

Documenting and Preserving the Endangered Archives: Palm Leaf Manuscripts of Kerala, India.

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India is a country which is extraordinarily blessed with rich cultural heritage. Various institutes, libraries, repositories, temples, rich families possess several objects or antiquity having heritage value. India is a home to one of the oldest written traditions known to mankind in the form of Manuscripts¹. The vast richness and diversity of Indian manuscripts found in India owes its origin to the fact that these manuscripts are composed and written in various scripts. Manuscripts are scattered in known and unknown public and private collections in all over India and found on different mediums, like clay tablets, animal skin, wood, bark, cloth, papyrus, leaf, etc. On the contrary, manuscripts of palm trees² were one of the most popular medium of writing. They were the cheapest and most easily available material. It has very good tensile strength and if well treated and carefully maintained, it has a reasonably long life and durability. Its folding endurance is almost nil with poor resistance to wear and tear and hence it is not suitable material for constant handling. It is believed that writing on palm leaves was spread from South India. These manuscripts cover subjects like medicine, history, grammar, music, astrology, mathematics, music, and scriptures. The basic reason for these manuscripts to make their way into collections is the sheer value of the knowledge and information they contain. Most collections are housed in archives, museums and libraries. As even larger number of manuscripts is stored in monasteries, *Granthghar*³

¹ Manuscripts are the richest collection of hand written documents, texts and scripts. These written documents provide information on the existence of different civilizations and emphasize on the importance of their survival

² The *Arecaceae* are a botanical family of perennial lianas, shrubs, and trees commonly known as palm trees.

³ The term '*grantha*' in Sanskrit means a book or bundle of palm leaves and *granthghar* is the place where *granthas* reside.

and community houses.⁴ In Kerala, written documents and books have been inscribed on the leaves for more than 600 years. In all over world, roughly 4000 species of Palm trees have existed. The two species of palm tree have been found in Kerala which are as follows:-

1. Borassus flabellifer (Palmyra Palm)

The Palmyra palm (*Borassus flabellifer*) is called as *tala*. It has an extensive growth range and is cultivated throughout most of tropical and subtropical Asia. They are fibrous, and initially strong and flexible; however, with time the natural flexibility decreases. The leaves of Palmyra palm are rather thick compared to those of the Talipot palm.

2. Corypha umbraculifera (Talipot Palm)

The Talipot palm or fan palm (*Corypha umbraculifera* Linn) is called as *Srital*. This is one of the most common leaves used in manuscript production, but is actually a fairly rare tree with a growth range limited to southwest India, Sri Lanka, western Myanma, and Thailand⁵. It needs a wet climate and grows abundantly in moist coastal areas. The leaves are soft, light coloured when dry and flexible.

Of the above two mentioned varieties of palm leaves, those of the Talipot are the most smooth, delicate and supple. The leaves of the Palmyra palm are rough and coarse. The fibres of Talipot palm leaves do not damage easily and are more resistant to decay.

For the longevity of the manuscripts, leaves were collected, separated, dried, burnished, seasoned and written. There are several ways of processing palm leaves which differ from region to region. The basic method of palm leaf preparation for writing is that they first cut from the trees before they could dry up and become brittle. Only a half opened young shoot

⁴ O.P. Aggarwal, *Conservation of manuscripts and paintings of south east Asia* (Butterworth-Heinmann, London), 1984, 24

⁵ O.P. Aggarwal, *Conservation of manuscripts and paintings of south east Asia* (Butterworth-Heinmann, London), 1984, 25

of palm leaves are suitable for making manuscripts. These are cut into required sizes and then boiled in water to the required temperature in order to render them soft. The unwanted middle ridge is removed from the main leaf. The desired portion is pressed, polished and trimmed to size. Then holes are made and a cord is passed through the holes to hold the leaves within two wooden planks of leaf dimension⁶.

The Kerala palm leaf manuscripts outnumber their other Indian counterpart with Tamil Nadu claiming the second position. The Kerala products are relatively longer but being thinner run the risk of becoming brittle sooner. On contrary, Kerala enjoys a rich legacy regarding manuscripts of many kinds covering every field of human thoughts. Dr. P. Vaisalakhy in his book '*Some aspects of manuscriptology*' that 'Manuscripts are invaluable source material for researchers or our cultural heritage and the intellectual endeavours of the ancient Indians.' In older days, writing on palm leaves was practiced as a profession by some; they were called *Lipikaras*- copyist. The stylus, sharp reasonably long and generally, in iron, known as "Narayam" in local jartgon served ably as the pen. Silver or gold Narayams were in use. No ink was involved in the process as the sharp pint incised in leaf.⁷

As palm-leaf manuscript or "thali-ola *granthas*" in Kerala have been used in large numbers and were found in hermitages, palaces, private collections, mansions, performing artistes and astrologers. In temples too they were abundantly present. A unique example is seen in the palm-leaf scrolls or Churumas of the Sree PadmanabhaSwamy temple.⁸

Documentation means gathering and recording all relevant data and information, both in written (free-text and essay style reporting) and visual forms (photography or illustration by pencil), accumulated during the examination and treatment of antiquities. The main focus of

⁶ D.P. Patnaik, *Palm leaf Etchings of Orissa* (Abhinav Publications, New Delhi), 1989

⁷Princess AwasthiThirunal and Gouri Lakshmi Bayi- Glimpses of Kerela Culture, (Konark Publishers,2011),119

⁸Princess AwasthiThirunal and Gouri Lakshmi Bayi- Glimpses of Kerela Culture, (Konark Publishers,2011), 118

documentation is to keep a record of the objects and it will enable us to understand and preserve the history and cultural environment. Thus, documentation is the organisation of information. The information includes the name of the object, provenance or source of the object, brief description of object (material, size, colours, etc), approximate year or period of object was made and other notes. Hence, it is a set of elements which has both quantitative as well as qualitative data and which can be used and referred by the future generation.

While preparing the documentation data sheet for the palm leaf manuscripts of Kerala; the main aim was to acquire the maximum information while observing these manuscripts. The reason being one will get familiar with the historical perspective and importance of being preserved for the future generation. The information further helps to the general public in order to promote the understanding and appreciation for the ancient culture to which the manuscripts belong. This technique of documentation will also help one to understand the reasons behind the current condition of these rare collections of manuscripts.

While observing these manuscripts in the collection, it was quite evident that the condition was not that stable. The crucial aspect of documentation sheet was recording the type of damage. The reason being that belonging to a Conservation field, one has to primarily focus on the causes and effects of deterioration. This point will help one to list the conservation need as per the requirements. Conservation enriches the experience of cultural materials, preserves its significance, cultural context and technical art history.

Palm leaves are organic in nature which is generally considered to be more susceptible to deterioration. Generally physical, biological, human errors and chemical agents which consists light, heat, moisture, fire; fungi, insects, air pollution etc are various causes of damage to palm leaf manuscripts.



Plate:1

In Kerala, the huge collections of palm leaf manuscripts are kept in the various archives, libraries, temples, etc. few manuscripts were in a fragile and endangered condition. I have taken a case study and emphasised on the collection of State Archives, Thiruvanthapuram, Kerala.



Plate:2

While observing the collection, it was noticed that these manuscripts have become brown or black. In few cases, only a portion near the edges have discoloured. The main cause of this

defect seems to be oxidation of the leafy matter. In spite of all preventions, the edges of the palm-leaf are particularly affected and eventually break easily whenever touched. So similar defect has been experienced here in the collection and the reason for brittleness is due to the presence of acidity. The other possible reason is that palm leaf is hygroscopic in nature and has poor resistance to wear and tear.



Plate: 3

For flexibility, frequent use of Citronella or camphor oil on the palm leaf from time to time has resulted in discolouration and accumulation of dust and dirt. It was also found to have a sticky surface due to the frequent use of oil.



Plate: 4

Another, noticeable effect seen on the manuscripts is the presence of longitudinal cracks in the surface layer. The main cause of the appearance of these cracks on the surface of the leaf is variation in the climatic conditions.



Plate: 5

Then the cleavage of the surface layer from the main body of the leaf was noticed. This happens because of the breakdown of the bond between the surface layer and the other parts of the leaf. In some leaves, the text is illegible either due to fading away of ink or non-application of ink.

The other thing which has affected the palm leaf manuscripts are insects. A detailed survey of insects living on palm leaves in India revealed that the only insect feeding on them is *Gastrallus indicus*. It is a tiny insect that eats its way through bundles of manuscripts. Hence, it has been observed in the collection that few areas have been attacked and badly eaten by insects and damaged at the edges.



Plate: 6

Palm leaves are fairly resistant to fungus⁹ attack and it is not a rampant problem in palm leaf manuscripts. However, in this archive it has been observed that the fungus occurred in greyish- black colonies. Unlike insect, fungus attack has been found on the whole leaf structure. Other than dust, an indirect source of fungus is the adhesive used in the Palm leaf manuscripts. .

After a detailed documentation sheet, the next step was to move ahead with the methods and techniques for the conservation and preservation of palm leaf manuscripts. The process of conservation both passive and active includes a wide variety of techniques, materials and treatments. Every type of conservation work that a professional does to an object involves a certain amount of risk of damage to the object. Hence, it was important and crucial that while preparing documentation sheet of the object, it should be carefully observed and examined the condition so that accordingly, conservation steps will be prepared. The method of treatment is essential to document as it will affect the way in which any cause of deterioration in the future is interpreted. Also, documenting the methods of treatments allows the conservation to monitor and assess the effectiveness of the treatment in the

⁹ Any of numerous spores producing eukaryotic organisms of the kingdom Fungi, which lack chlorophyll and vascular tissue and range in form from a single cell to a mass of branched filamentous hyphae that often produce specialized fruiting bodies. The kingdom includes the yeasts, smuts, rusts, mushrooms, and many molds, excluding the slime molds and the water molds.

future¹⁰. It was also kept in mind that the conservation techniques used in treating an object must be documented completely and any change in the environment, whether in the or on the display.

A proposal for Conservation treatment has been drawn up after a detailed condition report. The proposal has listed the treatments as per the problems that the object has and how they might be corrected by specific conservation procedures has been noted as a justification of the chosen methods. . There are two kinds of treating the objects, by applying modern and scientific chemicals or by following traditional methods by applying indigenous materials and techniques. At present, there is no dearth of modern chemical pesticides and repellents for the safe upkeep of manuscripts. Due to advent of technology, the approaches to preserve the manuscripts have become much more effortless by adopting modern techniques. Still the traditional methods of preservation should be encouraged over modern techniques because they are not hazardous for human health, don't have any adverse effect on the material and last but not the least the methods do not require much expertise, equipment and money. It includes the usage of parts of plants and their products such as oils, flowers, bark, seeds, resins, leaves – all of them are kept dried whole or in the powdered form for preservation of palm leaf manuscripts. Various spices, leaves, aromatic oils act as insect repellent. Most of the traditional methods that are used are fast disappearing and are being replaced by modern methods. Hence, it is strong need to continue with the traditional indigenous practices.

In conclusion, it is essential to mention that it is a high time to initiate the awareness among the society and authority regarding the preservation of these valuable manuscripts. It is the responsibility of not only the governmental authorities or other non-governmental sector for the safe keep of these valuables. It is the responsibility of us, all the individuals to safeguard

¹⁰ C.Collins, 1995. *Care and Conservation of Palaeontological Material*, (Butterworth-Heinemann, London), 1995, 15-20.

these manuscripts at a collective basis. Hence, collective ownership help in awareness with regard to preservation and thereby helping¹¹ in retaining them with minimum damage of their present state.