Is there an Indian way of Archiving?

There is an order and rhythm in all things pertaining to nature. In the history of human culture, music happens to be the earliest fine art to be developed. Vedic hymns are the earliest examples of sacred music in India. The Sama Veda is the oldest musical composition that we possess and is recited even now in the same manner as it was done 3000 years ago. Temples gave a fillip to the development of fine arts and also served as repositories of architecture, sculpture, painting and all fine arts. They preserved the fine arts in the forms of inscriptions and copper plates.

Temples that were the hub of all artistic activities have a wealth of musical heritage and preserved palm leaf manuscripts, inscriptions on copper plates, on which music, poetry, etc. were documented.

Indian art in any form, no doubt, has had an aural tradition that is not only considered sacred but also has a three thousand year history behind it. This represents perhaps the longest unbroken record of any cultural tradition. It is this long continuity of growth that is the most remarkable thing about Indian art, particularly music, which can be traced to the Vedic days. In the pattern of this culture, music and dance, visual arts and poetry are all governed by the same attitudes.

The best documented of ancient cultures of India are the Vedas of which we have a codified tradition.

Archives administration is a science, adopted and practiced all over the world today. Records are tools of administration. They are the memory of an organization, a family or an individual. Records embody past experiences, give evidence of progress and protect legal rights. They are, therefore, the evidence by which the Government is accountable to the people.

Record-keeping consciousness among Indian administrators dates back to the period of the Mauryas (3rd Century B.C.). Arthasastra speaks of record rooms, Vijayanagar sources refer to officers-in-charge of records and Chola inscriptions mention ‘Avanakalari’ meaning ‘Record Office’.

Archiving is a term used for making a permanent record that can be assessed later at any time. Archive is however more than a library. Through careful evaluation and judicious selection, it documents and preserves material that is of value as creative art and material that sheds light on history of art. It is essentially a storehouse where appropriate technology currently available is utilized to preserve rare and valuable material contained therein and to organize it in a meaningful way.

The ‘Guru Shishya’ relationship with its one–to-one mode of communication was viewed by traditionalists as the corner stone of [documenting] archiving. That we have been able to retain art forms that date back more than 2500 years ago only goes to prove that there has been an Indian way of archiving all along.
To-day an archive for Indian dance or music would comprise live recordings of music, interviews with personalities in the field, face to face sessions with performing artists, teaching methodologies, notations, books and treatises on music, a bibliographical index of books, theses and articles on the subject, manuscripts of songs with meanings and notations, photographs of artists, reviews and profiles, press-clippings etc.

MANUSCRIPTS AND MANUSCRIPT LIBRARIES

Communication is essential for human existence. In the primitive stage, man communicated with the aid of gestures, symbols and sounds, which were used only for face to face communication. This system of vocal symbols used for communication was systematically developed and grammatically arranged in a significant sequence that has been called as language. Later the necessity to record the experience and knowledge of man for the benefit of others and for future generation arose. They invented drawings and marks to represent their vocal sounds, through which human mental records were transferred to the walls of caves and rocks in the form of drawings and inscriptions. The idea of using marks to communicate was the greatest invention of Man. In course of time they searched for new writing materials.

WRITING MATERIALS

Materials such as stone, clay tablets, metal, wood, leaves, birch bark, cotton cloth, leather and paper were used for recording knowledge. Among them, stone, metal, birch bark, wood, leaves and paper were mainly used.

STONE

As it was believed that rock is a durable material, it was used for recording information. The letters inscribed upon them helped disseminate knowledge among contemporaries as well as succeeding generations. These rock carving paved the way for later inscriptions on walls, sthupas and steps of temples.

METAL

Even though rock is a permanent record, it can’t be transported. Hence metal sheets were used for writing. It was very popular in India. The letters were inscribed on metal sheets with the help of chisel and hammer. Mostly copper sheets were used for writing.

BIRCH BARK

Bark and leaves were used as they were easy to handle. They needed less labour. Birch bark was used as important writing material in ancient and medieval India. The practice of using birch bark was continued till the Mughal period.

WOOD

Writing on wooden slabs was also in vogue in India from the earliest times. The wooden boards were used for the primary schools students as writing material and were known as “Phalakas”
LEAVES

Leaves of Palmyra, palm tree were used very early in the south India as they are light and have a smooth surface for inscribing.

PAPER

All the above materials were replaced by paper, a writing material introduced by the Chinese. Developments in the field of paper technology together with the invention of the printing machine, during the industrial revolution of the West, led to drastic changes in the field of communication.

MANUSCRIPTS

Manuscripts are a form of recorded information and are the vehicle for preservation and dissemination of knowledge to the generations to come. The word 'Manuscript' (Man–you- script) comes from the Latin word “Manuscriptum” which means something that is written by hand. Encyclopaedia Brittanica defines it as, “Manuscript, a term applied to any document written by human hand with the aid of pen or pencil or other instrument”. Generally, manuscripts were rare commodities written with hard labour and great care. They were written on a wide range of subjects like religion, philosophy, history, literature, medicine and science. Manuscripts can be classified into two kinds on the basis of materials used, namely palm leaf manuscripts and paper manuscripts.

PALMLEAF MANUSCRIPTS

Palm leaf is a natural material. It is known as Tada Patra, Tala Patra or Panna. In ancient India they were commonly used for the purpose of writing, since palm leaves were available abundantly throughout India.

Palm leaf manuscripts were generally written in two ways. One was to inscribe letters on the leaves and other was to write with ink on leaves. Letters were inscribed on leaves by salaka or stylus, which was made of iron or steel with a pointed tip at one end and a sharp knife on the other. The knife was used for cutting leaves. In South India, the method of scribing with stylus was mostly in practice. Wooden or bamboo pens were used to write on leaves with ink.

For writing manuscripts, the leaves of palm tree are collected, separated and dried. After drying, the leaf edges are cut into convenient lengths for writing. Two small holes are made for passing the thread. Holes are put in such a way that they divide the leaves into roughly three equal parts. Due to the hardness of the surface, we can't inscribe on the palm leaf without softening. The process of softening is called seasoning.

For seasoning, the leaves are boiled with hot water or steam. Then the boiled leaves are allowed to dry for immediate use. For later use, leaves are kept under wet sand in order to retain their soft surface. Seasoning makes the leaves stiff and fit for handling.
The dried leaves are polished by rubbing with polishers or conch shells and can be bound with an external guard by planks of soft wood like mango, on which designs are carved for decoration. Nowadays, planks of all sorts are used for this purpose. Chords or silk threads are used to string the manuscripts together.

After inscribing the letters, the surface of the palm leaves has to be blackened with a mixture of vegetable juice and charcoal, so that scribed letters can be made visible. Nowadays, lamp black mixed with some oils such as citronella oil, camphor oil or sandalwood oil are smeared on the surface for preservation and as well as clarity of letters.

In ancient days, these palm leaf manuscripts were hung above the ovens in the kitchen. The smoke from the oven would accumulate as layers, which may resist insect attacks and also make the scribing more legible. Lamp black and some vegetable juice were used to protect manuscripts from insects and for clarity of characters. Margo leaves were put in the palm leaf manuscript bundles as repellent to insects.

**USE OF LEAVES IN SOCIAL CUSTOMS**

Importance of palm leaves could be easily understood from the role they play. In Hindu mythology, gods and goddesses of wisdom are portrayed with stacks of manuscripts. Lord Ganesa is said to have written the epic Mahabharatha as dictated by saint Vyasa on palm. When the stylus failed him in the course of his writing, Lord Ganesa broke one of his ivory tusks to continue writing. In south India, important domestic household documents are believed to be written on palm leaves. Tamil marriages are inevitably preceded by a formal betrothal which is called *Muhurtha Olai*. The name itself denotes that formal inscriptions indicating date, time and names of couples were made in an *Olay* (Tamil word for palm leaf). Messages conveying deaths were called *Savolai*. Kings and royal families would exchange messages through palm leaves. Students of *Gurukula* education, astrologers and *Pandits* used to record their writings on palm leaves. On the whole, literary treatises were written primarily on palm leaves.

**PAPER MANUSCRIPTS**

To overcome the difficulties in the use of palm leaves, paper was used. The pioneer of paper making was China, which invented the art of paper making in 109 A.D. The word ‘paper’ comes from the Latin word *Papyrus*, which was the tree used for preparation of paper. Paper is a substance in the form of sheets or leaves made from rags, straw, bark, wood and other fibrous materials. Paper is basically a cellulose material and has been made from different materials. There are various groups of paper, classified as cotton groups, grass groups, etc. Initially, paper was made by a tedious process and was called handmade paper. In India, handmade paper was used commonly in the 18th century. Therefore most of manuscripts were written in handmade paper. Later, machine-made paper was used.

In India, the ink used for writing was known by the names *‘masi’* and *‘mela’*. Inks of different colours, including red, black, gold and silver, were used. Paper manuscripts were written with permanent black ink, which was prepared by mixing lamp soot with sesame oil, gum of *‘vachella farnesiana’* and water. This ink gave long durability.
The pens used for writing manuscripts were made of wood or bamboo. Vulture or goose quills were also used as pens.

Papers of uniform size were collected and uniform margins were drawn. The title sheet was neatly decorated with some drawings relating to the subject. The papers were pressed with the lining board for uniform lines. Mostly the manuscripts are in loose form, a very few in the form of bound books with wooden planks placed on both sides, fastened and painted with mythological characters. In early days, the manuscripts were covered with a cotton cloth to avoid external deterioration. Alternative sheets of paper manuscripts were anointed with turmeric water, which acted as a repellent to insects and neutralized acidity. Snake skins were also put along with bundles as they were believed to be repellent to insects.

The illustrated manuscripts generally reflect some ideas or incidents illustrated with beautiful and colorful pictures these were also decorated with ornamental, floral and geometric designs. Mughals were the patrons of this art. Letters of some manuscripts are bright in nature, and these are called illuminated manuscripts. Illumination is the art of embellishment and beautification, which was done to attract and create more interest for readers.

MANUSCRIPT LIBRARY

Manuscript libraries are a medium of communication of the ancient art, culture, literature and history, which are as old as the written word. Evolution of libraries is based on the intellectual development of civilization. There is always an intimate relation between the development of libraries and spread of literature. The literary treasures of ancient India were preserved in the houses of Gurukulas of pandits, learned scholars and public institutions like mutts, temples and palaces of kings who were patrons of art and literature. Generally, these libraries were called ‘Saraswathi Bhanda’ or ‘Saraswathi Mahal’. In Hindu mythology, Saraswathi is the Goddess of learning. Libraries are ‘Saraswathi Bhandar’ or ‘Saraswathi Mahal’ which mean store house of knowledge or the abode of the Goddess of learning. The libraries were also called Granthakuthi, Jnana Bhandar, Pustaka Bhandar, Bharati Bhandar, etc.

Ancient India had a highly developed educational system. Historical records reveal the functions of ancient universities such as Kuru, Panchara, Matyavasinara Taxila, Varanasi and Nalanda. Among them, Baland was one of the biggest universities with three library buildings called Ratnasagar, Tatnadadhi and Ratnaranjaka. This was considered the largest library in India. Due to natural calamities and social customs, many manuscripts were lost and as the affairs of foreign countries intersected with India, thousands of Indian manuscripts adorned the shelves of foreign countries. According to Dr. V. Raghavan, there are 5,000 Indian manuscripts in the United States of America, 30,000 in the United Kingdom and 50,000 in Europe. In Europe, particularly, the Germans have a number of Sanskrit manuscripts.

The practice of manuscript collection and preservation ultimately paved the way for the formation of manuscript libraries, where manuscripts are collected and preserved for future use. The development of Manuscript Libraries is largely dependent on academic
and research-oriented programs. The present manuscript libraries have more or less common functions and objectives. They are:

1. Preservation of manuscripts
2. Publication of manuscripts
3. Services to researchers

Some manuscript libraries have some specialized functions arising from the nature of their collection. Along with manuscript libraries, manuscripts are also preserved in temples, mutts, research institutions, Government organizations, private institutions, learned societies, universities and individuals. The functions of these institutions are varied, but they also adopt the above functions to preserve the manuscripts.

PRESERVATION OF MANUSCRIPTS

Preservation is one of the vital functions of a manuscript library. A lot of manuscripts are in the houses of learned scholars, so acquiring and copying the manuscripts are the first steps of preservation. Then the collected manuscript should be protected from the physical, chemical and biological agents of deterioration. Modern preservation techniques such as microfilming, air-conditioning and modern conservation techniques can also be applied.

PUBLICATION OF MANUSCRIPTS

The recorded knowledge of art and literature of our ancestors is brought to light for public use. In order to disseminate unearthed knowledge, it becomes the duty of manuscript libraries to publish them in the form of books and periodicals.

Apart from helping research scholars and students, these publications carry immense knowledge of all subjects to the masses to keep the cultural chain unbroken over centuries.

SERVICES TO RESEARCHERS:

Research activities are carried out in many institutions to bring past experiences and knowledge to use. In order to assist these research activities, manuscript libraries are render the such services as Manuscript consulting services, Manuscript reading services, Translating services, Transliteration services, Hand written coping services and Bibliographic services. The library can also offer reprographic facilities, if available.

In India, there are several manuscript libraries. The Saraswati Mahal Library at Tanjore Palace is an ancient and famous one. Evolution, collection and function of this library is revealed here.

THE SARASWATI MAHAL LIBRARY

This library is one of the abiding temples of learning, an unbounded repository of culture and inexhaustible treasure house of knowledge. It was built up by the successive dynasties of Nayaks and Maratha Kings of Tanjore. It is one of the few medieval libraries extant in the world and is rooted in the Nayak rule over Tanjore (16th century) when it was a Royal Palace library and developed by the Marathas. Till 1918, it was
under the control of palace administration. Only after that, it has been made available for public use.

The Government of Tamil Nadu appointed a five-member Administrative Committee under the Chairmanship of the District Collector. Because of its valuable collection, it has been considered a library of National importance. From 1986, it is administrated by a Governing Body under the (Ex-Officio) Chairmanship of Tamilnadu Education Minister and (Ex-officio) Board of Governors from both Central and State Governments.

This library has very rare and valuable manuscripts on all aspects of art, culture, literature etc. The manuscript collection of this library can be classified as:

(1) Works on Arts, Science and Literature of Tamil Land from time immemorial.

(2) Works of the Vijayanagar renaissance brought under the Nayak rulers of Tanjore between 1535 to 1676.

(3) Works brought to Tanjore by the Maratha rulers of Tanjore.

(4) Works of the Scholars and Pandits in the country of the Nayak and Maratha Kings of Tanjore between 1535 and 1855.

(5) Collection made by Maharaja Serfoji from all over India

(6) Later collections from the families of great scholars and some temples.

The manuscripts of this library are in the classical languages such as Sanskrit, Telugu, Marathi, Tamil and Persian. The manuscripts are both in palm leaf and paper form.

The palm leaves are *Tada Patra* and *Panna* and the paper manuscripts are both in handmade paper and machine-made paper of foreign countries. Totally there are more than 44,000 manuscripts. Among them, the Sanskrit section has the richest collection with nearly 37,000. The Sanskrit manuscripts are in different scripts such as Grantha, Telugu, Nandinagari, Devanagari and few in other scripts. These manuscripts were broadly classified and catalogued descriptively. The descriptive catalogues are available in printed form.

Various sections such as Book section, Pandit section, Conservation section, Microfilming section, Printing section, Binding section, Sales section and a Gallery for public vision are functioning to satisfy the objectives of a manuscript library.

With the help of modern scientific techniques, which provide immense help in preserving these old and timeless manuscripts, this library helps numerous academics, scholars and students in their pursuit of new horizons of knowledge.

Tanjore has been renowned as a great centre of art, culture and literature for over ten centuries. Successive generations of the Cholas, Nayaks and the Marathas have enriched its cultural heritage. The Cholas contributed their magnificent temples, sculptures and paintings to enrich the culture of Tamils. The Nayaks, who succeeded
them, fostered and developed the study of literature, drama, music, and the allied arts. The Marathas and their successors followed suit and conserved and improved the legacies of their predecessors. Many of the Maratha kings were great scholars and good writers themselves. Saraswathi Mahal Library, a standing monument, unique treasure house and world intellectual center is the achievement of these three dynasties of kings which are blended together as one in this library.

Serfoji Maharaja (1777-1832) was mainly responsible for shaping the library and made it his life work to preserve, develop and hand it to posterity. It is said that he purchased many rare manuscripts and books in many languages and enshrined them in the archive of this internationally reputed library. All the manuscripts, both palm leaves and papers, are kept in large tall wooden almirahs [cupboards] of the library. There are more than 15,000 palm leaf manuscripts and 25,000 paper manuscripts. The library has both printing and binding sections. The old and rare books are bound by trained library binders, using chiffon cloth. In the binding section, fragile paper leaves of old books are repaired with chiffon lamination.

**Chemical Conservation:**

All books and manuscripts in this library are preserved very carefully. Manuscripts are very carefully smeared with citronella oil. A periodical fumigation treatment is also given to all manuscripts and books. An indigenous preservation powder, prepared with sweet flag, black cumin, cloves, pepper and bark of cinnamon, is placed in cloth bundles in shelves. Neem leaves and vasambu are also placed on shelves. Napthalene bars and balls are also used. The library has a fully equipped microfilming unit and about half of the manuscripts are already microfilmed. In this library, some manuscripts are very old and are in brittle condition. To preserve these, citronella oil is applied to the leaves, giving flexibility to leaves and acting as a repellant to the insects. For clarity of the scripts, citronella oil is mixed with lamp black (soot) and smeared on the manuscript. The old books and paper manuscripts in a brittle condition are given mending treatments. One is chiffon cloth mending, using liquid starch paste, and the other is cellulose acetate foil and tissue mending, using acetone as a solvent. The same process is used for broken palm leaves manuscripts. The fungus-affected books are fumigated using thymol as fungicide.

To control silver fish, the affected books are fumigated using a special mixture in a powder form in the following measure:

A mixture of sweet flag cumin four parts, cloves one part, pepper one part and bark of cinnamon one part is combined together to make this preservative. This mixture is placed in small lemon sized bundles. It has a sweet smell which repels the insects. Usually white cloth is dyed red or red cloth is used for binding the manuscripts to keep away the insects. Bleaching is also another step to restore original form of old brownish paper, maps and pictures. Clarity is possible after this bleaching treatment. These methods are also used in Oriental Library, Madras University.
How Sacred Hymns and Music [Compositions] were Preserved

The sacred hymns of the Vaishnavites and the Saivites of South India written by the 12 Vaishnavite Savants in the 7th and 8th centuries that had been preserved in the temples of Kattumannar Koil were set to tunes by Nadamunigal [Vaishnavite] and formatted to be sung by Araiya [performing artists in the temples] in all the Vaishnavite temples of Tamilnadu as a ritual.

Similarly in Chidambaram, hymns written by the 63 Saivite Savants popularly known as Aruvathumoovar [63], and inscribed on copper plates kept in locked storerooms of the temple, were unearthed by Raja Raja Chozha King and, later, Nambi Andar Nambi prescribed specific tunes and formatted them to be sung in the Saivite temples of South India as a ritual by specially appointed singers called the Oduvars - a practice that is followed to this day in almost all the temples.

All this only goes to prove that temples have always been a place for preserving art and even though a lot has been lost over the years due to wars, weather conditions etc, we still have retained a lot, proving that archiving of art and culture in India has been going on for centuries.

The Trinity of composers of the 17th century, particularly Saint Tyagaraja had a very unique way of documenting, preserving and disseminating his compositions. His most prominent shisyas [disciples] hailed from three important villages namely — Wallajapet, Umayalpuram and Thillaisthanam. Prominent among them were Wallajapet Venkatramaiah, Rama Iyengar and Veenai Kuppaiyer. He would pair them in twos and each pair learnt 100 pairs of kritis [compositions]. They would always wait with palm leaf manuscripts in hand and whenever Tyagaraja broke into song [it was always extempore], they would document it on their manuscripts. Not a day passed without at least one new composition being composed. Thus all these songs - more than 800 of them - were documented preserved in the manuscripts and also disseminated by the disciples who left for their villages and taught them to their disciples. Today almost all these manuscripts have been preserved in the ‘Saurashtra Sabha’ - an archives near Tanjore.

Muthusawamy Dhikshitar, another composer and pioneer in Carnatic music, taught all his compositions to his brothers. As a number of his songs were on temples, their deities, and sometimes even the history of the temples, several of his compositions have been inscribed in the temples where he composed them. He had very few disciples as he was always on the move. One disciple, Sri Thambi Appa Pillai the drum [Pancha Mukha Vadyam] player, had notated the compositions that Dhikshitar had composed in his presence and today they are available with Sri Selvaraj, who 6 generations later, is preserving a number of palm leaf manuscripts in his house at Thiruvarur. He preserves them in old trunks, where these are tied up in silk cloth spread amongst herbs to repel pests.

Sri Raja, the sixth generation descendant of Syama Sastri and a resident of Chennai, has got the entire collection, comprising nearly 300 palm leaf manuscripts of Syama Sastri, the senior-most of the Trinity. He has all the manuscripts tied up in Kanchi silk materials that he keeps changing every third or fourth year and preserves the
manuscripts in steel and wooden cupboards surrounded by little bags of mixture that he collects from the Saraswathi Mahal Library in Tanjore every year. Even the original painting of Syama Sastri, which is about 300 years old has been preserved by him.

The three archives in Chennai, namely the Archives, the Oriental Library, Madras University and the Adyar Library, are preserving a number of paper manuscripts. Chemical preservation methods are adopted by them, but the age-old tradition of using neem leaves and vasambu [a herb] is still in use. Binding in red dyed cloth, particularly in silk, is also practiced. The buildings are very old and not fully air-conditioned but have sufficient light and are weather proof. The oldest archives in Chennai, built in 1906 by the British with the sole purpose of archiving, now has people trained in preservation techniques like binding etc.

One cannot but apply the age-old method of using herbs and following outdated methods for preserving books. Neem leaves and vasambu are used in Sampradaya to preserve books. Today the Ayurveda concept has come to stay in a big way. Be it medicines, beauty products or why even for pet animals, people are going for Ayurvedic products.

It is also proved that herbal products do not have any side-effects and are safe. Hence, even though it is everyone’s dream to have a highly technical, sophisticated, computerized life, fully equipped with the latest knowhow, the dreams will have to remain dreams, as long as there is no support from the Government that is yet to realize the values of archives and their importance from the day civilization began.

I would like to conclude my paper saying that the Indian way may not be technical or fully right but is practical in every purpose, especially in cases of a number of organizations where there is a lot of fund constraint.

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