CHAPTER I

COLLECTIONS MANAGEMENT IN MUSEUMS

In the context of this research the term collections management refers to certain practices that are peculiar to a museum. Despite changes in the various definitions of a museum and of collections management, past and present, the basic premise of any museum – that it acquires and conserves material evidence (objects) of people and their environment – remained constant throughout the chequered history of museums.

1. WHAT IS A MUSEUM?

According to the ICOM (International Council of Museums)\(^1\) statutes the definition of a museum had changed seven times since 1946, but all the definitions recognize the importance, and indeed the necessity, of a museum having a collection or collections. For example, the 1956 definition specifies groups of objects and specimens of cultural value: artistic, historical, scientific and technological collections. The 1961 definition identifies collections of objects of cultural and scientific significance, while the 1989, 1995 and 2001 definitions mention material evidence of people and their environment.\(^2\)

One of the most recent museum definitions is the one adopted by Museums Australia in March 2002, that a museum is an institution with the following characteristics:

A museum helps people to understand the world by using objects and ideas to interpret the past and present and explore the future. A museum preserves and researches collections, and makes objects and information accessible in actual and virtual environments. Museums are established in the public interest as permanent, not-for-profit organisations that contribute long-term value to communities.\(^3\)

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\(^1\) ICOM is a non-governmental body of UNESCO, the United Nations Educational, Scientific and Cultural Organization, that was formed in 1946 as an agency of the United Nations. It is dedicated to the improvement and advancement of the world’s museums.


\(^3\) M. Birtley, New definition of “museum” from Museums Australia, <mbirtley@DEAKIN.EDU.AU> 15 April 2002.
The latest definition of a museum, according to a draft that was still under discussion in June 2003, is as follows:

A museum is a non-profit permanent institution in service of society, that operates an exhibition place regularly open to the general public. By acquiring, preserving, researching, interpreting and exhibiting tangible and intangible evidence of society and the environment, the museum engages with its visitors, promotes understanding and learning, and offers to all the enjoyment of sharing authentic cultural and/or natural heritage. This definition includes institutions that pursue similar objectives and accomplish most or some of the museum’s functions.4

Although the current debate on the review of the ICOM definition of a museum addresses the issue of the museum’s responsibility to society,5 the collections remain a *sine qua non*. It is clear that on the one hand, these collections and the information accompanying the collections should be made available to the public by means of displays or other methods, such as education programmes and publications. All these services are derived from the objects in the collections, which also provide the means for the curators and other museologists to do their work.6 To ensure the constant availability *ad infinitum* of these objects, they should, on the other hand, be cared for and conserved. The two core functions of a museum, to make available and to maintain, are apparently contradictory. For this reason perhaps, a little less is said in the definitions about the way in which a museum should deal with or manage the collections it has acquired.

2. WHAT IS COLLECTIONS MANAGEMENT?

Although the role of the museum has changed considerably over the last three decades and current museum practices could even be considered obsolete,7 nonetheless the fact remains that a museum cannot be a museum without a collection, and that a museum **with** a collection has the moral and legal obligation to care for the objects within its walls to the best of its ability. In fact the museum holds these collections in trust. Malaro puts this matter

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4 J. McAvity, Executive director, Canadian Museums Association, International Council of Museums Discussion list, <ICOM-L@HOME.EASE.LSOFT.COM>, <jmcavity@MUSEUMS.CA>, 12 June 2003.

5 See, for example, B.L. Murphy, The definition of a museum, *ICOM News*, 57(2), p. 3.


very succinctly: “A museum has the responsibility to provide reasonable care for the objects entrusted to it”.

This issue is clearly defined according to the definition of the American Association of Museums (AAM) for the purpose of the accreditation programme, namely that a museum should also care for the objects it owns and utilizes. Care in this case is defined as “the keeping of adequate records pertaining to the provenance, identification, and location of a museum’s holdings and the application of current professionally accepted methods to their security and to the minimizing of damage and deterioration”. Systematic care is defined as “thorough documentation, good and permanent records (registration and cataloguing), eternal preservation and security, organized filing of objects (storage) that is logical and accessible”. This, in short, is what collections management is all about.

There are as many definitions of collections management as there are of museums. Indeed, it may be regarded as a topic so broad that it presents some of the most daunting of all museum challenges. Because of its wide scope, collections management has been referred to as a blanket term that applies to the physical care and documentation of collections.

It has already been established that collections are the heart, the raison de’ être, the characteristic attribute of a museum. Collections management has to do with the model or manner in which a museum organizes its collections. Lord and Lord say that:

Their management are at the heart of any museum’s operations. Adding to them judiciously is the most fruitful way in which a museum can grow. Documenting them fully and caring for them as well is, in the long run, the fundamental criterion of a well-managed museum, since the ability of the museum to provide meaningful experiences for the public today and in the future depends on its care for its collections and the information about them.

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8 M.C. Malaro, *A legal primer on managing museum collections*, p. 269, my bold.


10 Ibid., p. 3.


The objective of collections management, according to Fahy, is the protection of the collections and their associated information against degradation, theft and destruction. It also involves permitting physical and intellectual access to the objects.\(^{14}\) Roberts says that the phrase “collections management” has become fashionable as museums attempt to clarify their function and pay special attention to the effective care of the collections in their charge. He defines collections management as the overall process of maintaining the collection,\(^{15}\) encompassing

the policies and procedures concerned with the accessioning, control, cataloguing, use and disposal of enquiries, acquisitions and loans while in the care of the museum or at an outside agency, together with related issues such as exhibition management and object transportation.\(^{16}\)

Roberts’ definition of collections management may be regarded as synonymous with the term museum documentation, because documentation includes the accessioning and cataloguing of the collections, information on the movement of objects, as well as loans and conservation. It also assists with the control and location/storage of objects and with auditing, insurance, the development of exhibitions, and curatorial research and publications. The process is referred to either as a museum documentation system, an information handling system or a collections management system.\(^{17}\) Such a system, that provides access to detailed information about the collection, is not only indispensable to the smooth maintenance of the entire collection, but also corresponds with the ways in which the museum operates. It should, maintains Light, be totally integrated with the working practice of a museum, and must back up the museum activities that affect its collections.\(^{18}\)


\(^{16}\) D.A. Roberts, Collections management for museums, in D.A. Roberts (ed.), *Collections management for museums*, p. 1.


\(^{18}\) R. Light, The scope and design of collections management systems, in D.A. Roberts (ed.), *Collections management for museums*, p. 53.
Although such a system may be manual, Sledge maintained that since the 1970s, collections management systems have usually been associated with the use of computers. In earlier days collections management was viewed as automated audit control of museum collections by means of an inventory.\(^\text{19}\)

It must be remembered that collections management should not only involve inventory control and information access on the objects themselves, but must also include idea management and intellectual access — “the data itself is an ‘object’.”\(^\text{20}\) In other words, more than the object itself should be preserved. According to Loy collections management is not simply a more modern phrase to replace the venerable term “curation”. He asserts that it is the embodiment of a strategy to provide access to and control of the entirety of the collection and its attendant data.\(^\text{21}\) Whether the practice of collections management is regarded as a new management style or a strategy, it either way drew attention anew to collections and the way in which they were maintained since the very beginnings of museums. In many cases the old methods were found to have serious flaws.

Legally the museum has certain obligations as regards the collections under its care. Malaro points out that museums have a legal responsibility to establish guidelines for collecting objects, disposing of and caring for them in the collection and also to oversee generally the welfare of museum assets.\(^\text{22}\) Thus collections management is much more than just a commitment towards its collections for the sake of the museum; in a legal sense it is a mandatory practice that museums could and should uphold. The fact that a museum is legally accountable for the collections in its care, can be regarded as the single most important incentive for the development of collections management.

Roberts does not regard the museum functions of security, environmental control,
conservation and research as part of collections management. Others hold the opinion, however, that adequate housing and conditions are essential for the collections and that no significant undertaking to improve the documentation should be done unless this is available. According to the definition used by the Heritage Collections Council of Australia collections management includes handling, storage and conservation. In the context of this research thesis, research and conservation have been accepted as an integral part of collections management.

Without collections management, collections would be diffuse and unmanageable; they would be of very little use to the museum itself or to the public. There are many benefits of collections management: probably the most important of these is that museums can now account for their collections and information can be found readily and efficiently.

3. THE HISTORY OF COLLECTIONS MANAGEMENT

Keeping records of the museum’s collections is, according to Mann, second only to the physical collection, which is the museum’s primary concern. As collections have always formed an irreplaceable part of a museum, the management of collections is not new, despite the fact that the term has not always been used. All museums have had to find means of controlling and taking care of the objects in their collections.

History

Probably the earliest form of control was the memory of the curator. While the collection was small, this was sufficient, but as the number of objects in the collection grew, written records became increasingly necessary. An elementary, and of course manual system of record keeping or documentation then came into use, such as a register, catalogue or

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25 N a, reCollections Caring for collections across Australia, Glossary, p. 9.
26 V. Mann, From clay tablet to hard disc, in M. Case (ed.), Registrars on record, p. 6.
28 See glossary.
ledger that provided a list of the objects or group of objects in a collection or museum. Often these volumes are still the primary sources of information on the collections. These record books were arranged in numerical order, making access to categories of information other than the acquisition or accession number virtually impossible. As Liversidge puts it:

Having a catalogue of what one possesses has one function only in the present old fashioned sense, and this is it records what comes into the Museum, when and from where ... It is not possible to tell from these catalogues if the object is still in the Museum, where in the Museum, what state it is in. Nor is it possible to select out particular objects from such catalogues without going through thousands of entries.29

Sarasan is of the opinion that the basic system of museum documentation such as files and ledgers, functioned adequately because they were supported by a strong framework of oral tradition. In other words the knowledge and memory of the staff who had worked in a museum for many years constituted a considerable wealth of unrecorded history about the museum objects.30

The control of the collections went hand in hand with attempts to classify and catalogue them.31 In 1853 for example, an idea accredited to a German, Hans von Aufsess, was incorporated into the act constituting the German National Museum in Nuremberg. He was of the opinion that descriptions of documents and objects had to be systemized scientifically and should index the information under headings such as name, place, subject and source in a “Generalrepertorium”.32 Apart from the accessions catalogue or register, museums sometimes also made use of an index (often also called a catalogue or a card catalogue) so that a variety of information access points could be retrieved.

Another form of documentation was also called a catalogue. It was usually printed and was a guide or booklet which listed, described and illustrated objects in a collection or on display. Although some scholarly catalogues were produced, many were inexpertly prepared.33

29 R. Liversidge, Museum cataloguing and a national system, SAMAB 8(14), September 1967, p. 451.
31 V. Mann, From clay tablet to hard disc, in M. Case (ed.), Registrars on record, p. 5.
33 Ibid., p. 32.
Lists of accessions were sometimes also published in local newspapers, for example, lists of donations made to the Staatsmuseum in Pretoria\textsuperscript{34} and also in annual reports, such as the list of the principal accessions to the South African Museum during the year 1881.\textsuperscript{35} The minute book of a museum could even serve as a catalogue. In the case of the National Museum in Bloemfontein, established in 1877, several donations were entered into the minute book, for example, “August 20: Received from Mr Orpen a copy of a Bushman painting”.\textsuperscript{36}

This basic pattern of record keeping was followed in many museums in the United Kingdom, notably the British Museum. When the British Museum opened in 1759 there were already 80 000 objects from the collections of Sir Hans Sloane and the Cotton and Harley libraries.\textsuperscript{37} Records of acquisitions had begun in 1756 in bound ledgers known as The Book of Presents. From 1836 onwards bound acquisitions registers were used, where donations and purchases were recorded.\textsuperscript{38} Although these records are still important, their very longevity, says Roberts, presents the museum staff with serious problems in managing the collections.\textsuperscript{39}

McCutcheon is of the opinion that although the British Museum had recognized the importance of comprehensive documentation of its collections, the various systems placed the emphasis on the registration of acquisitions and similar fundamental tasks, to the detriment of the development of systems for the organization, classification and retrieval of information.\textsuperscript{40} The fact that the documentation was done in the various departments led to

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\begin{itemize}
\item \textsuperscript{34} Staatsmuseum, Acquisitions entry register, vol. 1, December 1893 - 1897. See also, for example, \textit{De Volksstem}, 10 December 1898.
\item \textsuperscript{35} Cape of Good Hope, report of the trustees of the South-African Museum for the year 1881, pp. 8 - 24.
\item \textsuperscript{36} A.C. Hoffman, Interesting aspects about the early history of the National Museum in Bloemfontein, \textit{SAMAB}, 6(13), March 1958, p. 334.
\item \textsuperscript{37} D. McCutcheon, The British Museum, in R.B. Light, D.A. Roberts and J.D. Stewart (eds), \textit{Museum documentation systems: developments and applications}, p. 131.
\item \textsuperscript{38} D.A. Roberts and R.B. Light, The cooperative development of documentation in United Kingdom Museums, in R.B. Light, D.A. Roberts and J.D. Stewart (eds), \textit{Museum documentation systems: developments and applications}, p. 114.
\item \textsuperscript{39} D.A. Roberts, Collections management systems and practice in United Kingdom Museums, in D.A. Roberts (ed.), \textit{Collections management for museums}, p. 32.
\item \textsuperscript{40} D. McCutcheon, The British Museum, in R.B. Light, D.A. Roberts and J.D. Stewart (eds), \textit{Museum documentation systems: developments and applications}, p. 131.
\end{itemize}
disparate procedures and great variation in the availability of information. For example, in the ethnography department over 60 different registration numbering systems were used over the years.\textsuperscript{41}

Record keeping in the Smithsonian Institution, Washington DC, pre-dates the establishment of that Institution in 1846. Until 1976 the Smithsonian continued to use the record system of the National Institute that was established in 1818. One of the earliest incumbents of the registrar’s post at the Smithsonian was Stephen C. Brown in 1880, but the post was abolished with his death in 1919. The records then became the responsibility of the Division of Correspondence and Documents, but in 1956 a Central Office of the Registrar was again established. Most of the activities connected with collections management, however, were conducted at curatorial level, including the development of standards and systems. Objects became separated from their records when collections were moved, with the result that centralized access was impossible.\textsuperscript{42} There was no attempt to inventorize the objects or to take stock of the collections at the Smithsonian Institution prior to 1977.\textsuperscript{43}

The status of the museum profession increased considerably after the Second World War (1939 - 1945). There was also a growing awareness that the professional handling and management of collections would lead to an improvement in the way in which museums could account for their collections. The stocktaking of the museum collections was regarded as important from as early as 1888 when the British Treasury issued a Minute on the need for a regular store audit.\textsuperscript{44} This was followed by an investigation in 1912,\textsuperscript{45} but nothing was done about this because of the intervention of the First World War (1914 - 1918). By the middle of the twentieth century, museums in the United Kingdom and indeed worldwide had serious difficulties in accounting for each object in the collection. This was true both in the physical sense and in terms of the museum records.

\textsuperscript{41} Ibid., pp. 131 - 132.


\textsuperscript{43} D.A. Roberts, Planning the documentation of museum collections, pp. 15 and 512.

\textsuperscript{44} D.A. Roberts and R.B. Light, The cooperative development of documentation in United Kingdom Museums, in R.B. Light, D.A. Roberts and J.D. Stewart (eds), Museum documentation systems: developments and applications, p. 114.

\textsuperscript{45} D.A. Roberts, Collections management systems and practice in United Kingdom Museums, in D.A. Roberts (ed.), Collections management for museums, p. 32.
Not only did the number of museums increase, but their holdings grew to such an extent that records became inadequate and unreliable, particularly so for museum functions that are dependent on the collections, such as research, education and presentation. In many of the museums their records dated back a hundred or more years and were outdated and inadequate. Roberts maintains that these early records are usually less detailed, less reliable and less well maintained than the museum would wish. He claims that for many collections, there is possibly only one set of fading manuscript records and that any indexes prepared from these records may well be incomplete, badly maintained and little used. Then too, the records may not have been annotated in the event of a loss, disposal or transfer of an item from the permanent collection. Location details may also be cursory or out-of-date.46

Old museum practices and manual documentation systems could no longer exert maximum control over the collections, even if the collections in a museum were regarded as one of its major assets. Accountability became the most important incentive for the development of modern collections management practices. As Fahy puts it, accountability has become the watchword of museums.47

In the United States of America museums hold collections in trust for the nation, but in the 1960s confidence in the American museums was shaken when they became involved in court cases such as the case of Lefkowitz v. The Museum for the American Indian: Heye Foundation. The Attorney-General listed a number of charges of questionable accession and deaccession practices and a failure to keep adequate records.48

The importance of the legal aspects of collections management was recognized. Court cases like above and auditors’ reports led to surveys and reviews of collections management procedures in many museums in the United States and the United Kingdom. The concept of museum accreditation also contributed to the acceleration of sound collections

46 D.A. Roberts, Planning of documentation of museum collections, p. 17.
management practices. Many museums failed to receive accreditation since they could not comply with the minimum standards.\textsuperscript{49}

A survey conducted in 1966 at the National Museum of American History noted “inconsistent content and format within files, proliferation of numbering systems and card formats, and the lack of a central index to collections of the Museum”.\textsuperscript{50} The result was that sound collections management became a priority. According to a series of reports on American museums during the 1980s, most museums needed substantial reorganization.\textsuperscript{51}

An example of a feasibility study carried out in the United Kingdom is that on the St Albans Museum Service in 1973. This study emphasised the insufficiency of collection documentation. The documentation at the time comprised an inadequate and out-of-date accessions register for a small proportion of the City Museum collection as well as two incomplete card indexes that were produced in the 1930's and an ineffective registration procedure.\textsuperscript{52}

Several events precipitated the importance of collections management: in 1973 the influential Wright Report on British provincial museums recognized that effective collections management was dependent on the availability of accurate information about the collections in a museum.\textsuperscript{53} The Report was followed by investigations by the Public Accounts Committee and District Audit Services, that highlighted the shortcomings of the cataloguing and information retrieval systems.\textsuperscript{54} These initiatives were the result of an increasing awareness that cataloguing and information retrieval in museums should be more effective;  

\begin{itemize}
\item \textsuperscript{49} D.B. Reibel, The registrar as human resource manager, in M. Case (ed.), Registrars on record, p. 36.
\item \textsuperscript{50} K.P. Spiess, Collections management policy and procedure initiatives at the Smithsonian Institution National Museum of American History, in D.A. Roberts (ed.), Collections management for museums, p. 135.
\item \textsuperscript{51} D.A. Roberts, Collections management for museums, in D.A. Roberts (ed.), Collections management for museums, p. 1.
\item \textsuperscript{52} S.M. Stone, Collection records at St Albans Museums, in R.B. Light, D.A. Robert and J.D. Stewart (eds), Museum documentation systems, developments and applications, p. 190.
\item \textsuperscript{53} D.A. Roberts, Collections management systems and practice in United Kingdom museums, in D.A. Roberts (ed.), Collections management for museums, p. 33.; D.A. Roberts and R.B. Light, The cooperative development of documentation in United Kingdom museums, in R.B. Light, D.A. Roberts and J.D. Stewart (eds), Museum documentation systems, developments and applications, p. 117.
\item \textsuperscript{54} A. Fletcher, Computerizing records from Leicestershire’s Museums, in R.B. Light, D.A. Roberts and J.D. Stewart (eds), Museum documentation systems, developments and applications, p. 182.
\end{itemize}
in essence museums had to be more accountable for the collections in their care. Ways and means had to be devised to demonstrate to both the government and the public that collections could be managed effectively. Practical management objectives, such as those set by the Department of Education and Science, include the accession and registration of objects, the routine verification that they are safely stored to prevent or detect their loss, the monitoring of their condition and their efficient and detailed cataloguing.\textsuperscript{55} According to Roberts, however, the wide recognition of the significance of collections management only really came into focus in the late 1970s.\textsuperscript{56}

Despite this positive step forward, surveys and reports published as late as 1988, 1989 and 1992 express concern about the standard of inventory control and storage in some national and non-national museums in the United Kingdom.\textsuperscript{57} This creates the impression that these museums could neither account for their collections nor care properly for them.\textsuperscript{58} As a result, various initiatives were set up to improve the quality of collections management practices, such as the National Registration Scheme and the UK Museum Documentation Standard. The surveys also led to the awarding of special government grants for collections audits and inventories. A number of books on collections management have also been published.\textsuperscript{59}

**The use of computers**

From the 1960s computer technological developments grew apace and was seen as answer to collections management problems. Virginia Mann makes the point:

> ... manual record keeping is on the way out. After a long and venerable history extending back to antiquity, the practice of using a sharp instrument on a flat surface - a pointed stick and a clay tablet, a pencil and paper - is receding into oblivion.\textsuperscript{60}

\textsuperscript{55} Ibid., and D.A. Roberts, Collections management for museums, in D.A., *Collections management for museums*, pp. 1 - 2.

\textsuperscript{56} D.A. Roberts, Collections management systems and practice in United Kingdom museums, in D.A. Roberts (ed.), *Collections management for museums*, p. 33.

\textsuperscript{57} See A. Fahy, Introduction, in A. Fahy (Ed.), *Collections management*, pp. 2 - 3 and 8.

\textsuperscript{58} Ibid., p. 3.

\textsuperscript{59} Ibid., pp. 3 - 5.

\textsuperscript{60} V. Mann, The binary ball game, in M. Case (ed.), *Registrars on record*, p. 179.
She also asserts that museums are changing from traditional record keeping systems to electronic ones.\footnote{Ibid., pp. 183 - 184.}

In the United States an Automatic Data Processing Committee was established at the National Museum of Natural History of the Smithsonian Institution in 1963; an early computer project was launched at the University of Oklahoma in 1965,\footnote{L. Sarasan, Why museum computer projects fail, in A. Fahy (ed.), \textit{Collection management}, p. 188.} followed by the Museum Computer Network in 1967.\footnote{D. Vance, The museum computer network in context in R.B. Light, D.A. Roberts and J.D. Stewart eds), \textit{Museum documentation systems: developments and applications}, p. 37.} Despite the fact that great deal of hard work was put into computerization – hundreds of computer projects were set up in United States museums – by the late 1970s many problems linked to computerized data were still not solved, probably because, writes Sarasan, “museums rush into computerization with a \textit{naiveté} that is startling!”\footnote{L. Sarasan, Why museum computer projects fail, in A. Fahy (ed.), \textit{Collections management}, p. 196.}

The National Inventory Programme used by the Canadian museums was widely regarded as one of the most innovative museum documentation schemes in the world.\footnote{J.Sledge and B. Comstock, The Canadian heritage information network, in R.B. Light, D.A. Roberts and J.D. Stewart (eds), \textit{Museum documentation systems: developments and applications}, p. 7.} It was devised in 1972 with the directive to create a databank to include all the public museum collections in Canada. As major changes were made, it was renamed the Canadian Heritage Information Network (CHIN) to meet the computer demands of the day-to-day management of collections in museums.\footnote{Ibid., p. 8.}

In the United States the National Museum of Natural History at the Smithsonian Institution used automated methods for collections management from the early 1960s.\footnote{T.G. Gautier, National Museum of Natural History, Smithsonian Institution, in R.B. Light, D.A. Roberts and J.D. Stewart (eds), \textit{Museum documentation systems, developments and applications}, p. 48.} But it is also noteworthy that a four-year pilot programme for the computerization of the records of the registrar at the Metropolitan Museum of Art was abandoned after four years as a result of the lack of funds. However, the fact that the manual system was regarded as effective for
over three-quarters of a century, also contributed to that decision.\textsuperscript{68} The numbering system, established in 1906 at that Museum, was still used in 1986.\textsuperscript{69}

In the United Kingdom semi-mechanized and mechanized systems set up in major museums were eventually followed by the establishment of the Information Retrieval Groups of the Museums Association (IRMGA), and then the new Museum Documentation Association (MDA) in 1977.\textsuperscript{70} Many museums, both national and non-national, became aware of the necessity of implementing sound collections management procedures, particularly in reaction to the increased pressure for accountability. As automated facilities became available, retrospective programmes for inventorizing or re-cataloguing led to higher standards of documentation and improved utilization of collections.\textsuperscript{71} On the international front the International Committee for Documentation of ICOM (ICOM-CIDOC) was established.

The perception that the computerization of existing museum records would immediately solve all collections management problems proved to be naïve and was a common mistake made with many of the computer projects that were launched.\textsuperscript{72} The reality is that the computer is no more than a tool to be used by museum personnel to carry out collections management procedures; it is a new management style that has become the responsibility of all staff members.\textsuperscript{73} Efficient collections management can only be accomplished by the effort and commitment of the people in the museum, with or without computers.

\begin{itemize}
\item \textsuperscript{68} J. Buchanan, Documentation and control of collections at the Metropolitan Museum of Art, in R.B. Light, D.A. Roberts and J.D. Stewart (eds), \textit{Museum documentation systems, developments and applications}, pp. 63 - 64.
\item \textsuperscript{69} Ibid., pp. 56 - 57. Only one slight change was made in the system because the Museum was founded in 1870 when the first accessions occurred. After 1969, of course, a change in the system had to be made and the first accession in 1970 was numbered 1970.1.
\item \textsuperscript{70} D.A. Roberts and R.B. Light, The cooperative development of documentation in United Kingdom Museums, in R.B. Light, D.A. Roberts and J.D. Stewart (eds), \textit{Museum documentation systems: developments and applications}, pp. 114 - 118.
\item \textsuperscript{71} Ibid., p. 126.
\item \textsuperscript{73} Ibid., pp. 10 and 17.
\end{itemize}
Some curators did indeed find it difficult to adapt to the new computer technology, or even to set documentation standards, but others recognized the advantages of replacing manual systems with computerized ones. The use of a new documentation system did not only have the advantage of updating information about a museum’s collections; it also led to the reorganization of stores and even in some cases, to improved conservation measures.\textsuperscript{[74]}

There are instances where re-cataloguing a collection resulted in the retrieval of a body of information on the objects dating as far back as the nineteenth century or the establishment of the museum. At the Hunterian Museum for example, it was ascertained that the ethnography collection included a much higher proportion of historically valuable material than was previously realized.\textsuperscript{[75]} Loy says that the prime importance of computerization is the new ability to track, document and control collections management processes such as accessioning, loans, valuations and conservation treatment.\textsuperscript{[76]} Despite the depressing weight of evidence of the sheer scale of undone work that has been inherited from previous generations, it is encouraging that so many museums were involved in positive planning and change during the 1980s.\textsuperscript{[77]}

\textbf{The necessity of a collections management policy}

One of the most important factors in the successful implementation of collections management in a museum is the presence of a collections management policy. Such a policy should be the starting point and an integral part of the formulation of a system of collections management.

A museum needs a collections management policy for making meaningful decisions because indiscriminate or indifferent collecting “may result in the accumulation of a much too diversified and fruitless miscellany of objects …[and] may cause it [the museum] to become an overcrowded repository for miscellaneous discarded materials, a sort of community

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\item \textsuperscript{[74]} See for example S.M. Stone, Collecting recording at St Albans, in R.B. Light, D.A. Roberts and J.D. Stewart (eds), \textit{Museum documentation systems, developments and applications}, p. 194.
\item \textsuperscript{[75]} F. Willett, The Hunterian Museum and Art Gallery, University of Glasgow, in R.B. Light, D.A. Roberts and J.D. Stewart (eds), \textit{Museum documentation systems, developments and applications}, p. 212.
\item \textsuperscript{[76]} T. Loy, Collections computerization at the British Columbia Provincial Museum, in R.B. Light, D.A. Roberts and J.D. Stewart (eds), \textit{Museum documentation systems: developments and applications}, p. 22.
\item \textsuperscript{[77]} D.A. Roberts, Collections management systems and practice in United Kingdom museums, in D.A. Roberts (ed.), \textit{Collections management for museums}, p. 38.
\end{itemize}
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A collections management policy enables museums to manage collections methodically. Reibel is of the opinion that the system used for accessioning embraces the collections management policy of the museum. A collections management policy is defined by the AAM as

a comprehensive written statement articulating the purpose of the museum, and how this purpose is pursued through the museum’s collection goals, activities and methods. A strong collections management policy introduces consistency into day-to-day handling of an institution’s collections.

Although there is a number of guidelines for the formulation of an efficient collections management policy, the following precepts should be covered:

- statement of purpose or vision and mission of museum
- commitment to maintaining and caring for collections held by museum (conservation and preservation)
- scope, range and limits of a collection, such as dates, geographical range and materials, i.e. what the museum intends to collect
- criteria for inclusion with regard to authenticity, quality, significance and provenance
- accession or acquisition methods
- clear title to, and ownership of collections and objects in collections, and conformance with the legal rights of the museum
- ethical commitments
- purpose for which objects may be collected, e.g. study or display
- deaccessioning or disposal of objects
- loans
- evaluations or appraisals
- documentation of the collection, including entry records, registers and inventories
- marking of objects
- insurance cover for objects
- access, both physical and intellectual, to the objects
- reproduction and copyright

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By 1988 Roberts could maintain that although the pace and degree of change varies from country to country, the impact of the development and implementation of collections management policies, procedures and systems is becoming apparent throughout the world.\(^\text{81}\) The 1990s were characterized by the widespread availability of IT systems with the emphasis on effective collections management and the use of standards.\(^\text{82}\)

A collections management policy deals with the objects in a museum, but in practice such a policy directs the actions or behaviour of staff members who deal with those objects. And indeed, the successful formulation of such a policy is also dependent on the guidance, input and expertise of those staff members.

**Staff**

During the 1970's there were few staff members in the United Kingdom who could claim to be specialists in museum documentation. Many of those who were working in museums had moved from libraries or information science backgrounds, and of the staff responsible for documentation most were curators.\(^\text{83}\) In North America a museologist who specializes in collections management is called a registrar. A registrar in the museum field is described as an individual with broad responsibilities in the development and enforcement of policies and procedures pertaining to the acquisition, management and disposition of collections. Records pertaining to the objects for which the institution has assumed responsibility are maintained by the registrar. Usually the registrar also handles arrangements for accessions, loans, packing, shipping, storage, customs and insurance as it relates to museum material.\(^\text{84}\)

The primary concerns of registrars, according to the code of ethics, are creating and maintaining accurate records on objects, including the documents that provide legal protection for the museum and ensuring the safety of and control over objects.\(^\text{85}\) All these

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\(^{83}\) Ibid., p. 15.


\(^{85}\) Ibid.
are elements of collections management. Jack Foss agrees, saying that the registrar is a generalist who is more broadly and intimately involved with collections management and museum operations than other staff professionals. The emphasis on accountability is the one aspect that has accelerated the appointment of registrars in American museums. In the 1980s there was a gradual appointment of documentation specialists in the United Kingdom, usually from a curatorial background.

4. THE HISTORY OF COLLECTIONS MANAGEMENT IN SOUTH AFRICA, WITH THE EMPHASIS ON ANTHROPOLOGICAL, ARCHAEOLOGICAL AND HISTORICAL COLLECTIONS

History
Eight museums were established in South Africa in the second half of the nineteenth century. In the period after the Anglo Boer War (1899 - 1902) and unification (1910) new museums developed slowly. By 1941 there were five national, five provincial and two municipal museums of natural history, seven art galleries and eight history museums. In Pretoria the Transvaal Museum was regarded as a natural history museum, and the Kruger House as a history museum, but the Old Museum in Boom Street (the history section of the Transvaal Museum) was not even worth a mention according to a so-called statistical enquiry on museums in South Africa.

Matters of importance to the museum community in the 1930s included the care and restoration of works of art, display methods and the arrangement of objects for display. Display cases for exhibitions in museums and for school services were also of concern, as were display labels, the preservation of natural history specimens, the eradication of...
museum pests and collecting expeditions. Technical matters, like taxidermy, the sealing of jars and plaster casts, and the production of scientific publications were also emphasized.  

Figure 1

Sir Henry Miers (left) and S.F. Markham, President and Secretary of the British Museums Association respectively, who undertook the first museum survey in South Africa in 1932

\[\text{(C.K. Brain and M.C. Erasmus, The making of the museum professions in Southern Africa, p. 3)}\]

The first survey of museums in South Africa was undertaken in 1932 by Sir Henry Miers and S.F. Markham (figure 1) at the invitation of the Carnegie Corporation of New York, which met all the expenses. It was carried out on behalf of the British Museums Association, of which Miers was the President. In November 1931 Markham explained the dual aim of their proposed visit to South Africa to the High Commissioner for the Union of South Africa: the compilation of a survey on museums and the compilation of a directory for the Carnegie Corporation in New York. In South Africa the Secretary for the Interior, under which some museums resorted, and museum directors were also contacted.  

On 5 February 1932 Miers and Markham left England for Cape Town, where they started their investigation. They also visited Kimberley, Port Elizabeth, Grahamstown, East London, Durban, Johannesburg and Pretoria. Their brief was to make a study of the principal

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90 The first issue of SAMAB, the South African Museums Association Bulletin, was published in September 1936. The bulletin reflects matters of interest to South African museums.

91 C.K. Brain and M.C. Erasmus, The making of the museum professions in Southern Africa, p. 3.
museums in the British Empire in Africa, primarily in the Union of South Africa, Southern Rhodesia, Kenya, Zanzibar and the Sudan.\footnote{92}{H.A. Miers and S.F. Markham, \textit{A report on museums and galleries of British Africa}, p. ix.}

As points of reference for this investigation the geographical range, political diversity and in particular the population distribution were used. According to the two researchers the overwhelming majority of the population in the British territories was “illiterate negro or other indigenous races”, but the Union of South Africa was seen as the outstanding white area.\footnote{93}{Ibid., p. viii.} In their opinion museums were only likely to thrive where there was a large white or other literate population. The report claimed that in South Africa every centre with a white population of over 10 000, except those in the Witwatersrand area, had a public museum or art gallery.\footnote{94}{Ibid., p. 3.}

As far as the Union of South Africa was concerned, the study reported broadly on the administration of museums (whether they were subsidized by the government, provincial or local authority or any other source), and the lack of sufficient finances. Other issues that received attention included staff matters, museum buildings and equipment, displays and exhibits. Collections, taxidermy, museum pests, educational activities, expeditions, research and publications, and cooperation between museums were also mentioned. The report summarized the most important requirements for museums in South Africa as greater financial security, some form of co-operation between museums and the development of education work.\footnote{95}{Ibid., p. 44.} It did not report on current documentation procedures such as accessioning or cataloguing, nor did it call for improvements on these matters. However, it was suggested that funds be made available for the preparation and publication of a textbook dealing with curatorial problems in the sub-tropics.\footnote{96}{Ibid.}

At the inaugural meeting of the South African Museums Association (SAMA) held in Kimberley on 23 April 1936, various matters of importance were mentioned. These included art conservation, international loans, exchange of duplicates, study collections and research
activities. In addition methods of attracting the public to museums, co-operation with education authorities and the appointment of a taxidermist of the highest rank – issues listed in the Miers and Markham report – were mentioned by E.C. Chubb, the curator of the Durban Museum and Art Gallery, in his inaugural speech. He made no reference to the documentation and maintenance of collections.\textsuperscript{97}

The Miers report was raised at the first annual meeting of SAMA. Matters which were regarded as important for discussion included the need for the improvement of taxidermy, the dissemination of information on the control of insect pests, the establishment of an agricultural museum and the creation of museums in national parks. It was also suggested that museum staff might well benefit from visits to overseas museums.\textsuperscript{98}

In 1938 E.M. Shaw of the South African Museum, Cape Town, visited ethnographical museums, collections and exhibitions in Europe. She was very impressed by two aspects of modern collections management that she saw, namely cataloguing and in particular the storage system at the Royal Museum for Central Africa (the Congo Museum), Tervuren, Belgium.\textsuperscript{99} She describes these as follows:

But nothing surpassed the first storage system that I saw, at the Congo Museum, Tervueren. I cannot imagine a greater degree of efficiency; and its documentation is equally efficient, it must surely be the model of what an ethnographic department should be. Small and medium-sized specimens are stored in cupboards. The smallest of all – ornaments, pipes, etc. – are in drawers with glass lids. They are fastened on to a backing, and beside each is a label with the number of each object, the name of the tribe, and district from which it comes. All the cupboards and drawers are numbered; and on the backs of the doors of the cupboards is a series of numbered photographs, one of each drawer, so that the contents of each can be seen at a glance. Medium sized objects are in rows on shelves. Again on the back of the doors are charts which show, by the number of each object written in a circle, its position in the cupboard. The same system is followed in the basement ... If a specimen is removed for any purpose, a slip of paper with

\begin{itemize}
  \item \textsuperscript{97} E.C. Chubb, The advantages of forming a South African Museums Association, \textit{SAMAB}, 1(1), September 1936, pp. 2 - 5.
  \item \textsuperscript{98} Sir Henry Miers’ and S.F. Markham’s report, \textit{SAMAB} 1(4), June 1937, pp. 85 - 87.
  \item \textsuperscript{99} The Royal Museum for Central Africa was founded in 1897 - 1898 by King Leopold II, who wished to make the Congo better known in Belgium. He also hoped to promote trade between his country and Africa. The Museum is known for its scientific collections. G. Verswijver, Hidden treasures of the Tervuren Museum, \textit{African Arts}, Summer 1995, pp. 22 - 23. As early as 1912 the director of the Transvaal Museum regarded the Royal Museum as a model museum.
\end{itemize}
particulars is put in its place.100

On cataloguing, Shaw writes that the continental museums had sound card-index systems and general registers for the objects; the cards in triplicate were classified according to group, geographical position and type of object.101

Shaw strongly advocated that cataloguing be improved, in particular with regard to ethnographic material. She was of the opinion that the most satisfactory method of cataloguing is to compile a card catalogue, so that each object has its own card in addition to its entry into the register.102 She proposed that various categories of information be given on the cards, such as the name of the museum, the registered number of the object, the community, group and cultural division from which it comes, name of the object, how and when it was obtained and its storage/display in the museum. Shaw’s original system was modified and a list of object terminology added.103 She popularized it throughout the country, because she was of the opinion that a uniform system would enable museums to build up an accurate picture of indigenous South African material culture.104

A few years later Chubb raised the matter of documentation when he was president of SAMA. He saw the registering of accessions and the cataloguing of collections as important and he invited conferees to discuss their methods at the annual general meeting of the Association in Bloemfontein in May 1944. The documentation practices at the Durban Museum, the Transvaal Museum, the Johannesburg Art Gallery, the Africana Museum and other institutions were raised for brief discussion.105

In the 1940's the Africana Museum in Johannesburg, established in 1934, took the lead in

100 E.M. Shaw, Impressions of recent visit to ethnographical museums in Europe, SAMAB, 1(12), June 1939, pp. 303 - 304.
101 Ibid. p. 304.
102 E.M. Shaw, A system of cataloguing ethnographic material, SAMAB, 2(5), September 1940, p. 118.
104 Ibid., p. 1.
105 Proceedings of the eighth annual general meeting of the South African Museums Association, SAMAB, 3(6), June 1944, pp. 176 - 177.
early collections management practices for history museums. The Africana Museum’s aim was to relate South Africa’s history and cultural development, using a variety of pictures, engravings, miniatures, photographs, coins, medals, documents, books, maps and personal or historic relics.\textsuperscript{106} The Museum supplied information on important events, individuals, manners and customs.\textsuperscript{107} It regarded the documentation of objects as important as their preservation.\textsuperscript{108} The term “recording”, as used by the Africana Museum, meant more than a catalogue entry; it was also “an exact description, accompanied by a photograph, carefully classified, and with those invaluable added notes, drawn from books, verbal information and other sources, without which a specimen is often meaningless”.\textsuperscript{109} The establishment of the Africana Museum was fraught with difficulties. This was particularly so in the documentation and classification of historical collections. Oliver asserts that there were “no neat ready-to-hand scientific classifications and check-lists of objects.”\textsuperscript{110} In addition, there was also a lack of standardised methods and descriptive terminology.\textsuperscript{111} The system eventually adopted by the Africana Museum was based on the Dewey decimal system, that was used by libraries in South Africa.\textsuperscript{112} A national catalogue of all Africana on South Africa was also envisaged.\textsuperscript{113} The standardization of archaeological terminology was raised at the third annual general meeting of SAMA on 10 April 1939.\textsuperscript{114} This was important to museum workers in the systematic arrangement of their collections of stone implements and other human artifacts.\textsuperscript{115}

\begin{flushleft}
\textsuperscript{107} Ibid., p. 14.
\textsuperscript{108} H.G. Oliver, The importance of preserving and recording Africana, \textit{SAMAB}, 2 (10), September 1941, p. 242.
\textsuperscript{109} Ibid.
\textsuperscript{110} Ibid., p. 242.
\textsuperscript{111} Ibid., p. 245.
\textsuperscript{112} Ibid., p. 247 and F.R. Kennedy, The adaptation of biographical classification to museum exhibits, \textit{SAMAB}, 2(6), December 1940, pp. 144 - 146.
\textsuperscript{113} H.G. Oliver, The importance of preserving and recording Africana, \textit{SAMAB}, 2(10), September 1941, p. 248.
\textsuperscript{114} Archaeological terminology, \textit{SAMAB}, 1(12), June 1939, pp. 294 and 299 - 300.
\textsuperscript{115} Summary of the discussion on archaeological terminology, \textit{SAMAB}, 1(2), pp. 4 - 9.
\end{flushleft}
However, no finality was reached on the matter.\textsuperscript{116} The details of the cataloguing system used by the Archaeological Survey of the Union of South Africa were published six years later (in 1945).\textsuperscript{117} In the same article aspects of acquisitions, the catalogue, the card index and site charts are explained by the director of the survey, C. van Riet Lowe.

From 1938 onwards, attention was primarily paid to the cataloguing (recording and retrieval of information) of archaeological, historical and ethnographical collections in manual systems. However, the reality that a museum had to accept legal accountability for the accessioning, maintenance and disposal of objects in the collection, in other words the basic precepts of modern collections management, was not addressed at this stage.

By 1945 the inclination of many museums was to devote most of their energy and funds to the display of specimens. Educational aspects were also gaining in importance, but research work was relegated to the background.\textsuperscript{118} In the opinion of Austin Roberts, then president of SAMA (and also a well-known zoologist at the Transvaal Museum), natural history research was of international as well as national value and should not be abandoned due to a lack of money.\textsuperscript{119} Archaeological, historical and ethnographical research was not mentioned.

Natural history museums usually exhibited mammals and birds, but the collection, preservation and display of historical and archaeological objects also formed a component of some museums.\textsuperscript{120} At the time (the 1940s) it was problematic to collect historical objects; so much so that all these that were worthy had to be displayed. It was advocated that care should be taken to avoid a historical display becoming “an ill-assorted jumble of

\begin{thebibliography}{11}
\bibitem{Chubb1944} E.C. Chubb, The first eight years of the South African Museums Association’s existence, \textit{SAMAB}, 3(6), June 1944, p. 157.
\bibitem{Lowe1945} C. van Riet Lowe, Catalogue system of the Archaeological Survey, Union of South Africa, \textit{SAMAB}, 3(11), September 1945, pp. 325 - 327.
\bibitem{Roberts1944} A. Roberts, Museums and biological research, \textit{SAMAB}, 3(10), June 1945, p. 292. Because D.A. Roberts is referred to as Roberts in this research paper, reference is made to Austin Roberts.
\end{thebibliography}
personal souvenirs which can teach no history”.\textsuperscript{121} Instead, a strict chronology and the “elimination of unworthy objects” were recommended for a history collection.\textsuperscript{122} As far ethnography was concerned a study collection in addition to the show collection was, however, important.\textsuperscript{123}

Collections management issues listed in a plea for training in museology included the preservation of objects, common museum troubles (museum pests, dust, humidity and temperature control) and accessioning, registration, numbering and cataloguing.\textsuperscript{124} Nevertheless the Du Toit Commission (appointed in 1949) found to its surprise that few museums, if any, had a complete inventory on hand for all the objects in their collection. The Commission was of the opinion, therefore, that every piece should be documented as completely as possible with accession number and provenance; they recommended that every state-aided museum and gallery should compile catalogues of its study and display collections for distribution. The Commission was also of the opinion that every possible step should be taken to preserve collections against the risk of theft, fire and deterioration.\textsuperscript{125}

The Commission did not make any recommendations on the appointment of ethnologists to the staff of museums, claiming that more information was necessary before this could be done. However, it was recommended that the significance of historical collections as subjects for display and research should be enhanced by appointing qualified historians in museums.\textsuperscript{126}

Until the 1950's there was a slow but steady growth in the number of museums, but nonetheless there were many gaps in the South African museum scene. The intrepid Shaw suggested a number of museums or museum departments that were still lacking in South

\begin{itemize}
\item \textsuperscript{121} N. Jones, The study of man in the museum, \textit{SAMAB}, 3(9), March 1945, p. 253.
\item \textsuperscript{122} Ibid., p. 253.
\item \textsuperscript{123} Ibid., p. 251.
\item \textsuperscript{124} H.G. Oliver, Professional training and status, \textit{SAMAB}, 3(4), December 1943, pp. 98 - 102.
\item \textsuperscript{125} NCHMA, \textit{Verslag van die Kommissie van Onderzoek na sekere staatsondersteunde inrigtings}, pp. 157 - 158.
\item \textsuperscript{126} Ibid., p. 171.
\end{itemize}
Africa, including a maritime museum, a museum of science and industry and a museum of history “where objects may be seen ... in their historical perspective; ... where one can meet Pharaoh Necho in the first room, and, ... Mr Havenga putting a tickey on petrol in the last.”

No reference was made to the management of these proposed museums or their intended collections. Shaw did, however, stress the need for following correct procedures, particularly as far as ethnoogy was concerned, arguing that the value of an object diminishes if there is not proper organisation in the museum. The first requirement is that specimens, of whatever value, should be numbered indelibly and entered into a register immediately, not the next week, or perhaps the next month ... and it is tragic to think what has been lost to knowledge in this subject by the simple fact of the responsible person failing to record the information at the time.

The need for correct documentation was also stressed by Anna Smith of the Africana Museum in Johannesburg. She warned history museums to be careful about family traditions, because anecdotes often proliferate around objects as time passes, with the result that objects with suspect attributions may be accepted in good faith. Daphne Strutt of the Old House Museum, Durban, emphasized the necessity of an index and a proper classification system so that there is no difficulty in separating the various items and putting them in their proper place in a museum.

The transition to the Republic of South Africa in 1961 led to an unprecedented blossoming of new museums and larger, established museums continued to grow and acquire new satellite museums. Whether there was corresponding progress made in the maintenance and management of collections in museums is debatable. Nonetheless, more interest was shown

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128 E.M. Shaw, Museums and ethnological research, SAMAB, 6(12), December 1957, pp. 303 - 304.
129 A.H. Smith, Museums of history, SAMAB, 8(14), September 1962, p. 333.
130 D. Strutt, The functions of an historical museum and its role in the community it serves, SAMAB, 6(4), December 1955, p. 97.
in history collections by experts such as Smith and Strutt than was previously the case.\textsuperscript{131}

**The use of computers**

Although the use of computers to alleviate the problem of maintaining collection information was considered in the early sixties in the United States and the United Kingdom, it was only in 1967 that a plea was made for the modernization of South African museum systems by using punch cards, computers and other mechanical means.\textsuperscript{132} According to R. Liversidge of the McGregor Memorial Museum, Kimberley, who presented a paper at the annual meeting of SAMA in 1967, the progression from filing card, to punched card to stored information for computer use, is comparatively simple.\textsuperscript{133}

At the Kimberley meeting a committee, comprising A.D. Bensusan, J.R. Grindley, J.M. Winterbottom and Liversidge, was appointed to investigate the requirements, potential and scope for computers in South African museums. It was also resolved that the Council of SAMA should consider methods of co-operation between the museums in the matter of classification of records with a view to future computerization.\textsuperscript{134} In the main, however, there was little enthusiasm for the new technology. It took six years of lecturing, publishing and investigations by the SAMA committee for the climate to change and for museums to accept the benefits of computerization.\textsuperscript{135} Cultural history museums in particular seem to have been reluctant to show interest in the use of computers, probably because natural history museums had more exposure to computers for research purposes, while cultural history museums had little or no experience in using computers.\textsuperscript{136}

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\textsuperscript{133} R. Liversidge, Museum cataloguing and a national system, *SAMAB*, 8(14), September 1967, p. 452.

\textsuperscript{134} Ibid., Comment by editor, p. 454.

\textsuperscript{135} The Computer Group of the Museums Association of South Africa, minutes, meeting, 2 October 1973, *Computer Group of the Museums Association of Southern Africa Circular*, no. 4, p. 1.

\textsuperscript{136} *Computer Group of the Museums Association of Southern Africa Circular*, no. 1, p. 4.
In 1973 a Computer Group was established at SAMA in reaction to the recommendation put to the Council at the annual meeting. It was resolved “that Council should support a committee to form an open group involving every discipline to consider the problems and requirements of data processing in Southern African Museums”\(^\text{137}\). The Computer Group distributed a circular/newsletter and held meetings and workshops in an effort to heighten the awareness of computerization in museums\(^\text{138}\). The name of the group was changed to Documentation Group in 1983 and it became a standing committee of the SAMA Council. The publication of various articles in the bulletin of SAMA is an indication of the growing interest in museum documentation\(^\text{139}\).

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The way in which the anthropological, archaeological and history collections was initially managed at the Transvaal Museum follows the same pattern as that adopted in the majority of overseas museums. A manual system of documentation was used, namely handwritten acquisitions entry registers and catalogues. These provided inventories, arranged numerically, of the objects or group of objects in the collections. In many cases these original registers and catalogues are still the primary source of information about objects in the collections. Until the late 1940s abortive efforts were made to maintain a card catalogue (or index). Manual information retrieval was only successful in the 1950s and 1960s.

The general trend of museum development in South Africa is also clearly reflected in the development of the natural history and the anthropological, archaeological and history collections at the Transvaal Museum from 1913 to 1964. At first there was an overwhelming devotion to natural history, tempered in the 1940s and 1950s by a gradual interest in the history collection.


\(^{139}\) Ibid., pp. 30 - 31.

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After 1953 there was an increasing awareness at the Transvaal Museum of the anthropological, archaeological, and history collections and the importance of taking reasonable care of these objects. The way in which the history collection in particular, and to a lesser degree the archaeology and anthropology collections, were managed reflects the first real evidence of this change of attitude. Modern collection management principles, although they were not identified as such, featured in the handling of these collections for the first time in 40 years. This in turn, reflects a change of heart that was to give rise to an independent new museum in 1964.

Despite this changed outlook, accountability of the historical, anthropological and archaeological collections at the Transvaal Museum was not an important issue and computerization was not even considered.