rote, Harp, Psaltery.
24. Guitar, Cittern, Lute, Mandoline.
25. Persian Santir, Dulcimer, Keyed Cittern, Provençal Tambourin.
26. Indian Ravanastrom, Burmese Thro, Arabian Rebab, Crowd, Viol, Violin, Hurdy-gurdy.
27. French Aero-Clavichorde.
28. Virginal, Spinet, Harpsichord.
29. Clavichord, Pianoforte.
30. Nuremberg Geigenwerk, Arched Viall, Claviola.
31. Barrel Piano, Pianolas, etc.

figure 4B      Characteristic examples of instruments for the  
Classification of instruments of music by Galpin.

## THE FIRST CLASSIFICATION BY GALPIN (1965)

### Introduction

This classification is described and analysed in some detail prior to an examination of Galpin's 1937 classification published in A Textbook of European Musical Instruments (1956), because many of the problems found in the later classification with which we are primarily concerned, first appear in the earlier one. Therefore, the 1900 classification, which can be located in Old English Instruments of Music (1965), is regarded as the source of many pitfalls found in the second classification by Galpin. Since many of the difficulties observed in this earlier classification are discussed in detail here, where they occur again in the later classification they have not been repeated in the discussion.

This classification was originally drawn up by Francis Galpin for the International Music Exhibition, held at the Crystal Palace, London, in 1900. Galpin acknowledges the value of Mahillon's research and work, but says that his own classification aims to be "less intricate" than Mahillon's classification.

Galpin claims that the effectiveness of his classification for museum purposes "has been proved in the catalogue of the Musikhistoriska Museum at Stockholm, and in that of the famous collection...(in) the Metropolitan Museum of New York" (Galpin, 1965:231). The Museum Vleeshuis collection in Antwerp, Belgium, has also been organised according to the second classification drawn up by Galpin in 1937 (Lambrechts-Douvillez, 1969), but this particular museum collection has also incorporated elements of the original classification of 1900. Later in this chapter, reference



is made to the way in which Museum Vleeshuis has adopted Galpin's classification systems.

#### Description and Analysis

There are four classes: A. sonorous substances, B. vibrating membranes, C. wind instruments, and D. stringed instruments. Within each class, the order of taxa is class, division, group, section, sub-section, and branch.

The principal criterion for division of the main classes is based on the playing action. Main groups are divided according to the uniform principles of the following criteria: I. without a keyboard, II. with a keyboard, and III. with automatic mechanism.

These three divisions break down into groups which refer to the principle of sound production. Not all divisions of all classes have groups; the exceptions are classes A.II., A.III., B.II., and B.III. The fourth class, D. - stringed instruments, has no groups at all. Classes A.I. and B.I. employ one of two criteria: A. rhythmic, or B. tonal, while class C.I. and II. employs the criteria of either A. flutes, B. reeds, or C. cup mouthpieces. The last mentioned group is not included in C.II.

From these groups, the taxonomy is refined into sections. Classes A. and B. have no sections. Classes C. and D. have sections referring to the method by which the sound is caused to become activated, e.g. instruments in sections i - iv in class D. are classified according to whether they are air-vibrated, plucked, struck, or bowed. Instruments in class C.I.A. are classified according to whether they are vertical or beaked, or transverse. In class C.I.B., wind instruments with reeds, the sections are i. beating, and ii. free; the same applies to C.II.A., wind

instruments of the flute type.

Instruments which are classified as C.I.C. - wind instruments without a keyboard and with cup mouthpieces, strictly speaking, have no section to be assigned to although they are given i. with conical tube, or ii. with cylindrical tube. These two designations are inconsistent with those already given as sections in other parts of this classification. Their use in this instance, corresponds to branches of sub-sections, class C.I.B.i.a./b.\*., the asterisk denoting branch rather than sections.

Only two classes, wind instruments and stringed instruments, have sub-sections. These sub-sections are restricted to one section of each respective class: C.I.B.i. - beating reed instruments without a keyboard which a. have single reeds, or b. double reeds, and D.I.ii. - plucked stringed instruments without a keyboard which a. have no neck, or b. have a neck.

Some specific illustrations selected from the classification show that its use in museum cataloguing has disadvantages. A variety of shortcomings is evident in the Galpin classification when compared with the Hornbostel-Sachs classification.

Galpin classifies harps, musical bows, and lyres as D.I.ii.a. - plucked stringed instruments without a keyboard and without a neck. The division, 'without a keyboard', and the sub-division, 'without a neck', are highly artificial criteria that become relevant only when contrasted with other criteria in the same taxa. The Galpin classification operates by a

process of elimination. In classifying anything, it is more difficult to eliminate what is not wanted from a list that theoretically encompasses an infinite number of criteria, than to specify in positive terms what is wanted. We do not need to enumerate characteristics not peculiar to an instrument to specify what it is. Because it gives higher relevance, positive identification is more conducive to systematic arrangement and classification.

Another problem regarding the instruments classified as D.I.ii.a., is that it is desirable to make some differentiation between the many instruments which fit into this classification, simply because there are obvious differences. Hornbostel-Sachs, for example, enumerate these differences, and thereby fulfil an elementary purpose of any classification. Using the same number of taxa, they are able to attain a greater degree of specificity for each of these three instruments, clearly demonstrating the differences and the similarities. The numerical classification of each of these instruments is, (i) 311.1, musical bow, (ii) 322, harp, and (iii) 321.2, lyre. It is obvious which of these two types of classifications is more specific and which gives greater clarity. We must remember that both factors are of great importance in museum application. The Galpin classification does not display the advantages which the Hornbostel-Sachs classification displays even when limited to the first two or three taxa.

We see that the first digit of the Hornbostel-Sachs numbers is common to the three instruments, denoting that one or

more strings are stretched between fixed points. The second digit shows the distinction between the musical bow, 1, as a simple chordophone or zither, and the harp and the lyre, 2, as composite chordophones. Thus Hornbostel-Sachs have differentiated the musical bow, classified at this point as 31, from the harp and the lyre, classified as 32. Galpin's classification to this point is D.I., stringed instruments without a keyboard.

To make a distinction between the harp and the lyre in the Hornbostel-Sachs classification, the third digit is added. The harp becomes 322, indicating that the plane of the strings lies at right angles to the sound table. The lyre becomes 321, indicating that the plane of the strings runs parallel with the sound table. The result is that in three figures, Hornbostel-Sachs acknowledge the elementary similarities and differences, while the Galpin classification, even with the addition of a third taxon, shows only that the same characters relating to a single function are shared. With the classification D.I.ii. we know that the musical bow, the harp, and the lyre are plucked stringed instruments without a neck, sharing a common manner of sound production. No expression is given to the relationship between these instruments. As a means of communication, this description and classificatory code fail to communicate anything definite that would be of benefit to a museum catalogue.

In a museum, the need is to organise a collection of instruments in such a way that when one seeks information, one does not have to scan the whole contents in order to find what is wanted. The aim is to go with a minimum of delay to those instruments which will be of use. Opportunities for realising

this are seriously reduced with the Galpin classification.

Because the classification is crude in its outlines, it appears to contain a great number of generalisations when a body of instruments is catalogued and classified. The artificiality of taxa means that instruments are classified in broad, non-specific terms. The result is that a large number of instruments are grouped together because they are related in very general terms, but any differences displayed between them cannot be particularly identified from the final classification of a group of instruments in the same division of one class.

There is no provision for the accommodation of instruments into two or more categories or parts of a class, e.g. violins are both plucked and bowed, pianos may be considered as stringed instruments that may be plucked or struck, Indian tabla may be used both tonally and rhythmically.

A number of terms used in the classification require definition, since imprecise terminology can be a source of great confusion, especially for the non-experienced cataloguer. Confusion may occur at two levels. Firstly, there is no definition of what is meant by 'keyboard', and this is particularly important since this criterion is the major principle of division within each class. For example, we do not know whether or not the series of keys on a xylophone constitute a keyboard; an inexperienced cataloguer might assume that they do, but Galpin classifies the xylophone as an instrument without a keyboard. Secondly, terms for instruments given as characteristic examples in particular classifications are often not clear, e.g. 'marimba', 'tom-toms', and 'onion flute'.

For class B, vibrating membranes, the use of all three criteria given as divisions of the class is redundant. Two problems are associated with this point. The first one is that when classifying a kettledrum, for example, what is the relevance of asking if it has a keyboard? By analogy, one might also ask if it has a double-reed. A more rational question would be based on the shape and the construction of the instrument, or the method of playing. The second problem concerns the fact that division II, with a keyboard, is inapplicable because there are no instruments in this class that meet this criteria.

Hornbostel-Sachs also incorporate criteria that are inapplicable in the discrimination of the smaller groups of their classification, but not as the major discriminator as Galpin does. Four specific instances occur in the idiophonic class of Hornbostel-Sachs for which no known instruments can be given. These are (i) individual friction sticks, as opposed to sets of friction sticks, (ii) individual friction plaques, as opposed to sets of friction plaques, (iii) individual blown sticks, as opposed to sets of blown sticks, and (iv) individual blown plaques, as opposed to sets of blown plaques. In Hornbostel-Sachs, incorporation of these criteria is different from the way Galpin incorporates them. Hornbostel-Sachs have formulated them as dichotomous alternatives of fourth consideration for this class; Galpin uses two criteria which do not really operate as dichotomous alternatives because of their inappropriateness as criteria for this class. Therefore, in Galpin, the use of division I, 'without a keyboard', has to be regarded as the only suitable one in museum cataloguing, since the

use of division III, with automatic mechanism, will probably never occur in the museum situation, and the use of division II is irrelevant.

In the Galpin classification, the phonograph and the gramophone are given presumably as characteristic examples of sound producers, rather than music instruments in the usual sense. In any case, museum curators do not normally regard them as part of instrument collections.

To summarise this point, if we seriously consider the Galpin classification in terms of its suitability for museum application, the criterion of a keyboard as the primary principle of division for vibrating membranes is negative. Most, if not all types of instruments of this class which will be found in a museum collection, will automatically fall into division I simply because there is no reasonable option. This criterion is inappropriate in answering the need to place instruments into categories from which inferences and deductions may be made. The criteria selected by Hornbostel-Sachs are more successful in answering this need.

The Classification of Instruments (Galpin, 1956: 32 - 36)

CLASS I. - AUTOPHONIC INSTRUMENTS

Sub-class	Division	Subdivision	Typical examples
i. By striking	A. Direct	a. Clashed	Cymbals, Castanets
		b. Shaken	Ball rattles
		c. Struck	Xylophones, Bells
	B. Indirect	a. With keyboard	Dulcitone, Carillons
		b. Automatic	Clock chimes
ii. By plucking	A. Direct	a. With finger	Jew's harp
		b. With ratchet	Notched rattles
	B. Indirect	a. With keyboard	Claviola
		B. Automatic	Musical box
iii. By friction	A. Direct	a. With finger	Musical glasses
		b. With bow	Nail harmonica
	B. Indirect	a. With keyboard	Clavicylindre
		b. Automatic	Barrel Aiuton
iv. By blowing	A. Direct	a. From mouth	Cracker glass
	B. Indirect	a. With keyboard	Aeolsklavier

CLASS II. - MEMBRANOPHONIC INSTRUMENTS

Sub-class	Division	Subdivision	Typical examples
i. By striking	A. Direct	a. On rim-frame	Timbrel, Tambourine
		b. On cylinder frame	Side and bass drums
		c. On bowl frame	Kettle drum
	B. Indirect	a. With ratchet	Handle drum
		b. With pedal	Pedal drum
		c. Automatic	Barrel drum
ii. By friction	A. Direct	a. With rod	Rommelpot
		b. With cord	Brummtopf
	B. Indirect	a. By whirling	Waldteufel
iii. By co-vibration	A. Direct	a. Vocal	Flute eunuque, Mirliton
	B. Indirect	a. Automatic	Gramophone

figure 5



CLASS III. - CHORDOPHONIC INSTRUMENTS

Sub-class	Division	Subdivision	Section	Typical examples
i. By plucking	A. Direct	a. Without neck	1. Open strings	Musical bow, Harp Lyre, Psaltery
		b. With neck	2. Fretted strings	Zither Lute, Cither, Guitar
	B. Indirect	a. With keyboard		Virginal, Harpsichord
		b. Automatic		Barrel spinet
ii. By striking	A. Direct	a. Without neck		Dulcimer, Tambourine
		b. With neck		
	B. Direct	a. With keyboard		Clavichord, Piano
		b. Automatic		Pianola
iii. By friction	A. Direct	a. Without neck		Talharpa, Ancient Crwth
		b. With neck		Rebec, Viol, Violin Trumpet marine
	B. Indirect	a. With keyboard		Nyckelharpa, Hurdy-gurdy,
		b. Automatic		Celestina, Violina
iv. By air	A. Direct	a. Without neck		Aeolian harp
	B. Indirect	a. With keyboard		Anémocorde

figure 5/continued

CLASS IV. - AEROPHONIC INSTRUMENTS

Sub-class	Division	Subdivision	Section	Typical examples
i. Flue-voiced	A. Direct	a. Open flute	1. End blown	Kaval, Giorgi flute
			2. Whistle-blown	Recorder, Flageolet
			3. Side blown	Transverse flute
	B. Indirect	b. Closed tube		Ocarina
		a. With keyboard		Pipe organ
		b. Automatic		Bird organ
ii. Reed-voiced	A. Direct	a. Cylindrical tube	1. Single-beating reed	Clarinet
			2. Double-beating reed	Krumhorn
		b. Conical tube	1. Single-beating reed	Saxophone
			2. Double-beating reed	Oboe, Bassoon
		c. Framed	Free reed	
			Mouth organ	
	B. Indirect	a. With finger-holes		Phagotum, Bagpipe
		b. With keyboard		Regal, Harmonium
		c. Automatic		Barrel-organ
iii. Lip-voiced	A. Direct	a. Conical tube	1. Simple	Natural horn
			2. With holes	Cornetto, Ophicleide
			3. With slide	Slide horn
			4. With valves	Valve horn, Cornet
		b. Cylindrical tube	1. Simple	Natural trumpet
			2. With holes	Keyed trumpet
			3. With slide	Slide trumpet, Trombone
			4. With valves	Valve trumpet and trombone

figure 5/continued

CLASS V. - ELECTROPHONIC INSTRUMENTS

Sub-class	Division	Subdivision	Typical examples
i. By oscillation	A. Direct	a. Free hand	Aetherophon, Electronde Trautonium, Hellertion
		b. Graduated	
	B. Indirect	a. With keyboard	Givelet-Coupleux Organ, Phototone
ii. Electro-magnetic	A. Direct	(not in use)	
	B. Indirect	a. With keyboard	Hammond Organ Radio-Gramophone
		b. Automatic	
iii. Electro-static	A. Direct	(not in use)	
	B. Indirect	a. With keyboard	Compton Organ and Electrones Bells and Clock Chimes
		b. Automatic	

THE SECOND CLASSIFICATION BY GALPIN (1956)

Description

There are five classes:

- I autophonic instruments or self-vibrators
- II membranophonic instruments or skin-vibrators
- III chordophonic instruments or string-vibrators
- IV aerophonic instruments or wind-vibrators
- V electrophonic instruments or electric-vibrators

A summary of the taxa used by Galpin in this classification is as follows:

- class - type of sound producer
- sub-class - principle of sound production
- division - manner of application (direct or indirect)
- subdivision - particular form of construction employed

The first four classes correspond to the Hornbostel-Sachs classes, and to the four included in Galpin's first classification of 1900. The fifth class of electrophones is a new addition not found in any other classification of music instruments. According to Galpin (1956:30), electrophonic instruments are ones "in which the sound-waves are formed by oscillations set up in electric valves". The addition of this fifth class is an important contribution to the classification of music instruments in general, which, of course, was not anticipated by Hornbostel-Sachs.

This classification, drawn up in 1937, is a little more refined than the earlier one by Galpin, with improvements in some areas which were unsatisfactory in the earlier classification. The major improvement is the change in the most important principle of division, from that of the presence or absence of a keyboard

(the second taxon, originally entitled 'division'), to the principle of sound production (the second taxon, now entitled 'sub-class').

A second major change is the alteration of class positions, specifically of the third and fourth classes. In the first Galpin classification, class C represented wind instruments, and class D, stringed instruments. In the later classification, stringed instruments have become class III (or C), and wind instruments are class IV (or D). This is in line with the order of groups in Mahillon's classification which was closely followed by Hornbostel-Sachs.

The presence or absence of a keyboard as the criterion for the playing action ('sub-division') has not been abandoned altogether, for its use is reserved in four of the five classes, the exception being class II, membranophonic instruments. Its incorporation in this class would be irrelevant. This criterion is no longer of the second order of importance in the classification, and hence it is not the major principle of division in each class; it has become the fourth taxon, indicating that the particular form of construction employed takes fourth precedence.

### Analysis

In sub-divisions of the classification several alternative criteria are given. The ones offered for each of the five classes, and also within each respective class, show a great deal of variation, which is quite inconsistent and therefore, unsatisfactory. Almost every division employs different criteria for its sub-division, e.g. in class III.i., chordophonic plucked instruments, the sub-division of A (direct manner of application) is either a. - without

a neck, or b. - with a neck. In the same class, a sub-division of an indirectly struck chordophonic instrument, III.i.B., is either a. - with a keyboard, or b. - automatic. This shows the variation within one class. Another illustration taken from the aerophonic instruments, class IV, shows even greater variation, but also inconsistency in the use of sub-division, e.g. a directly flue-voiced aerophone may have either, a. - an open tube, or b. - a closed tube, while an indirectly flue-voiced aerophone may be either, a. - with keyboard, or b. - automatic. Thus we have two pairs of criteria for each sub-division within the same class. Now, if the sub-division of this classification were to be consistent in its approach, the same criteria for indirect and direct manner of application should be used; however, Galpin has discarded the option of open or closed tubes for any indirect flue-voiced aerophone, IV.i.B, by substituting the option of having a keyboard or of being automatic. The example given for IV.i.B.a., an indirect flue-voiced aerophone with a keyboard, is a pipe organ which does possess open and closed tubes, as well as a keyboard. Yet, Galpin has considered the presence of the keyboard to be more important than the fact of its having open and/or closed pipes, which is the sub-division offered to the cataloguer by other divisions of this class. A secondary criticism of the classification of the pipe organ is that it is reed-voiced as well as flue-voiced, but Galpin has placed it firmly in the latter category.

The criteria given in the sub-division relating to direct plucked autophonic instruments, I.ii.A., are a.- with finger, or b. - with ratchet. Some confusion arises when the attempt is made to classify the African 'sanza', the plucked idiophone with sets of

lamellae in board or comb form, with or without a resonator. Galpin's classification would be I.ii.A.a., i.e. an autophonic instrument that is directly plucked with the fingers. The jew's harp is given by him as a typical example of an instrument in this category. Two problems are, that no references are made to the resonator of the 'sanza', if there is one, or to the sets of lamellae which are arranged in keyboard form on it, while the jew's harp depends on the player's mouth cavity for resonance of the sound produced by the one lamella. Two options are given for the sub-division pertaining to these instruments and neither makes allowance for a keyboard, yet this allowance is made for other divisions, namely, the plucked, blown, friction and struck sub-classes. But because the manner of application cannot be said to be indirect, we cannot employ the sub-division of 'with keyboard'. Thus, the classification of the 'sanza' as I.ii.B.a. would be less correct, than the classification I.ii.A.a., but neither are precise.

Classification of the carillon similarly calls for a transition of boundaries between sub-divisions. Galpin has given carillons the classification I.i.B.a., the last figure, a., being the sub-division denoting 'with keyboard'; however, the carillon can equally correctly be classified as an automatic instrument as opposed to 'with keyboard', e.g. I.i.B.b. The system makes no provision for flexible or composite classification across sub-divisions.

The aerophonic instruments discussed above, also illustrate the fact that the means of altering pitch has not been considered important for making inferences and deductions about instruments of music. We may take the transverse flute as an illustration. It

is classified as a direct flue-voiced aerophone with an open tube which is side-blown, IV.i.A.3.; no reference is made to the presence or absence of finger-holes.

In only one instance is the option of finger-holes offered as a criterion for classification, and this is in the reed-voiced aerophonic instrument sub-division, IV.ii.B.a. For this reason, it is difficult to distinguish between a recorder, a simple whistle flute, or a hole-less flute, for example, as the three instruments are classified as IV.i.A.a<sup>2</sup>., direct flue-voiced aerophones with an open tube that is whistle-blown. The necessity for making a distinction between these instruments seems so elementary that it is difficult to see why it cannot be accommodated in an instrument classification.

With regard to aerophonic instruments, the classification of the bull-roarer is impossible because of the criteria given for sub-classes, the first division within the class. A further fault of the classification of instruments in this class is that there is no provision for including piston operated wind instruments in the appropriate part of the classification, i.e. the section.

Another major criticism of this classification concerns the fact that resonators are not prominently featured in it, either with regard to their presence or absence, or their shape, size, and kind. Concentrating on aerophones again, we may take three examples which illustrate the confusion which can be caused because of vague classification. We must remember at the same time that classification is intended to simplify, and not complicate our understanding of the subject at hand.

It seems that to refer to a closed tube as the resonator



of the ocarina, IV.i.A.b., is too imprecise when it would be better equated with a vessel or globular shape. Hornbostel-Sachs overcome the problem of terminology for this by simply referring to wind instruments wherein the vibrating air is confined.

The classification of the bagpipe, IV.ii.B.a., presents the problem of making no reference to the confinement of air, in the appropriate sub-division of the classification. To classify the bagpipe as an indirect reed-voiced aerophone with finger-holes, is vague to say the least. If Galpin employs the term 'indirect' to mean, by implication, that the air is confined in a collapsible reservoir, then its use is inconsistent with the fact that the category of the classification which is reserved for the particular form of construction is the sub-division and not the division.

Pan-pipes would be classified as direct, flue-voiced aerophones with an end-blown open tube, IV.i.A.a<sup>1</sup>., the same classification as for the Turko-Balkan 'kaval', yet the difference between these two examples, even for museum identification purposes alone, is too great to go unrecognised. The classification completely omits reference to the fact that pan-pipes consist of several flutes of different pitch combined to form a single instrument without finger-holes. Its construction and use are different and this needs to be spelled out in some manner even in a broad classification if cataloguing is to be of real value. In the Hornbostel-Sachs classification the difference is shown in the second cluster of digits: the recorder is classified as 421.221.12, while the pan-pipe is classified as 421.112, as well as in its accompanying description, e.g. the pan-pipe is an instrument in

which the air is confined within the instrument itself, without duct; sets of end-blown flutes or pan-pipes.

The order of precedence of taxa expressed in the 1937 classification is better than that of 1900, which, as pointed out earlier in this chapter, contains many inconsistencies in regard to the use of sections, sub-sections, and branches. While some of these inconsistencies remain with regard to the use of the sub-division in the later classification, the arrangement of hierarchical order is improved between sub-division and section. In regard to sound production, it is more important to note the type of bore of wind instruments before noting the specific manner of application, than the reverse, as is the case in the earlier classification.

The problem of identification that is imprecise or vague may be illustrated from another angle, e.g. the classification III.i.A.b. is a direct, struck membranophonic instrument on a cylinder frame, and could refer to any of the following instruments: a side drum, a bass drum, a bongo drum, an Indian banya, or a conga drum. The enormous variety of these drums selected as a random example shows that there are too many instruments with great differences in construction and playing methods classified in the one category. This seems to be a feature of the Galpin classification system, a problem which is partly the result of its being a more general rather than a specific classification.

Hornbostel-Sachs, by contrast, give these drums the following classifications which are both more precise and much more specific:

side drum - 221.212.(1)

bass drum - 211.312

bongo drum - 211.251.(1)

Indian banya - 211.233.23

conga drum - 211.221.(1)

It is necessary to point out that the first two digits in the second cluster of digits must be seen together as a pair, rather than as two separate individual digits that refer to different characters, since they refer to the same specific body shape. The first digit to the right of the first decimal point is common to four of the five drums, indicating the shared characteristic of a tubular body, while the second digit to the right of the first decimal point is different in four of the five examples: in simplified Dewey numbers, as used in the Hornbostel-Sachs classification, these elements appear like this:

000.21 - cylindrical, i.e. side drum

000.31 - frame, i.e. bass drum

000.25 - conical, i.e. bongo drum

000.23 - double conical, i.e. Indian banya

000.22 - barrel-shaped, i.e. conga drum

It is this second digit of the second cluster which, when seen as a pair with the first digit, informs of exactly what type of tubular shape is peculiar to each drum.

In five digits of the Hornbostel-Sachs classification (i.e. three digits in the first cluster plus a pair of digits in the second cluster) we have each of the five examples of drums distinctly classified: similarities, as well as differences between

the instruments are expressed visually and in a fairly simple manner.

If one were to argue that the above number of Hornbostel-Sachs Dewey figures and their corresponding descriptions are unnecessarily complicated, or too refined for a general museum collection of instruments, then of course, only as many categories as are wanted may be used. The advantage of a system that allows for more refinements, however, cannot be denied, especially when the system of classification incorporates a universal decimal system such as that in Hornbostel-Sachs. Should the need or the desire ever arise in the museum to catalogue in more detail than, for example, three or four taxa, then the Galpin system is not able to meet this need. The Galpin classification is a closed system in which no provision is made for expansion of existing categories, or combinations of categories. The Hornbostel-Sachs classification, on the other hand, can be used in a simple manner or in a complex manner. The Museum für Völkerkunde in Basel, Switzerland, has adopted the Hornbostel-Sachs classification and uses it in a simple manner. A copy of this museum's simplified Hornbostel-Sachs classification is in figure 6. We have seen that no degree of complexity is catered for in the Galpin system, with recorders and pan-pipes being classified together, and the five examples of drums that are quite different in construction and use, carrying exactly the same classification code. Similarly, one cannot deny that even two figures or taxa of the Hornbostel-Sachs classification are more specific, and hence classify instruments more precisely, than the same number of figures and taxa in the Galpin classification.

Certainly, it may be argued that there are many advantages for a broad classification for museum cataloguing. Not many museums in Western Europe employ refined taxonomies in the catalogues of their collections.

Two museum collections selected as illustrations are Museum Vleeshuis in Antwerp, and the Museum für Völkerkunde in Basel. These two museums are widely different in several respects. Museum Vleeshuis is a numerically small, specialised collection of European art and folk instruments, while the Museum für Völkerkunde in Basel is a numerically larger collection of non-Western instruments which form part of the general ethnographic collections. The first museum provides an example of a collection that has been catalogued using a combination of the Galpin classifications of 1900 and 1937. A copy of this classification is in figure 7. The second museum provides an example of a collection that has been catalogued according to the Hornbostel-Sachs classification (1914) and is in figure 6.

These two museums, however, share the fact that they have made adaptations to each respective classification system by selecting only the larger discriminant groups, or by simplifying various aspects of the classifications. They demonstrate the practical application that is made of the two respective classifications under consideration for museum use, and should be studied and compared in view of the descriptions and analyses made.

Museum für Völkerkunde, Basel: Classification of Music Instruments  
according to Hornbostel-Sachs (1914)

IDIOPHONE (Unmittelbar geschlagene)			
Gegenschlagidiophone	Gegenschlagstäbe		
	Gegenschlagplatten		
	Gegenschlaggefäße	Kastagnetten	
		Becken	
Aufschlag-Idiophone	Stampfer	Stampfbretter	
		Stampfstäbe	
		Stampfröhren	
		Wasserstampfergeräte	
		Rasselstampfstäbe	
		Reis-Stampfer	
	Aufschläger	Aufschlagstöcke	
		Aufschlagkörper u.-gefäße	
		Aufschlaggabeln	
Schlag-Idiophone	Schlagstäbe	Selbständige Schlagstäbe	
		Xylophone (Schlagstabespiele)	
	Schlagplatten	Selbständige Aufschlagplatten	
		Lithophone (Schlagplatten- spiele aus Stein)	
		Metallophone (Schlagplatten- spiele aus Metall)	
	Schlagröhren	Selbständige Schlagröhren	
		Schlagröhrenspiele	
	Schlaggefäße	Bambus-Schlitztrommeln	
		Holz-Schlitztrommeln	
		Kesselgongs	
		Selbständige Gongs	
		Gongspiele	
		Aussengeschlagene Metallglocken	
		Doppelglocken	

figure 6

IDIOPHONE (mittelbar geschlagene)

Schüttel-Idiophone	Kloppelglocken	Naturglocken
		Kloppel-Holzglocken
		Kloppel-Metallglocken
	Schnurrasseln	Reihenrasseln
		Kettenrasseln
		Bündelrasseln
	Stabbrasseln	Sistren
		Klirrstücke
	Rahmenrasseln	Gleitrasseln (Angklung)
	Gefässerasseln	Kurbisrasseln
		Korbrasseln
		Flossrasseln
		Tonrasseln
		Holzrasseln
		Ringrasseln
		Rollschellen
		Gefässerasseln, div.
		Materialien
Schrap-Idiophone	Schrapstäbe	Div. Schrapstabe
		Kalkspatel
	Schrapröhren	Div. Schrapröhren
Zupf-Idiophone	Schrapgefäße	guïro
	in Rahmenform	Haultrommeln
		Cricri (Callipnuss-Schnepper)
	in Brettform	Sanzas
Reib-Idiophone	Reibplattenspiele	Reibhölzer (nunut)
	Reibgefäße	Schildkrötenpanzer

MEMBRANOPHONE

Schlagtrommeln	Röhrentrommeln	Zylindertrommeln (einfellige)
		Zylindertrommeln (zweifellige)
		Fasstrommeln
		Konustrommeln
		Doppelkonustrommeln
		Sanduhrtrommeln
		Becher-/Morsertrommeln
	Kesseltrommeln	Selbständige Pauken
	(Pauken)	Paukenspiele
	Rahmentrommeln	einfellige, ohne Stiel
		zweifellige, ohne Stiel
		einfellige, mit Stiel
		zweifellige, mit Stiel
	Klappertrommeln	Klappertrommeln
Reibtrommeln	Stab-Reibtrommeln	
	Schnur-Reibtrommeln	
Ansingtrommeln	Freie Mirlitons	
	Röhrenmirlitons	

figure 6/continued



CHORDOPHONE

Zithern	Stabzithern	Musikbögen
		Schrapbögen
		Rundstabzithern
		Plattstabzithern
	Röhrenzithern	Vollrohrenzithern
		Halbrohrenzithern
		Wolbbrettzithern
		Flosszithern
	Brettzithern	Brettzithern, ohne Resonator
		Kastenzithern
Lauten	Schalenzithern	
	Rahmenzithern	
	Bogenlauten	
	Jochlauten (Leiern)	Schalenleiern
	Stiellauten	Spiesslauten
Harfen	Bügelharfen	Spiessgeigen
		Halslauten
		Halsgeigen
		Bogenharfen
Harfenlauten	Kerbsteg-Harfenlauten	Winkelharfen
		Kora

figure 6/continued

AEROPHONE

Freie Aerophone	Zungen	Selbständige Durchschlagzungen Mundorgeln (Durchschlagzungenspiele)
	Wirbelaerophone	Schwirrblätter Schwirrhölzer Schwirreisen
	Flöten	Selbständige Längsflöten Einfache Längsflöten ohne Grifflöcher mit Grifflöchern Kerbflöten ohne Grifflöcher mit Grifflöchern Längsflötenspiele unverbundene Panflöten Floss-Panflöten Bundel-Panflöten Kernspaltflötenspiele Querflöten ohne Grifflöcher mit Grifflöchern Nasenflöten Gefäßflöten Gefäßflöten ohne Kernspalte Spalt-Gefäßflöten Pfeiföpfe Schwirrgefäße Brummkreisel Scheibenflöten
Schalmeien	Oboen selbständige Klarinetten Klarinettenspiele Durchschlagzungen-Schalmeien	
Trompeten	Schneckentrompeten Röhrentrompeten	Langsschneckentrompeten Querschneckentrompeten Längstrompeten Quertrompeten Querhörner

(Ramseyer, 1970)

Museum Vleeshuis, Antwerp: Classification of Music Instruments  
according to Galpin (1965 and 1956)

- I. IDIOFONEN
  - II. MEMBRANOFONEN
    - 1. Met onbepaalde toonhoogte
    - 2. Met bepaalde toonhoogte
  - III. AËROFONEN
    - A. Fluiten
    - B. Rietbladinstrumenten
      - a. enkel rietblad
      - b. dubbel rietblad
      - c. vrijslaande tongen
    - C. Lip-vribrerende aërofonen
  - IV. CHORDOFONEN
    - A. Tokkelchordofonen
      - 1. rechtstreeks - zonder hals
      - rechtstreeks - met hals
      - 2. onrechtstreeks met toetsen
    - B. Strijkchordofonen
      - 1. rechtstreeks
      - 2. onrechtstreeks met toetsen
    - C. Slagchordofonen
      - 1. rechtstreeks
      - 2. onrechtstreeks met toetsen
- (Lambrechts-Douillez,  
1967:47)

figure 7

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Translation of figure 7

- I. IDIOPHONES
- II. MEMBRANOPHONES
  - 1. instruments of untuned pitch
  - 2. instruments of tuned pitch
- III. AEROPHONES
  - A. Flutes
  - B. Reeds
    - a. single reeds
    - b. double reeds
    - c. free reeds
  - C. Lip- vibrated aerophones

It may be more useful for the general museum with a non-specialised collection of instruments to have a good general classification, that is, one that is broad enough to encompass and include all of the required categories without going into extensive details which would be disregarded in the daily course of the museum's work. There may be no need for a sophisticated classification with innumerable categories. At the same time, however, it should be recognised that a broad classification needs to be a good one, if it is to perform the function, and to best serve the purpose of classifying anything. We have cited several examples illustrating that Galpin's classification is limited in this regard. Comparison of the two examples of classification systems as applied in two different museums, substantiates claims that the Galpin classification is much more limited than the Hornbostel-Sachs classification, and that it is less able to communicate information accurately, concisely, or precisely.

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Translation of figure 7/conclusion

IV. CHORDOPHONES

A. Plucked

1. direct - without neck  
direct - with neck
2. indirect with keyboard

B. Bowed

1. direct
2. indirect with keyboard

C. Struck

1. direct
2. indirect with keyboard

ADVANTAGES OF THE HORBOSTEL-SACHS SYSTEMATIK

Hornbostel and Sachs were aware of the need to develop Mahillon's four-class system in new directions, and they managed to achieve this in the revised and expanded version of 1914. Classification systems by others, by contrast, were not really formulated in new directions, and tended towards the promotion of the limited notions of the type exhibited in classifications by Galpin, and Donington (1962).

Laurence Picken, in his excellent treatise on Folk Musical Instruments of Turkey (1975), recognised the value of the Hornbostel-Sachs Systematik, and claims that it is an excellent base for further development of organological research. Picken takes the basic Systematik one step further along the path of these 'new directions' sought by its authors, by providing elementary comments on physio-acoustical principles of major groups of instruments. Taking into account the shape of idiophones, for example, becomes significant, for this decides in a "highly complex fashion both modes of vibration and quality of resonance" (1975:4). He also successfully dismisses many of the criticisms of the Hornbostel-Sachs Systematik as being the result of misinterpretation of classification in general, and of fundamental misunderstandings of the Systematik itself. Montagu-Burton (1971), interestingly, have abandoned their project on a proposed new classification system for instruments. No doubt, comments in the Postscript of Picken's book have had some influence on this decision.

The major problem which has confronted authors of classifications of music instruments has been the recognition of physio-acoustical properties of instruments. Picken says it is

necessary

to realise the complexity of the sound-producing behaviour of instruments, but yet to appreciate that such complexity does not undermine the genial notion of Mahillon, as of Hornbostel and Sachs, that the nature of the prime vibrating material is a valid basis for the discrimination of main categories (1975:ix).

Like Picken, Mantle Hood has introduced certain areas of consideration that have gone beyond the normal order of information presented in existing taxonomies of instruments. Hood cites examples to show that instrument classifications are not as efficient as they should be because of their omission, for example, of the internal shapes of membranophones in relation to external shapes, techniques of performance, musical function, decoration, and socio-cultural factors. Picken has also stressed the latter aspect in its importance to organological research.

Hood uses the Hornbostel-Sachs Systematik as the basis of the suggestions made for the development of a more correct, i.e. more complete, classification of instruments based on increased knowledge. In substitution for the Dewey decimal system of Hornbostel-Sachs, however, a symbolic taxonomy is employed for the five classes of instruments (electrophones are included by Hood as the fifth class). The resultant symbols, referred to as organograms (see Hood, 1971:163-196), have certain advantages over the Dewey decimal numbers, yet it would appear that museum curators and cataloguers might be averse to the adoption of such a system in the immediate future. The symbolic taxonomy still relies on some form of ordered classification for the arrangement

of its symbols, and is therefore, dependent on the use of an existing classification such as the Systematik.

On the one hand, these developments by musicologists have been valuable in the field of organology, and have contributed to the increase of our knowledge of music instruments. Hood and Picken amongst others, have recognised the merit of the work of Hornbostel and Sachs in their classification of instruments, but have felt that in-depth research of instruments in general, the contributions made by physio-acoustical research, and fieldwork in both ethnomusicology and musicology into instruments and associated areas like socio-cultural studies, have warranted the need to augment and develop this particular classification system. Hornbostel-Sachs themselves stated that they were aware that

with increasing knowledge, especially of extra-European forms, new difficulties in the way of a consistent classification will constantly arise. It would thus seem impossible to plan a system today which would not require future development, and amendment

(Baines and Wachsmann, 1966:8).

On the other hand, if we are to address ourselves to the question of "what" and "how much" does a museum need to know for cataloguing purposes, the answer can best be sought from current museum practices.

Although the variety of circumstances and types of instrument museums make it difficult to generalise, for there will inevitably be cases that tend towards either extreme, we may state that the degree of usage of the complete Hornbostel-Sachs Systematik has been minimal in the normal course of the

curator's work in a museum. This amplifies the notion that classification is an administrative convenience as much as it is a scientific reality. Extended use of the Systematik proves most useful for the museum in research that is restricted to geographical area studies, or to studies of instruments that concentrate on closely defined areas such as those outlined by Picken in his book, e.g. ergology and technology, playing-technique and musical possibilities, repertory, use, history and distribution.

While in-depth application of the Systematik, and hence of the added developments by Picken, and Hood, for example, would be useful in museum research, few museums have been able to catalogue and classify their collections to this degree, regardless of the benefits to be gained from such practices by those collections whose numerical size or specialisation would warrant this even more.

We agree with Picken that

a complete statement of a classification of any kind has only one practical use: to permit the organisation of representative objects in space in a museum. Only in this special environment, and for this special purpose, might it be anticipated that all signatures, together with their verbal definitions, would need to be set out seriatim (1975:560).

This anticipation, however, has not been witnessed in contemporary collections in Western Europe.

Several implications arise out of this, confirming the two suggestions made at the beginning of this chapter; firstly, that the use which will be made of any classification



depends on the experience and knowledge of the cataloguer and curator, and secondly, that museum experience with classification of instruments has not been fully explored. These implications are that existing classifications, although often derived from observation and study of instruments in museum collections, do not meet the needs of museums; museum cataloguers are not able to classify according to existing systems because of inexperience and unfamiliarity with instruments and classification systems, or because of lack of time available for the task; cataloguing of instruments does not necessarily require the application of any specific system beyond the readily identifiable classes; museums have no need for the refinements presented by taxonomies; the refinements included are too complicated, and mostly irrelevant for application in numerically small collections.

## SUMMARY AND CONCLUSION

As previously stated, the system chosen for the museum must be found both efficacious and expedient by those using it.

While systematic arrangement, or classification, refers a given object to its class, it must also summarise relationships between the object and closely or distantly related objects. Analysis has shown that the classifications by Galpin are able to meet the first requirement to some degree, but not the second.

In a museum, a system is needed that will give high relevance, even though recall will be low. This is an important principle which does not appear to have been considered with respect to museum selection of a classification system.

To obtain the maximum amount of control over one's searching in a catalogue, the system must permit precision in the specification of subjects. The Hornbostel-Sachs Systematik permits a high degree of both specificity and precision.

Furthermore, the Systematik is successful in meeting the considerations listed at the commencement of this chapter. Thus, reasons for the widespread use and knowledge of the Hornbostel-Sachs classification are that it is based on the work of Victor Mahillon who was enormously respected in the field; it is published and available in English; it accepts as the most important principle of division, the physical characteristics of sound production; it has high specificity, and is more precise than other classifications; it is able to be used in a simple or complex manner; most of the requirements of museum cataloguing can be met; it is more easily computerised since a numbering

system like the Dewey decimal system will lend itself better to such treatment; later developments can be built on the basis of this system because of its construction and concepts; as it is simple and clear, there is more likelihood of accurate classification by inexperienced cataloguers.

Three levels at which the Systematik may be conveniently used by a curator in his daily work can be identified as (i) a convenient, scientific method of assembling and arranging instruments, (ii) a basis for systematic organisation of knowledge of instruments, i.e. organology, and (iii) a discipline in reference service to enable the curator to readily locate and identify an instrument in subject inquiry, and to respond readily to outside queries.

Because the use of a complete statement of a classification of the Hornbostel-Sachs Systematik seems more than desirable in cataloguing instruments of music in museum collections, eleven instruments have been catalogued and classified in chapter five according to this system. Each instrument has been selected to illustrate the fact that the characteristics of the Hornbostel-Sachs Systematik which facilitate its use outnumber those which hinder its application in museums.

All signatures are set out with their verbal definitions. In addition, each instrument catalogued has incorporated an organogram as described and developed by Hood, in order to show that the advantages of symbolic taxonomy for instruments claimed by Hood, may be a profitable supplement to the Hornbostel-Sachs classification in museum application.

## CHAPTER FIVE

### A MUSEUM GUIDE FOR CATALOGUING INSTRUMENTS OF MUSIC

The aim of the guide for cataloguing instruments of music as outlined in this chapter is to provide those who are responsible for the cataloguing of music instruments in museums of all kinds with a potential method of obtaining and recording a maximum amount of information in an economical fashion.

In Western Europe, and probably in the United States of America, a wide variety of methods are used to catalogue instruments. These range from those methods which seek a great amount of information, to those which seek only the barest essentials necessary for museum identification purposes. Few of the instruments in Australian museums have been catalogued at all. Where they have been catalogued, only a minimum amount of information about each instrument is generally recorded. It appears,

therefore, that there is a need for an adequate guide for cataloguing instruments of music in museums of all kinds.

Some might argue that in many cases there is no demand, as yet, for recording the amount of detail which is sought by the method proposed in this thesis. There is also the question of skill and time required by this method, which may not be readily available in many museums. While these are very real considerations that have to be met, one cannot ignore the need that exists for some full guide that is designed along sound musicological and organological lines. As another answer to problems which may be raised in this regard, it is suggested that where all sections of the catalogue card cannot be used or completed along the lines proposed, as many sections as possible be completed, with the aim of further completion when that possibility arises later on.

A secondary aim of this guide, the use of which will hopefully result in cataloguing instruments of music properly, is to emphasise that more worthwhile results can be had from making an analysis of the material, once it is catalogued thoroughly, than from cataloguing according to any less select criteria.

#### IDENTIFICATION AND RECORDING OF DATA

Some knowledge of music and music instruments is necessary to catalogue instruments correctly. It would be foolish to deny that skill in cataloguing and an understanding of music instrument classification is helpful. A trained person or specialist is likely to be more efficient and more reliable as far as detail and accuracy are concerned.

It must be understood that the input stage of cataloguing is perhaps the most important part of the total process. Cataloguing is a skilled operation that requires some discrimination and expertise in the identification of instruments, and in translating observed information into language that accurately records nothing but the facts. With reference to the immediate requirements of cataloguing and analysis, eloquence is less important than accurate, factual, empirical observation, which is available to any serious cataloguer.

Part of the skill of this recording process lies in knowing what to include and what to exclude as relevant information. To some extent this facility comes with experience; the more objects of the same kind that one catalogues, the more obvious certain observations become. Thus, the recording of information in this manner is really a way of selecting only the most useful data from the total observations made. When this is done, classification of recorded observations pertaining to each instrument is already on its way.

But what does one regard as useful data for a museum catalogue? The criteria to be recorded on a catalogue card will obviously vary according to the needs of each museum, and as already stated, this helps to account for the fact that there are a variety of ways of recording information in museums. Each museum should have some clear guidelines as to its role and function. The value of this policy has been discussed earlier in this thesis. The understanding that a museum has of its own role and function in respect to the objects being catalogued will affect the type and

degree of information sought for cataloguing. With regard to music instruments, it is very important that musical considerations should be met to at least a minimum degree. For example, when recording the dimensions of an instrument on a catalogue card, those dimensions relevant to determining the mode of sound production should be incorporated. More will be said later in this chapter about what is regarded as useful information.

#### CLASSIFICATION AND ANALYSIS OF INSTRUMENTS: CATALOGUING

Once instruments are catalogued, theoretically any system of classifying the recorded information may be selected, and any number of cross-references may be established. The conclusions reached in chapter four have been adopted and applied to a sample number of music instruments which have been catalogued here to illustrate the proposals put forward for cataloguing.

The most economical method of cross-referencing a catalogue is to provide multiple access through various selected reference points that lead to the required points in the main, central catalogue. An alternative method, which is similar, is to make identical copies of each card - typed or photocopied, and to set these out in the selected reference points. In the former method, there is need for a central catalogue which is regarded as the primary statement of each instrument.

A cross-referencing system for a museum catalogue of music instruments would involve a minimum combination of three types of cross-reference. A smaller number would be less satisfactory as will be shown.

The three suggested ways for cross-referencing an instrument catalogue are:

- 1 organologically, i.e. by instrument classification, e.g. Hornbostel-Sachs (1914)
- 2 geographically, i.e. by the provenance of the instrument
- 3 numerically or chronologically, i.e. by number or date of accession, or if possible, by historical period of manufacture and use.

All three would serve as a satisfactory and successful combination necessary to meet the basic requirements of a museum, for sometimes a particular type of instrument will be sought, necessitating use of an organological classification; sometimes, and especially in the case of non-Western instruments, it will be necessary to know the instruments from a particular country or tribe, requiring the use of a geographical index; and at other times, a particular accession number or date will be known, requiring a search of a numerical or chronological index.

Although not necessary, several additional cross-references are suggested for use. They should be seen as complementing the above three cross-references, rather than supplementing them.

A useful source of cross-reference is a photographic catalogue. Enlargements rather than contact prints, would normally provide a good source of identification for this type of reference. Each photograph is given an identification number of some kind that is written on the back, or alternately, a self-adhesive label with some numbering system is attached to the back. Generally, the numbering system in this type of catalogue would refer to film



or negative number which is recorded on the central catalogue card for precisely this type of reference.

Depending, of course, on the number or specialisation of European instruments, it may be useful to have a cross-reference index of instrument names and makers as well.

Because the number of instruments catalogued in this thesis is quite small and selected to demonstrate a particular approach to cataloguing, it is not realistic to classify the recorded material. Nor is it necessary to do so. The classification of instruments which has been examined at length in the preceding chapter, would, by following the Hornbostel-Sachs Systematik, merely repeat it in the present circumstances.

#### THE DESIGN OF THE CATALOGUE CARD

Few of the catalogue cards used in museums visited in Europe contain as many categories of information as those sought by the following catalogue card. This card has been designed and revised a number of times, after much consideration, and following the experiences involved in attempting to catalogue the larger part of the collection of over 500 music instruments<sup>1</sup> in the National Museum of Victoria, Melbourne.

The design and development of a new card suitable for museum use in cataloguing music instruments was thought necessary due to the various inadequacies found in most existing museum catalogue cards. By current museum standards, the combination of

1 See Appendix

categories of information sought by this particular card provides one of the most thorough and complete records that can be obtained in cataloguing music instruments in museums.

The information to be recorded on the card falls into six broad sections. These may be enumerated as

- (i) identification
- (ii) production
- (iii) description
- (iv) collection and acquisition
- (v) process
- (vi) notes

Specific information sought under each of these sections is as follows.

- (i) identification: common name
  - local or native name
  - museum number or catalogue number
  - class
  - sub-class
  - geographical origin
    - I country
    - II region or specific area
    - III linguistic group

- (ii) production: name of maker  
date of manufacture  
marks
- (iii) description: condition  
Hornbostel-Sachs classification number  
materials  
description of form and construction  
decoration  
dimensions  
photograph  
organogram
- (iv) collection: collection method  
source, i.e. collected by whom  
date of collection
- acquisition: acquisition method  
source, i.e. acquired from whom  
date of acquisition  
price paid, if any  
insurance value
- (v) process: any process of conservation  
any process of restoration

(vi) notes:            research  
                             reference  
                             publication and/or exhibitions  
                             location in store, or exhibition  
                             photograph or negative number  
                             identifier of instrument  
                             date of identification  
                             recorder of information  
                             date of this recording

The catalogue card and a key to its use according to the above sections are presented in figure 8. For purely practical reasons, the card is presented in this thesis on a single sheet, rather than in card form: the top half of the page represents the front of the card, and the lower half of the page represents the reverse side, or back of the card.

If there is insufficient space on a card to record all of the information in any section about a particular instrument, a second and third card may simply be attached to it.

Common name		Museum /cat.no.	Class
Local /native name			Sub-class
Geograph. origin I	Maker	Collection method	
II	Date	Source	
III	Marks	Date	
Condition		Hornbostel - Sachs no.	Photo
Materials			
Description			
Decoration			Organogram
Dimensions                      diameter max. width /height              width /height max. length                      length			
Acquisition method			
Source		References /Publications /Exhibitions	
Date			
Price			
Insurance value			
Restoration /Conservation			
Research Notes			
Location	Photo/neg.no.	Identifier	Recorder
		date	date

figure 8 Proposed museum card for cataloguing instruments of music

#### EXPLANATION OF THE CATALOGUE CARD

A number of problems are always involved in cataloguing anything at all, and music instruments are no exception. The questions of skill and knowledge have already been mentioned in this regard. Other problems are associated with inadequate or imprecise definition and use of criteria and terminology that are to be recorded on catalogue cards, with a major problem being consistency in use, especially over a long period of time.

In order to prevent confusion, the meaning of some of the major items of information required, has been amplified and explained in more detail. A serviceable guide for museum cataloguing of instruments demands conciseness, but not at the expense of clarity.

Only those items in the various sections of the catalogue card whose use in the present context require a more distinct understanding of concepts involved, are discussed here; many items, such as museum number, date of manufacture, collection and acquisition for example, are self-explanatory.

The catalogue card has been designed for use with all types of instruments from all countries. More particularly, instruments of both European and non-Western traditions can be fully catalogued according to this manner, for special attention has been paid to the range of musicological and sociological criteria that need to be accounted for in order to make cataloguing as thorough as possible.

Some categories of information sought, although relevant for all instruments, will be difficult or impossible to record.

For example, the general nature and circumstances of the production of many instruments manufactured in the non-Western tradition makes it virtually impossible to record the name of the maker, or the date. In addition, this type of information may have less importance in such a tradition. Nevertheless, if this information is available, then it should certainly be noted for all instruments. Similarly, there may be other pieces of information that are not available for recording on the card because such information is unknown and not to be had from observation of the instrument itself.

#### Identification

Several pieces of information make up the section wherein an instrument is readily identified. Of these, common name and local name, instrument classification, and geographical origin require further explanation in the present context.

Common name is the general name employed in daily use, or the name by which an instrument is most commonly called, e.g. flute, drum, harp, violin, jew's harp, pan-pipes.

Space is given for a more specific identifier for each instrument under the heading local or native name. The following names, selected from the catalogued examples, are illustrations of the type of entry made in this space: mbira, kudu, lutnut, warup, etc. These examples give the names by which instruments are known locally, or alternately, the names which are native to instruments in a particular region.

Class refers to the name of one of the major Hornbostel-Sachs classes of instruments: idiophone, membranophone, chordophone, or aerophone. A fifth possibility is electrophone. This class of

instruments, however, is probably least likely to be used, if at all, in a museum collection of instruments. It may well come into use some time in the future.

In this regard, even if the class of instrument is membranophone, it is still necessary to mention the presence or absence of a membrane in the space provided for materials or condition. To record this fact in another space on the card, as well as in the space for class, is not unnecessary duplication. It may be quite possible, for example, that the instrument belongs to the membranophonic class, but does not have a membrane any longer, and this should be made clear in the spaces for materials or condition.

When the class of the instrument and its name have been entered in the appropriate spaces, the sub-class is recorded. This is a more specific identifier than the other two categories, and is intended to further clarify the common name by its description. Some examples of descriptive sub-classes are: side-blown flute, raft pan-pipes, bowl lyre, etc. The choice of description - for example, side-blown, appended to the common name - flute, is made according to descriptions and criteria given in the Hornbostel-Sachs classification system. In this respect, the Hornbostel-Sachs Systematik can often be used to guide the cataloguer. For example, Hornbostel-Sachs enumerate the following types of tubular drums, from which a choice can be made for entry on the catalogue card in the sub-class space: cylindrical, barrel, conical, frame, hour-glass, and goblet.



Two of the six membranophones catalogued show how these descriptive sub-classes of the Hornbostel-Sachs classification may be further refined if desired, and if possible, for more precise identification: asymmetrical hour-glass drum (p.195), and elongated hour-glass drum (p.197). Such terms may be coined to refine the existing Hornbostel-Sachs classification. These types of refinements develop out of experience and observation. Although the Hornbostel-Sachs Systematik provides a consistent guide for most instruments within each class, where no appropriate guide is to be found, the cataloguer should be able to arrive at some logical, sub-class consistent with the Hornbostel-Sachs Systematik.

Geographical origin is another identifier requiring some explanation. Country refers to the major political - historical division of any particular area, while region refers to the most specific area known for the instrument being catalogued. Space has been provided for linguistic group and this is an important geographical identifier, particularly for non-Western instruments, e.g. for instruments from New Guinea, as well as numerous other world regions, including Aboriginal Australia. In many instances linguistic information can help to locate an instrument more specifically than region or area.

#### Hornbostel-Sachs Classification Number

As explained in chapter four, a full statement of the Hornbostel-Sachs classification involves both a numerical component and a verbal component. The catalogue card allows space for both of these components. The verbal component is taken up in the space

given to description; the numerical component has been given a separate space as part of the means for supplying a complete identification and classification of the instrument that is catalogued.

The Hornbostel-Sachs number contributes to the most specific statement of classification and identification of each instrument, if it is incorporated with the verbal description, photograph, and organogram on the catalogue card. The use of the Hornbostel-Sachs classification itself has already been examined in the previous chapter.

#### Condition

For the purposes of the present catalogue card, one of three keywords is used to identify the condition of the instrument being catalogued:

(i) good, (ii) fair, and (iii) poor. A fairly simple value judgement based on observation needs to be made by the cataloguer to ascribe the most appropriate keyword to the instrument. A brief description may be added to point out the particular deficiencies in the state of the instrument at the time of its being catalogued, e.g. membrane (of a drum) missing, or, damaged neck (string instrument). A more extensive description of the condition may be written in the space reserved for restoration and conservation.

### Chronology

The only important chronology is that of collection, or of manufacture, if that can be ascertained. Date of manufacture is usually impossible to establish for the majority of non-Western instruments. Chronology of accession is usually of interest to those working in the museum, and is normally immediately apparent from the accession number. The accession number or date becomes important, of course, where the collection date or manufacture date cannot be ascertained. Accession date can therefore be an important terminus. It should be used only as a last resort, however, in publications, exhibitions, etc.

### Materials

Information recorded here lists the materials from which major parts of each instrument are constructed. Materials may be classed scientifically if desired. The scientific names of materials would include, for example, the species of shell in a conch trumpet, the type of skin used for a drum membrane, the names of trees or type of wood from which instruments are made. This information obviously requires knowledge and expertise which may lie outside the range of the cataloguer, and is therefore dependent on outside help.

Such information, as with much of the other information, may be recorded after the initial cataloguing has taken place. In this way, a thorough and complete record may be built up over time.

### Description

The description of an instrument should be such that it is unmistakably identifiable, even without its photograph, i.e. the concepts and terminology used should be a descriptive illustration of that particular instrument. At the same time, the description alone will not necessarily be regarded as sufficient for distinguishing two very similar specimens of the same type; other items of information will help to contribute to the total description of each instrument. Generally, information contained under this heading will be a description of the form of the instrument and of its various parts as they are used in the construction of the instrument.

Where parts of an instrument are damaged, or an instrument is incomplete in some way, this should be noted under condition, rather than in this space.

### Dimensions

For general museum identification purposes the maximum length, width, and height, are usually sufficient. For cataloguing purposes of the kind outlined here and in chapter four, consideration must be given to the dimensions that are relevant for a music instrument.

While it is useful to have some idea of the shape and size of each instrument, especially if it is to be set up in an exhibition, or if storage space is limited, careful thought should be given to providing other measurements relevant to determining characteristics which have a bearing on sound production. For

example, it is useful, when cataloguing skin drums, to provide measurements relevant to specifying the various shapes: hour-glass, elongated hour-glass, asymmetrical hour-glass, barrel-shaped, goblet, conical, cylindrical, etc. Six differently shaped drums from New Guinea have been included in the sample to illustrate how this principle operates in cataloguing.

In addition to the maximum length, and the diameter of the membrane end of a drum, the relevant dimensions could include the diameter of the distal end of the drum, the minimum diameter, i.e. the waist of the drum, the length of the slit at the distal end, the length of the waist, and the length of the 'skirt', i.e. the body between the waist and the distal end (Massola, 1957:2).

Naturally, all of these measurements such as the length of the waist, will not apply to each skin drum. This particular measurement is appropriate to the catalogued example, X40359 (p.200), from the Morobe District of New Guinea, but not for other drums catalogued here. The length of the skirt is relevant on two of the six examples catalogued, X4727 (p.195), and X40358 (p.199); the length of the slit at the distal end is relevant to X4727 and X19429 (p. 197).

With regard to the six drums catalogued, some of the terminology has been adopted from Massola (1957) because of its clarity in classifying drums from New Guinea.

Relevant dimensions that should seriously be considered for other types of instruments generally relate to dimensions that can contribute to the understanding of an instrument. In this way,

the internal dimensions of wind instruments are more important than external ones. Musically speaking, for example, it is the internal dimensions of pan-pipes that are relevant, especially in those pan-pipes which are stopped by a node or other obstruction at some distance from the bottom of the tube. The overall width and length are not as suitable for a music instrument as are musical length and diameter, for example - string length, tube length, free skin diameter clear of the rim, etc. Thus it is necessary to make a basic distinction between the uses of different dimensions recorded in the cataloguing process. One type is intended for museum identification purposes, while the other, as explained above, is for musicological purposes. If there is an awareness of those dimensions that are relevant in cataloguing instruments of music then these may be added without too much trouble. The amount of handling is greatly reduced if all dimensions of an instrument, i.e. both types of dimensions, are taken at the one time.

#### Photographs

A photograph of the complete instrument is essential. Detailed photographs from every angle that reveals any information, whether it be functional or decorative, are complementary to the main photograph of the complete instrument.

Photographs for museum catalogue cards should always include a scale of some kind to act as an indicator of the size of the instrument.

Contact prints are normally adequate for identification, which is the sole function of a photograph on a catalogue card, especially since the card to which it is attached bears a full description of the instrument. Two additional advantages are that contact prints save space, and more than one photo per instrument can be attached to a catalogue card if necessary. Space for additional photos can be found on the reverse side of the card, in the restoration/conservation section, or in research/notes, whichever is not already filled. If neither of these spaces is suitable, then an additional card can be attached to the first catalogue card for this purpose.

Photographic enlargements made from the same negatives can be used to establish a photo-archive, with photos preferably in half-plate size. A photographic catalogue or archive is extremely valuable in addition to other catalogue files, and is easily established from negatives used for the contact prints.

Although the format for photographs suggested above is preferable, especially for publication or other reproduction purposes, the size used in this thesis is 35mm. This size has been used because of the availability of 35mm photographic equipment, but where a museum is seriously considering the question of the photographing of all of its music instruments, half-plate size should be given preference over 35mm, because of its greater versatility.

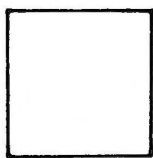
### Organograms

As mentioned in chapter four, organograms are visual notations that represent a symbolic taxonomy of instruments, and were developed by Mantle Hood (1971, chapter 3). The basis of Hood's system is that there is an abstract resemblance between a symbol and the object represented, i.e. the music instrument. The square represents

the myriad forms of the idiophone by rationalising that it could remind us of a wooden box (or wood block). The horizontal rectangle might suggest a drum..., the vertical rectangle might suggest the cello, the rebab, a koto propped up against the wall...The circle is not too far-fetched to suggest the large family of aerophones related by a column of vibrating air

(Hood, 1971:144,145).

Each of the four classes of instruments as identified by Hornbostel-Sachs is thus represented by four different symbols. The diamond has been selected by Hood to represent electrophones, the fifth class of instruments. These five symbols as defined by Hood are given below.



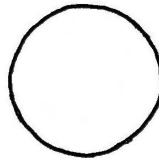
idiophone



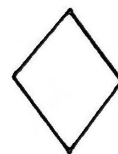
membranophone



chordophone



aerophone



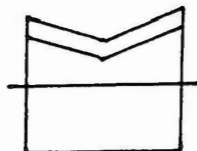
electrophone



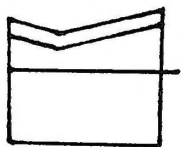
Basically, each of these five symbols is further developed symbolically with the addition of numerous shapes, numbers, and letters to correspond to the selected classification system of instruments. Hood has chosen to use the Hornbostel-Sachs system, but any classification can be applied. A basic set of organograms for each of the four Hornbostel-Sachs classes of instruments, together with the Dewey decimal equivalents is set out by Hood in The Ethnomusicologist (1971:168 - 196). Only these basic organograms are here suggested for use in museum cataloguing.

Theoretically the number and type of symbols which could be developed and added to these basic organograms is infinite. It is important to note, however, that the use of organograms is not intended to replace an instrument classification, but to provide a practical supplement (Hood, 1971:160). Organograms have been incorporated in this thesis as part of the cataloguing process with this aim in mind.

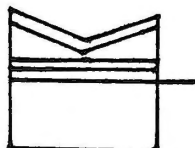
In order to differentiate the shapes of the six New Guinea drums, and in particular the five examples of hour-glass drums catalogued, some of the basic organograms suggested by Hood have been modified slightly to show how differences can be catered for. For example, Hood gives the following organogram for 211.24 - membranophone with hour-glass exterior and interior. For an example, see catalogued instrument X15942 (p.196).



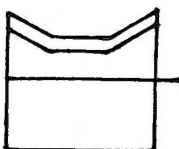
An open, elongated hour-glass drum, as in example X19429 (p.197), would be symbolically notated in this way:



An open, asymmetrical hour-glass drum, as in example X4727 (p.195), would become:



An open, long waisted, hour-glass drum, as in example X40359 (p. 200), would become:



The value of organograms becomes clearly evident in distinguishing the basic differences in shape which are shown by the five hour-glass drums which have been catalogued. While the Hornbostel-Sachs number is the same for each of these five instruments, 211.241.1, the organograms above present distinct visual symbols that readily illustrate the basic differences which are apparent.

This experiment of modifying a basic organogram provides some insight into the value of incorporating organograms on catalogue cards for museums. Organograms are thus presented as an important element of a catalogue of music instruments that provides a relevant and practical supplementary source of information. Specific advantages are that the various symbols that combine to make up an organogram can be quickly memorised, and different symbols can be readily identified and differentiated, analysed and compared. In addition, they can be conveniently used for purposes of computerisation, for any system of classification, and extra features can be incorporated in the composite symbol, such as "techniques of performance, musical function, decoration, and an endless variety of socio-cultural information" (Hood, 1971:161). Other values of organograms, which may be useful for museum research, are presented and discussed in The Ethnomusicologist (ibid). For the present cataloguing purposes, basic organograms are able to provide sufficiently informative supplementary data as to make their incorporation worthwhile for any museum catalogue.

#### A SAMPLE OF INSTRUMENTS CATALOGUED FOR MUSEUM REQUIREMENTS


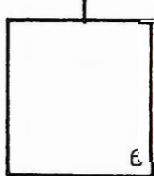
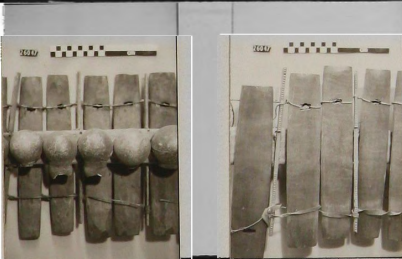
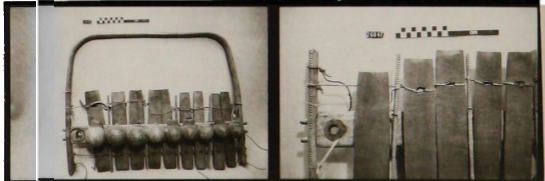
Eleven different instruments have been selected from the ethnographic collections of the National Museum of Victoria, Melbourne, Australia. Each has been catalogued according to the principles proposed here. The eleven instruments are intended as a sample to show how a whole collection may be catalogued, and the order in which they are presented is, firstly, by instrument class, and secondly, by the museum's chronological number for each instrument.


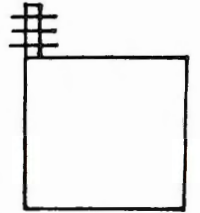
Six membranophones are included, together with two aerophones, and three idiophones. The membranophones are skin drums from New Guinea. Each example is somewhat different in its form and particular characteristics from the other drums. The idiophones include one specimen of each of the three different types of idiophones classified by Hornbostel-Sachs, i.e. struck, plucked, and friction. Two different types of aerophones are included.

Although this sample of eleven instruments consists of non-Western instruments and includes no European instruments, the principles and outcome for using this particular method of cataloguing remains the same for all instruments.


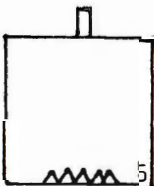

The sample of instruments which follows, concludes this chapter. The intention in cataloguing actual examples is to provide a practical illustration of the methods and procedures which have been put forward.


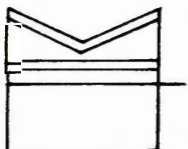

The way that the instruments have been catalogued shows that the method is comprehensive, practical, and efficient, and that the proposals suggested are able to meet museum requirements for cataloguing and classification discussed in this thesis. Good cataloguing and an appropriate manner of classifying the catalogued material are essential if those in museums are to carry out other museum work successfully. The importance of an adequate guide for achieving this cannot be overestimated.

Common name xylophone		Museum/cat.no. X26047	Class idiophone	
Local/native name		Nat. Mus. of Vic.	Sub-class struck idiophone	
Geograph. origin I Mozambique *	Maker unknown	Collection method		
II	Date	Source		
III	Marks	Date		
Condition	fair: one bar and its resonator are missing	Hornbostel - Sachs no. 111.21	Photo	
Materials	wood, gourds, fibre string			
Description	Nine, tuned, wooden bars are suspended in pairs to a U-shaped wooden frame by fibre string and a strip of leather bound around each bar. Each bar has a gourd resonator suspended beneath it; gourds are attached with black wax; each pair of bars is separated by a piece of wood, the same length as the bars.			
Decoration	The four pieces of wood separating the pairs of bars, and the frame of the instrument, have serrated edges.		Organogram	
Dimensions	diameter			
max. width/height	53cm			width/height of bars: from 4.5 - 6.4cm
max. length	67cm			length of bars: from 31 - 29cm
Acquisition method purchase		References/Publications/Exhibitions		
Source Hentze Esquire				
Date from accession chronology +1918				
Price				
Insurance value				
Restoration/Conservation	 			
Research/Notes * The museum register gives the origin as Zaire, however, this is most unlikely; Mozambique seems more probable.				
Location	Photo/neg.no.	Identifier V.Rosier	Recorder V.R.	
rack 34F	Mf 26,27 1/79:1 - 7	date 12.2.76	date May, 1979	


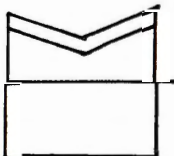

Common name sansa		-193-	Museum/cat.no. X38442	Class idiophone
Local/native name			Nat. Mus. of Vic	Sub-class board sansa
Geograph. origin I Central Africa		Maker unknown		Collection method
II		Date		Source
III		Marks		Date
Condition poor: small split in board resonator, one lamella is missing, resin missing under keys			Hornbostel - Sachs no. 122.11	Photo
Materials iran, wood				
Description A flat board with a hole in the centre; 13 iran lamellae are fixed at one end over a metal bridge; metal rattles are attached to the front on a bar at the bottom of the board; lumps of resin under some lamellae are tapered so that the wide end is free to vibrate.				
Decoration Incised lines are set in squares to give the impression of zig-zags on the lower portion of the board only.				Organogram
Dimensions max. width/height 14.5cm      diameter width/height max. length 21.5cm      length of lamellae: (freely vibrating length) 4.4, 4.9, 5.6, 6.3, 7, 7.4, 7.1, 6.35, 5.7, 5.25, 4.45, 3.6, 3.3cm				
Acquisition method		References/Publications/Exhibitions		
Source				
Date 1930				
Price				
Insurance value				
Restoration/Conservation				
Research/Notes				
Location 2041	Photo/neg.no. MF 11 1/79:16, 17,18	Identifier V.Rosier date 12.2.76	Recorder V.R. date May, 1979	

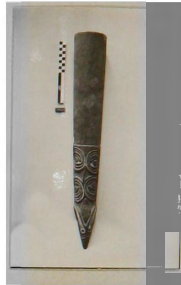
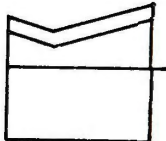




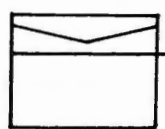

Common name friction drum		-194-	Museum/cat.no. X45554	Class idiophone
Local/native name lu(a)nat, nutnut, lunat, nunat, livika, or lauka			Nat. Mus. of Vic.	Sub-class friction idiophone
Geograph. origin I New Ireland	Maker unknown	Collection method		
II East Coast	Date	Source W.P. Kilkinson		
III	Marks	Date		
Condition good		Hornbostel - Sachs no. 132.2		Photo 
Materials wood				Organogram 
Description A solid block of wood with a raised ridge at the top of the head down to the forehead and nose - seems to represent a bird-like crest. Two shells of green and orange color inserted into the wood for eyes. Three plaques are carved out of the block: the instrument is made to vibrate by friction.				
Decoration Carved to represent an anthropomorphic figure.				
Dimensions		diameter		
max. width/height $\pm 27$ cm		width/height of plaques 17.5, 16, 13cm		
max. length 59cm		length of plaques 12.5, 13 cm		
Acquisition method donation		References/Publications/Exhibitions		
Source collector		A. Balfour, "The Friction Drum" (1907)		
Date 1942		H. Fischer, 1958:table vii, fig.102, and page 126.		
Price		C. Sachs, 1972, 1965:90		
Insurance value		J. Guiart, 1963:280, fig.294		
		H. Tischner, 1958:146		
Restoration/Conservation				
				
Research/Notes The museum register says: "Called a lutnut. Made only in southern villages of the east coast of New Ireland in various sizes and forms. Used in initiations, believed by initiates to be voices of spirits." All of the examples of friction idiophones in the Nat. Museum of Victoria show that the internal shape hollowed out of the wood to make the plaques, is uniformly designed for each instrument, but varies considerably from one instrument to another. Various local names have been ascribed in the literature for this instrument.				
Location 2035	Photo/neg.no. MB 6 - 10	Identifier V. Rosier	Recorder V.R.	
		date 28 - 10 - 75	date May, 1979	

Common name drum		-195-	Museum/cat.no. X4727 Nat. Mus. of Vic.	Class membranophone
Local/native name warup				Sub-class asymmetrical hour-glass drum
Geograph. origin I II Daudai & Torres Straits III Dri People		Maker unknown Date Marks		Collection method Source Date
Condition good		Hornbostel - Sachs no. 211.241.1		Photo 
Materials cassowary feathers, wood, bees wax, varanus membrane, cane				Organogram 
Description Large, heavy, polished black wood; the skirt is open for approx. one third of its total length, opening into large jaws; the lips are decorated with feathers; nine tuning pellets of bees wax on membrane which is glued on and fastened with a string-bound cane hoop; two spiked pegs to tighten membrane are on the side; upper jaw has a gentle upward curve, the lower is cut in a straight line with a square end.				
Decoration The features of the fish face and the jaws are carved with red and white natural colors in the zig-zag lines. A band of carved geometrical lines and leaves, 36cm in length, is near the membrane.				
Dimensions max. width/height max. length 1m 6cm		diameter of membrane 16cm <del>width/height</del> internal waist diam. approx. 7cm length of slit at distal end 22 cm		
Acquisition method Source Date March 14, 1884 Price		References/Publications/Exhibitions A. Massola, 1957:2,11, plate I,4 H. Fischer, 1958: table xii, fig.216 A. Haddon, 1894:39, fig. 15		
Insurance value				
Restoration/Conservation 				
Research/Notes The museum register indicates that the "feathers are representative of "Dri" headdress".  "Tradition says that the Warup came to the Lower Fly from the Island of Saibai. It has not been made for a long time, specimens being now very rare." Massola, 1957:3				
Location 2075	Photo/neg.no. MC 26, 27 2/79:11 - 15	Identifier V. Rosier date 5.11.75	Recorder V.R. date May, 1979	


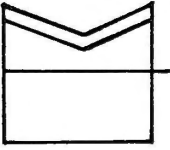
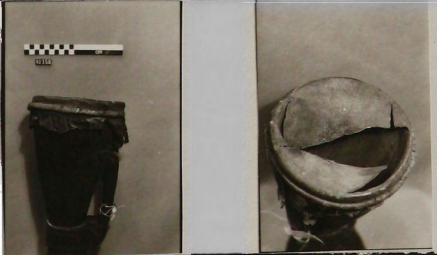



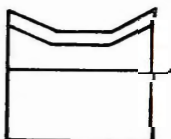

Common name drum		-196-	Museum/cat.no. X15942	Class membranophone
Local/native name			Nat. Mus. of Vic.	Sub-class hour-glass drum
Geograph. origin I New Guinea		Maker unknown		Collection method
II Central District		Date		Source
III Koita and Motu People		Marks		Date
Condition poor: membrane torn, no tuning pellets			Hornbostel - Sachs no. 211.241.1	Photo 
Materials wood, varanus membrane, rattan				Organogram 
Description Dark brown-colored wood; membrane glued on; waist at centre of instrument; plaited rattan hoop around circumference 16cm from open end; open end round; handle; two raised ridges with several holes in them extend from each end of the handle towards the two ends of the drum.				
Decoration Midway between the bases of the handle and encircling the waist is a carved serrated ring or band around the circumference; ridges along the length of the instrument are serrated.				
Dimensions		diameter membrane & open end: 12.5, 13cm		
max. width/height		<del>max. width/height</del> internal waist diam. 3cm		
max. length 63.4cm		length of handle 17.5cm length from membrane to waist 31cm		
Acquisition method			References/Publications/Exhibitions	
Source			A. Massola, 1957:2, and plate II,4	
Date from museum accession no. +1910				
Price				
Insurance value				
Restoration/Conservation				
Research/Notes Although this instrument has incised lines, Massola says there is no ornamentation of any kind on this type of drum.				
Location rack 83F		Photo/neg.no. ME 15 2/79:5 - 10		Identifier Veronica Rosier date 7.1.76
				Recorder V.R. date May, 1979


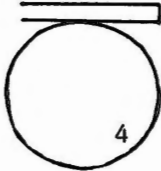
Common name		-197-	Museum/cat.no.	Class
drum			X19429	membranophone
Local/native name		Gama	Nat. Mus. of Vic.	Sub-class elongated hour-glass drum
Geograph. origin I New Guinea in use at Dibiri on the Bamu II River III		Maker unknown Date Marks	Collection method Source Date	
Condition poor: one of the two v-shaped ends is broken off, membrane missing			Hornbostel - Sachs no. 211.241.1	Photo
Materials wood				
Description Light-weight brown wood; easily recognisable drum because the waist is close to the open jaws at the open end; the jaws are exaggerated the waist is where the slit of the distal end commences. Interior shape same as exterior.				
Decoration Red and white pigment in incised circles and spirals and fish face design on the jaws - said to represent the snout of a crocodile; tail-like design at the opposite end.				
Dimensions		diameter of membrane 8.8cm		
max. width/height		<del>width/height</del> internal waist diam. 5.8cm		
max. length 67cm		length from membrane end to waist 54.8cm length of slit at distal end 12.9cm		
Acquisition method purchase Source Fred K. Thornton Date 1913 Price			References/Publications/Exhibitions A. Massola, 1957:4 H. Fischer, 1958:table xii, fig.205	
Insurance value				
Restoration/Conservation				
Research/Notes				
Location	Photo/neg.no.	Identifier	Recorder	
rack 83F	ME 18 1/79:20,21 2/79:1, 2, 3	V. Rosier date 7.1.76	V.R. date May, 1979	

Common name drum		-198-	Museum/cat.no. X26673	Class membranophone
Local/native name Kupi			Nat. Mus. of Vic.	Sub-class hour-glass drum*
Geograph. origin I New Guinea II T obriand Islands III		Maker Date Marks		Collection method field expedition Source B. Malinowski Date probably 1912
Condition poor: membrane missing		Hornbostel - Sachs no. 211.211.1		Photo 
Materials wood, pandanus leaf				Organogram 
Description Cylindrical drum whose ends curve gently inwards towards the handle; the two extremities of the handle are continued to the ends of the drum as raised ridges; a raised ridge on the lower side - 90° from the handle situated parallel to the axis of the drum; strips of pandanus leaf are attached to the side ridges; small diameter of instrument by comparison with its length; interior shape is hour-glass with waist at centre of drum.				
Decoration Two birds' heads with open beaks are carved on the handle; incised curvilinear lines along the raised ridges with white pigment in incisions.				
Dimensions max. width/height max. length 69.5cm		diameter membrane & open end: 8.7, 8cm <del>width/height</del> internal waist diam. approx. 5cm length		
Acquisition method Source collector Date December, 1919 Price		References/Publications/Exhibitions A. Massola, 1957:6, and plate II,3 H. Fischer, 1958: table xii, figs. 233, 234		
Insurance value				
Restoration/Conservation				
Research/Notes According to Massola, the membrane on this type of drum, although missing from this specimen, was varanus skin. * Since the internal waist is important acoustically this is sufficient reason for going by internal shape. This instrument is therefore more accurately classified as an hour-glass drum rather than a cylindrical drum as in Hornbostel-Sachs' classification, even though the exterior shape is cylindrical.				
Location rack 83E		Photo/neg.no. ME 18 1/79:7 - 11	Identifier V. Rosier date 6.1.76	Recorder V.R. date May, 1979



Common name drum		Museum/cat.no. X40358	Class membranophone
Local/native name		Nat. Mus. of Vic.	Sub-class hour-glass drum
Geograph. origin I New Guinea	Maker unknown	Collection method	
II Morobe District	Date	Source	
III	Marks	Date	
Condition poor: membrane damaged extensively, longitudinal splits in body, no tuning pellets		Hornbostel - Sachs no. 211.241.1	Photo 
Materials varanus membrane, bark fibre, wood			Organogram 
Description Very thick reddish-brown wood in hour-glass shape with round open end; the lower part of the handle is extended around the circumference; the waist is towards the open end; membrane attached by means of a thickly rolled hoop of bark fibre.			
Decoration Incised geometrical lines with 'v' shapes on half near open end, traces of white pigment in incisions.			
Dimensions		diameter membrane & open end: 16, 13.5cm	
max. width/height		<del>width/height</del> internal waist diam. approx. 4.5cm	
max. length 42cm		length of handle 18.5cm	
		length of skirt 15 cm	
Acquisition method donation		References/Publications/Exhibitions	
Source Mrs. C. J. Levien		A. Massola, 1957:7	
Date 1932		H. Fischer, 1958: table xi, fig.183	
Price		see example X40356 (photo MC 8)	
Insurance value			
Restoration/Conservation			
Research/Notes Fischer represents a very similar instrument: the decorations are similar, as are the handle and body shape. The hoop over the membrane appears somewhat thicker in Fischer's diagram. According to Fischer this type originates in Humboldt Bay.			
Location 2022	Photo/neg.no. MC 1 2/79: 16 - 19	Identifier V. Rosier date December, 1973	Recorder V.R. date May, 1979

Common name drum		-200-	Museum/cat.no. X40359	Class membranophone
Local/native name			Nat. Mus. of Vic.	Sub-class long-waisted hour-glass drum
Geograph. origin I New Guinea		Maker unknown	Collection method	
II Morobe District		Date	Source	
III Azera		Marks	Date	
Condition poor: some tuning pellets missing, membrane torn			Hornbostel - Sachs no. 211.241.1	Photo 
Materials wood, varanus membrane, bark fibre, bees wax				Organogram 
Description A long cylindrical waist approx. one third of the total length of the instrument extends into hour-glass shape at each end; membrane attached with bark fibre wrapped around the circumference; six tuning pellets on the membrane surface; interior shape as exterior shape.				
Decoration Glossy varnish-like finish on wood; the two hour-glass shaped ends are painted black, while the waist is a natural wood color.				
Dimensions		diameter membrane & open end: 12.7, 12.5cm		
max. width/height		width/height internal waist diam. approx. 4cm		
max. length 47cm		length of waist 13cm		
Acquisition method donation		References/Publications/Exhibitions		
Source Mrs. C. J. Levien		H. Fischer, 1958:31, and table x, figs. 158, 159		
Date 1932		see also specimen X70261		
Price				
Insurance value				
Restoration/Conservation				
Research/Notes According to Fischer this type of drum is from the Markham River, Eastern New Guinea, and used by the Azera.				
Location 2022	Photo/neg.no. MC 6 2/79: 20 - 25	Identifier V. Rosier date December, 1973 November, 1975	Recorder V.R. date May, 1979	

Common name pan-pipes		-201-	Museum/cat.no.	Class aerophone
Local/native name			X27327	Sub-class
			Nat. Mus. of Vic.	stopped raft pan-pipes
Geograph. origin I New Guinea		Maker unknown		Collection method
II		Date		Source
III		Marks		Date
Condition poor: bamboo deteriorating, several pipes are split		Hornbostel - Sachs no.		Photo
		421.112.2		
Materials bamboo				
Description A single row of nine stopped pipes; thin strips of cane binding are wound around and between each pipe; the whole raft is bound together with three strips of cane in three separate places on the raft.				
Decoration none				Organogram
Dimensions		diameter (internal) 0.9, 0.9, 0.9, 0.75, 0.75, 0.7, 0.8, 0.8, 0.9		
max. width/height 9.4c,		<del>width/height</del>		
max. length 21.5cm		length (exterior) 21.5, 19.7, 18, 16.5, 15, 13.8, 12.5, 11.5, 10.8cm		
length of pipes (interior) 21.4, 19.6, 17.8, 16.4, 14.4, 13.2, 12.3, 11.3, 10.6cm				
Acquisition method donation		References/Publications/Exhibitions		
Source Royal Geographical Society		H.Fischer, 1958: table xxiv, fig.388		
Date 1920				
Price				
Insurance value				
Restoration/Conservation				

Research/Notes Fischer gives a very similar example from West Santo, New Hebrides.

Location	Photo/neg.no.	Identifier V. Rosier	Recorder V.R.
2021	MB 17 1/79:12, 13, 14	date December, 1973	date May, 1979

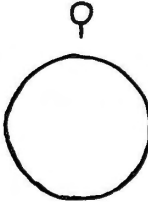
Common name bull roarer		-202-	Museum/cat.no. X46603	Class aerophone
Local/native name			Nat. Mus. of Vic.	Sub-class whirling aerophone
Geograph. origin I New Guinea		Maker unknown		Collection method field
II		Date		Source H. Basedow
III		Marks		Date

Condition good	Hornbostel - Sachs no. 412.22	Photo
----------------	----------------------------------	-------


Materials wood	
----------------	---

Description	An ovoid-shaped piece of wood designed to represent a fish body; a hole is located 5.5cm from the tail end; thickness of wood increases from the sides to the center, and a definite line is visible vertically from the tail to the head showing the maximum point of thickness.
-------------	---

Decoration	Shape and decoration of a fish, with a prominent body and facial outline; the face is in black and white coloring; the remainder of the instrument is covered in red ochre.	Organogram
------------	---	------------

Dimensions	diameter	
max. width/height 7cm	width/height of end with hole 2.55cm	
max. length 41cm	length	
max. thickness 1.2cm		

Acquisition method purchase	References/Publications/Exhibitions
Source collector	
Date 1945	
Price	
Insurance value	

Restoration/Conservation	
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Research/Notes			
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Location 2020	Photo/neg.no. MC 11 1/79: 18, 19, 20	Identifier V. Rosier date December, 1973 November, 1975	Recorder V.R. date May, 1979
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## SUMMARY AND CONCLUSION

In this thesis a broad spectrum of ideas, theories, and practices relating to museum instrument collections has been used in preference to any other approach. The aim of this approach has been to arrive at a more comprehensive understanding of these collections than would have been possible if one particular area or facet had been singled out for examination and discussion.

It has been apparent from surveying the situation of museum instrument collections in Western Europe and in Australia, and from studying the available literature, that an ordered arrangement of ideas, or method, has hitherto been lacking in this area of inquiry. That is to say that an overview which treats of the several interrelated yet diverse aspects of a museology specifically concerned with instrument collections has not been expressed in this way until now.

Basically, method has a two-fold function. It can select and define what was inadequate in former procedures and, at the same time, indicate the better procedures that have become available. The exposition of this two-fold function has helped to explain the current disposition of instrument museums.

The attempt to make a practical contribution to the basic care and understanding of music instrument collections in museums has revolved around clarification of some of the basic principles and contemporary practices of these collections. This clarification has



been made in three ways.

1. In order to understand the responsibilities and work of the curator of a museum instrument collection, it is necessary, firstly, to be clear about the meaning of the museum generally, and secondly, to know what particular role, function and objectives are essential and legitimate for an instrument collection in that context. The functions and objectives of the instrument museum have been identified and analysed at both a theoretical and a practical level in this study.

2. In regard to any proposals that may be put forward, it is always of some advantage to inquire into existing practices and principles followed by contemporary museums throughout the world. By implication, this also demands an historical examination of museums. A selective list and synopsis of many European collections was offered in chapter one, while an in-depth, detailed view of one particular museum, the Gemeentemuseum in The Hague, was given in the third chapter.

To look at music instrument museums, and critically to examine their principles in relation to their practices, is to acknowledge that there is an urgent need for an integration of museology and musicology. Some precise reasons for this were expounded in chapter two.

3. Two of the primary, essential functions of any museum are to catalogue and to classify its material. These two functions are important areas that have been much neglected by museums all over the world. In the last two chapters of the thesis, several viable suggestions have been offered with particular reference to the

cataloguing and classification of instruments in museums. While museums have often tended to be vague in the use of these two functions, the thesis put forward is that a more thorough and more scientific understanding and application of them will benefit all those involved in work in the museum.

The purpose of the present study of museum instrument collections is not controversial or negative; it is intended to be positive and didactic. The method, theory and practices exposed here are an exigence for further development. Such an approach to this specialised subject will not dissolve the solid achievements of the past; it will put that achievement on a more secure base and enrich it with a fuller content. If the contemporary challenge to the traditional outlook of museology on musicology, and of musicology on museology, is to be met, then one must go beyond current beliefs and practices.

It is hoped that the presentation of this overview of basic principles and contemporary practices of instrument collections in museums will be of some practical benefit in creating an improved understanding and management of such collections.

## APPENDIX

### NATIONAL SURVEY OF MUSIC INSTRUMENT COLLECTIONS, AUSTRALIA

As a result of casual enquiries conducted in December, 1973, and continued throughout the following months, it became apparent that there were unknown numbers of music instruments in the major Australian museums.

In November and December, 1973, some informal vacation work in the anthropology section of the National Museum of Victoria, Melbourne, not only confirmed the existence of a large collection of music instruments in that museum, but also suggested the possibility of the existence of collections of instruments in other national and state museums throughout the country.

With this knowledge, it was decided to make a rudimentary survey of music instruments in the museums of Australia. The survey, under the auspices of the Department of Music, Monash University, Melbourne, was conducted by questionnaire.

The questionnaire itself was designed to elicit brief but informative data, specifically relating to the amount of instruments held, the places of origin, the type of instruments, publications and exhibitions about the instruments in question, and other persons or institutions who should be included in the survey.

The survey was restricted to particular categories of institutions, all of them in the public sector. In September, 1975, the questionnaire was forwarded to the following:

- (i) all national and state museums in Australia,
- (ii) selected national and state art galleries,
- (iii) regional museums and institutions thought likely to possess music instruments as an integral part of their collections, such as the National Trusts of Australia,
- (iv) all university music departments,
- (v) all university anthropology departments, and
- (vi) all conservatoria.

A complete list of all the institutions to whom the questionnaire was originally sent is as follows:

AUSTRALIAN CAPITAL TERRITORY

Australian Institute of Aboriginal Studies  
Australian Institute of Anatomy, National Ethnographic  
Collection  
Australian National University, Research School of  
Pacific Studies, Department of Anthropology  
Canberra School of Music  
National Library of Australia

NEW SOUTH WALES

Armidale University of New England, Department of Music  
Braidwood Braidwood Historical Society  
Gulgong Gulgong Historical Society  
Port Macquarie Hastings District Historical Society  
Richmond River Richmond River Historical Society  
Sydney Art Gallery of New South Wales  
Australia Council, Music Board  
Australia Music Centre  
Australian Broadcasting Commission  
Australian Museum  
Macquarie University, Department of Anthropology  
Museum of Applied Arts and Sciences  
Museums Association of Australia  
Musicological Society of Australia  
National Trust of Australia (N.S.W.)  
New South Wales State Conservatorium  
University of Sydney, Department of Anthropology  
University of Sydney, Department of Music  
University of Sydney, Macleay Museum  
University of Sydney, Power Institute of Fine Arts  
University of New South Wales, Department of General Studies  
War Memorial Gallery of Fine Arts

NORTHERN TERRITORY

Darwin       Museums and Art Galleries of the Northern Territory

QUEENSLAND

Brisbane    Early Music Society of Queensland  
             Queensland Art Gallery  
             Queensland Conservatorium of Music  
             Queensland Museum, Anthropology Section  
             Queensland Museum, History and Technology Section  
             Royal Historical Society of Queensland  
             University of Queensland, Department of Music  
Townsville   James Cook University of North Queensland  
             Kennedy Musicological Museum

SOUTH AUSTRALIA

Adelaide    Art Gallery of South Australia  
             South Australian Museum, Anthropology and Archaeology Section  
             University of Adelaide, Faculty of Music  
             University of Adelaide, Elder Conservatorium of Music  
Birdwood    Birdwood Mill Museum

TASMANIA

Hobart       Tasmanian Museum and Art Gallery  
Launceston   Queen Victoria Museum and Art Gallery

VICTORIA

Ballarat    Ballarat Fine Art Gallery  
Bendigo     Bendigo Art Gallery  
Castlemaine   Castlemaine Art Gallery and Historical Museum  
Geelong     Geelong Art Gallery  
Melbourne   La Trobe University, Department of Music  
             Ministry for the Arts  
             Monash University, Department of Anthropology  
             Monash University, Department of Music  
             National Gallery of Victoria

National Museum of Victoria  
 National Trust of Australia (Vic.)  
 Science Museum of Victoria  
 University of Melbourne, Faculty of Music  
 University of Melbourne, Grainger Centre and Museum  
 Victorian College for the Arts, School of Music  
 Mildura Mildura Arts Centre

#### WESTERN AUSTRALIA

Perth University of Western Australia, Department of Music  
 Western Australian Art Gallery  
 Western Australian Museum

Sixteen additional questionnaires were forwarded between Septemeber, 1975, and February, 1976. Figure 9 shows the breakdown of all participants.

Institution	Number	Percentage
national and state museums	23	31%
regional museums and art galleries, private collections, individuals	32	43%
universities and conservatoria	19	26%
total	74	100%

figure 9 Total participants receiving questionnaire forwarded by the Department of Music, Monash University

The total number of returns was 70%. What is highly significant about the rate of responses is that all of the national and state museums in the survey responded. The original purpose of the survey was "to discover the quantity and the type of music instruments which are in this country" in "museums at the present time" (Jones, 1975, cover letter). When judged against this original purpose, the response represents a 100% success rate. It also underlines the fundamental importance which museums in Australia attached to this inquiry.

As far as national and state museum collections of music are concerned, it is not possible to make an exact breakdown of material into different areas, either as to countries of origin, or types of instruments. Complete information is not available because it has not been thoroughly checked in the majority of the collections.

An estimate of the numbers of instruments in Australian museums, art galleries, university departments and conservatoria, which is derived from the survey, is given below. These data have been collated from the results of the national survey alone. Because these figures, in most cases, are estimates and not exact, they should be read with a degree of caution. Nevertheless, until more reliable statistics are forthcoming, they are presented as the sole source of information relating to the number of publicly-owned instruments of music in this country.

State	Non-Western	Western	% of total
N.S.W.	650	170	29
Victoria	550	150	24.5
Australian Capital Territory	350	nil	12.1
Queensland	300	40	12
South Australia	260	40	10.5
Western Australia	150	60	7.4
Tasmania	70	10	2.8
Northern Territory	50	nil	1.87
	<u>2,380+</u>	<u>440+</u>	<u>100%</u>

figure 10 Estimated Number of Music Instruments in Public Institutions in Australia, June, 1976

In order to provide a visual image which is more easily comprehended, these estimates may be illustrated in the form of a bar-graph.

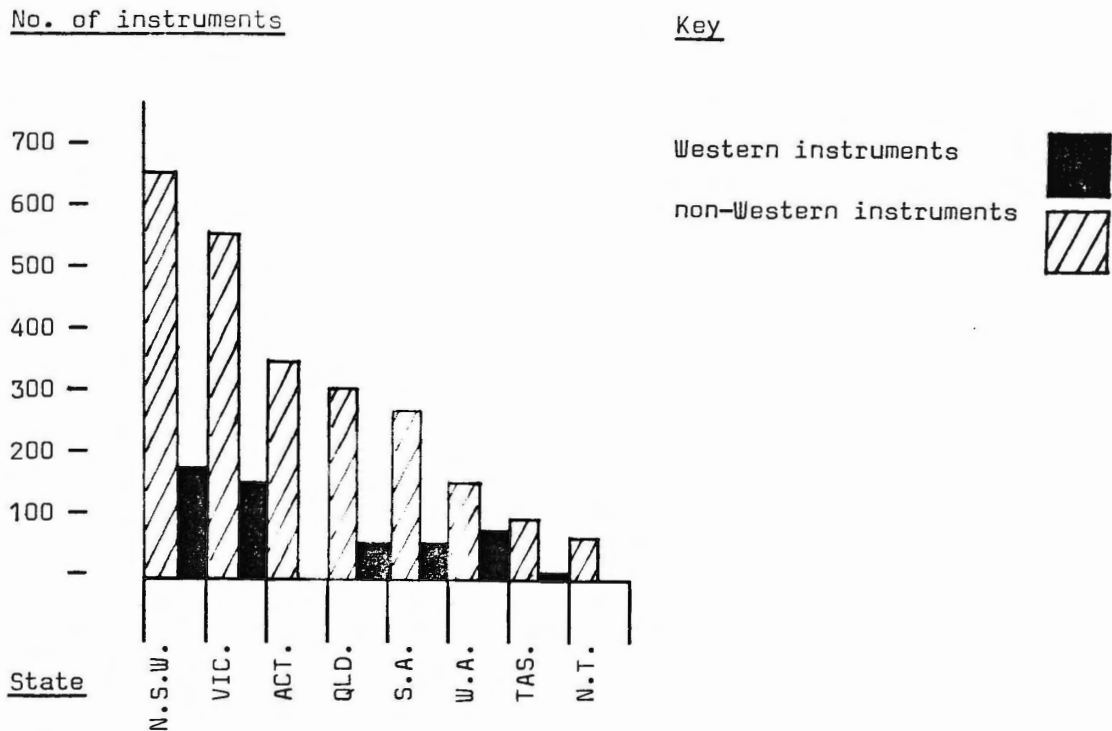


figure 11 Graph of Estimated Number of Music Instruments in Public Institutions in Australia, June, 1976

Further details regarding this national survey may be found in Kalori (Rosier, 1977).



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