Original Research Article

Holding onto the Past in Present for the Future:
Conservation & Preservation in Archives of India

Rohan* ᴵᴰ
Department of History, Maitreyi College, University of Delhi, Delhi, India
*Correspondence: rohan@maitreyi.du.ac.in

ABSTRACT

Archives are the repositories of sources from the past, however they are also its subjects, sites and the politics of their own. An archive is a product of the forms of decisions taken by its various stakeholders, beginning from those who wrote the papers to the people (archivists) who cared, processed, curated them, to the state machinery that determine the importance of such papers, to the scholars who framed the content of the form after years of spending time with them. In a democracy, the records are the means by which the servants of the public are held accountable to the people. Records have different functions - they are memory to an organisation, tools in the hands of administration, they encapsulate eons of experience, they become source of legal rights, information, and that they merit utmost attention. The article, thus, delves into the two aspects of an archive – *Poetics of the Archive* i.e., rationale, politics and historical evolution of the institution; and *Grammar of the Archive* i.e., the methods of conservation and preservation of the records in India.

Keywords: Archive, conservation, preservation, coloniality, NAI, NMM, NAMAMI, questionnaire, CAT-CAT and Manus

_____

'*No archive is innocent*'
- (Yale, 2015)

INTRODUCTION

Remnants of the past help us reconstruct history of the land and in turn it creates the legacy on which the nation's heritage is built. The keeping of the records, in effect, becomes an important edifice of nation building. It helps structure a narrative of 'collective' history of a community. For a historian, ethnologist, anthropologist and a sociologist what is written in the records and what the artefacts entail help them construct meaning whereas for an archivist and a curator the material with which the record is made of and the artefacts prepared with are more important because if the material is lost, the source of the meaning is lost. The process of meaning making begins from the technicalities of collecting, documenting, preserving, and, despite all odds, showcasing it to the people who constantly engage with them on a regular basis. In that sense, a role of an archivist and a curator is much more than what meets our eyes.

ARCHIVES

The origin of the word can be traced back to the Greek word *archeion,* meaning which belongs to the office. The root word here is *arche,* which has a number of derivatives and a number of meanings making the horizon of an archive way bigger than one could imagine. *Arche* means: 1) the first cause: the beginning, the origin; 2) first place: power, sovereignty, realm, kingdom, empire; and 3) magistracy office (Karp & Levine, 1991). From the first definition, the Greek word *archaios* is derived*,* which means ancient and old; and from here we get the words like archaic and archaeology. The second of derivatives gave the Greek word *architekton* which means chief builder; and from here we get architecture and archbishop. From the third set of derivatives, we get *archeion,* that gave us the word archives. In due course of time the term evolved and reached Romans, who called it *archivium* in Latin, from where comes the French word *l'archive* (sing.) and later *les archives* (pl.). The collective sense of the word was adopted into English and thus, was derived the word, archives. Once it became part of the English lexicon, a lot many derivatives were born out of it. For instance, Henry Jenkinson who was the Deputy Records Keeper of England from 1947-1952 used it in singular form to denote a single document (Bhattacharya, 2019). Roscoe Hill, who was the Chief of the Division of Classifications of the US Official Archives in Washington from 1941-1946, suggested a lot of derivative terms from archives, such as – archive = depository; archives = the records in an archive; archivalize = to consign a record to an archive; archivology = the science of administration of the archive (Barringer & Flynn, 1998).

To qualify as an archive, there are three pre-requisites: the records, the physical structure or building to house those records, and an administrative machinery that is involved in maintaining and servicing them. For an archivist, an archive is an organised body of records created or received by a government agency, institution, organisation, family or individual and preserved by that agency or its legitimate successors as evidence of its organisation, functions, policies, decisions, procedures, operations or other activities or because of the information data contained therein (Basu, 1960). Archives don't include everything. So, if the archives are all records, then why certain records don't make it to the archives? That brings us to another pertinent question – are all records archives?

What qualifies as 'record'? Etymologically speaking, 'record' is derived from the Latin word *recordari* that means 'being mindful of'. The root word is *cor,* which means 'heart' in Latin. The Romans believed that the real place of memory is our heart and thence the phrase, 'to learn by heart.' A record, thus becomes something that is committed to writing in order to preserve the memory of fact or event of the past. That increases the dimension of what can qualify as record, from – books, manuscripts, cartographs, diaries, photographs, recordings, microfilms or any other document (Basu, 1960).

A record is something that is committed to writing in order to preserve the memory of fact or event of the past. That increases the dimension of what can qualify as record, from – books, manuscripts, cartographs, diaries, photographs, recordings, microfilms or any other document (Chakravorti, 1949; Thakurta, 2004). The first such person to give some clarity on this was the celebrated Italian archivist, one of the pioneers of systematising the science of archive administration and the father of Italian archival, Eugenio Casanova (1867-1951). While serving as the Director of the State Archive of Rome, he made two distinctions between archival records – current records (*archivio corrente*) and non-current or the second records (*archivio di deposito*). The former was easy to define but there were troubles defining the second because it was arbitrary and differed from one archivist to the other (Yale, 2015).

The second attempt in this regard was made by Philip Coolidge Brooks (1906-1977), an archivist at the National Archives and Records Services and later the Director of the Harry Truman Library. He came up with his famous concept, "The Life History of Records" (Brooks, 1949). It was conceived as a diagram, wherein at one farthest end is kept all elements that create records and on the other end is the archives. Between these two points would be the systematic treatment divided in stages through which a record will pass and finally end up in the archives.

First Stage (Currency Stage): To see whether it is of use in day today administration for the purpose for which it was originally created.

Second Stage (Semi-Currency Stage): Of their being 'recorded' either with or without an indication of how long should they be kept, their re-examination after a stipulated period and weeding out of the valueless material. If the agency does not weed it out and so it retains its purpose. However, they are semi-current files and is not that active both in terms of usage in ancillary service and otherwise.

Final Stage (Archival Stage): The semi-current files become practically non-active. They are no more of ephemeral interest for the administration and now they are ready to be finally transferred to central archives for 'indefinite retention' (Brooks, 1949).

The first attribute of an archive, is therefore, the relationship it has with a creating agency. The archives of a particular agency reflect the policy, function, organisation and transactions of that agency alone; and from this fact is derived the first major principle – *the archive of a given creator in no circumstance be intermingled with those of another creator.* The second attribute of the archive is its official character, meaning thereby, that the product or by-product of the transaction have legal effects; giving the second principle - *the archive must remain under the custody of a curator and his legal successor to ensure that no tampering has been done with them from outside and they are acceptable as a valid piece of evidence of transaction in the court of law.* The third attribute is the uniqueness of the archive therefore *qua* record may not be repeated anywhere else. The transaction between the agency and the archive is a never-ending process and with it the records grow naturally. Each new file is connected to the preceding piece of record and the former is explained only with the help of the latter. The sequence therefore is pivotal to record keeping because if the sequence is lost the story is lost or worse the story gets wholly inaccurate. Thence, the original order of records in no circumstance be disturbed, changed or tinkered with. *The sanctity of the original order* is the fourth attribute of an archive.

These four principles distinguish an archive from a museum where in the latter the collections are isolated events and they are arranged in some sort of logical order and the arrangement is determined as they grow and not afterwards. The museum doesn't have the official character or relationship with the creating agency nor are they unique. They may be rare but not necessarily the only one until something new is unearthed.

Bernard Cohn (1996) maintained that beyond military and economic transformations the British embarked upon the cultural transformation of India and that was possible through the masterly display of the relics from the past that included both textual as well material culture of the sub-continent. Knowledge, after all, as Foucault puts it irrevocably linked to power. Not all the records of the Indian past were important for the imperialists. As discussed above it is the agency that decides the nature of the archive, and here the agency was the imperial power under the empress of Great Britain. The *Dharmaśāstras* were not a constituent for the imperial archive that was set up in Calcutta as Imperial Records Department (IRD) in 1891. The religious texts of India that the imperialist labelled 'mythical' 'poetic' and 'philosophical'

didn't complement the British imperial vision of colonial empire and hence they didn't attest as records. In other words, the history and the beginning of archives in India has a colonial legacy which didn't represent the culture, heritage, story and life of the native Indians. To understand what qualified as records under the imperial agency one has to understand the objective behind creating IRD.

The National Archives of India: Coloniality of Knowledge; the Politics of Preservation

With the shift of the capital from Calcutta to Delhi in 1911, IRD too shifted to its new home and was re-christened The National Archives of India (NAI) on 20th August 1947. A section of historians believe that the purpose of creation of such department of records was to ease out administration of the natives. However, scholars like Partha Chatterjee, Tapati Guha Thakurta and Bodhisattva Kar (2014) and Sabyasachi Bhattacharya (2019) argue that creation of archives was based on a larger colonial discourse of orientalism and question of race since the commissioning of state sponsored archival projects date back before the establishment of IRD in 1891. These projects had the ontological power in providing the assumption about how India would be portrayed in the world. The first investigative project began in Bengal in the 1770s. They called it 'enquiries.' It had a set of question that they sought answers to – Who collects the revenue? How is it assessed? The objective was to find the nature of the ownership rights over land and wealth in India. These enquiries helped them to understand that the king is not the owner of the land rather the ownerships over a piece of land could be with many, and among them zamindars are the most powerful. That explains why the British pushed for diwani rights in Bengal rather than becoming nawabs themselves after the defeat of the Nawab in the battle of Plassey in 1757. In other words, the land settlement process of the British began the process of collecting "customs and local histories" only related to the information pertaining to land tenure. The findings of the enquiries constituted settlement reports, that were produced on district to district basis, in turn culminated into the creation of the agency of the British Census office that would provide important records to the IRD/NAI in the later run (Barrier, 1981). The second set of records came from what we may call as 'civilising mission' projects. Several imperialist scholars like Alexander Dow, Robert Orme, Charles Grant, Mark Wilks, James Mill and James Tod began to write about the people and the peopling cultures and tradition of the country. What was earlier apart of the memory of natives, was being codified in the form of written records. Neeladri Bhattacharya (2019) argued that the way the memory that preceded history was codified, gave rise to three segregated yet interconnected agencies of modern India – thana, survey (with maps and revenue records) and legal system. He further argues that the information collected through these projects helped transform 'rural India' into 'village India'. In other words, the creation of village scape as the smallest unit of India was created so as to bring uniformity and ease to administrative control, revenue collection and maintaining time to time records of the populace of the colony. All these were to become the records of the archives later. The third set of records came through travel reports and surveys. The first survey of importance was by James Renell in 1765 (Barrier, 1981). From there on many successive surveys were undertaken; from surveying the flora and fauna to draw imaginary lines on the land to find the highest peaks of the Himalayas. This also gave the first set of surveyors in India – James Renell, William Lambton, Colin Mackenzie, Alexander Cunningham and Francis Buchanan Hamilton. The findings during these surveys that were penned, made their way to the archives later. However, the relics called the 'antiquaries' paved the way for The Archaeological Survey of India and the Museums. The last set of bulk of records came from surveillance. For instance, a 'Thagi' and 'Dacoity' Department was created in 1835. The first task, therefore, in front of them was to gather information on the practices of those communities who killed for rituals, particularly the travellers. Chatterjee, Thakurta & Kar state that "The records that came down to us from such department to archive constructed the ethnographic profiling of

India on which the notion of criminal tribes and castes were based even after the independence of India in 1947 ((2014). The other institution was the policing system and later the introduction of fingerprinting by William Herschel and Francis Galton. The plethora of information that was collected with the primary objective of easing out administration, marked the first stage of the archives in India. Therefore, even though IRD was established in 1891, it had records from 1748.

The first phase, from 1748 to 1891, was marked by an administrative logic, but it must be seen in connection with the rising wave of nationalism in Europe, since 1848. Archives were a symbol of nationalist fervour that had taken shape in Europe since the eighteenth century. In the post-war treaties, one would find 'archival clauses' wherein clear terms and conditions were laid for the transfer of records and archival debts after the war was over. The archive was equated with the state and thus during wars taking over the archives was portrayed as purifying or freeing or cleansing the archives from servitude to the state. By the nineteenth century, 'archival clauses' were in every post-war treatise, though some saw archives as an institution of servitude to the State, for the State it symbolised the edifice of their past to be preserved for life in the name of nationalism. This marked the beginning of the second phase in the history of archives in India.

Archives too were undergoing significant change. Until the nineteenth century, medieval records and royal charters alone qualified to be considered as 'historical records'. However, with the rise of nationalism, the definition of a historical record for a state changed significantly. It paved the way for historians who were conscious of the necessity of the records for constructing a history that cannot be challenged. For them, records were the only facts, and facts generated truth, and the abode of the truth was the archives. These set of historians were called the 'Positivists,' who made archives *holier than thou,* because it was a source of writing the 'absolute' history of the state. This consciousness came down to India as well and thus marked the emergence of an archival consciousness. Thanks to the Positivists, who gave the house of administrative records, an intellectual value and in turn made the edifice that must be protected at all costs. However, India was a colony back then, and the imperialists were aware that the role of the archives was not only to redefine the past but also to define the future. In the second phase, therefore, K. M. Panikkar (2003) maintained that the colonial cultural projects transformed India by tinkering and denigrating the existing epistemic structures of the Indian society. In other words, IRD began working as a tool to hegemonise the colonial intellectual structures.

The colonial articulation of power was spatially articulated in the confines of the archives where its own subjects were denied intellectual rights. The agencies who decided on the records were silent about the Indian side of the records. An Indian could find about India only from whatever the official records of the British had to tell. The assertion made by Foucault (1988) that the facts are culturally constructed and it is decided upon the state to ensure that power remains with it, is true in this context.

An archive keeps textual records and so vast sections of sources were denied the status of records. For instance, most of the religious and philosophical texts were rejected because they came down from one generation to the next orally, and, their translation would be far from being sanctimonious like the records maintained by modern agencies. For instance, the translation of *Hedaya* (12th century text of Hanafi School) into English for the native Muslims by the order of Warren Hastings - an attempt to validate a history of the natives using their texts selectively, while calling the rest of the sources 'mythical' and 'poetic,' led to the development of 'State Attested' sources for writing the history of the natives (Hamilton, 1791).

The third significant step towards the development of NAI was the regulation of archival records. Since most of the curators were not trained archivists, the functioning of the archives was based on rules that were retained by the Governors one after the other. Any significant change in the attitude of the successor governor was also reflected in the longevity of the importance of certain documents for record keeping in the archives. Also, the Indian scholars who knew the vernacular languages were not given the role of prominence in the matters of collecting, corroborating, and deciding what could be made into a record for the archives. Rama Mantena (2007) gives an important example in this regard: Colin Mackenzie who is famously known for his Mackenzie Collection in the NAI for the extensive collection of inscriptions and epigraphical records from South India died in 1821 (Filliozat, 1950). While alive, one of his closest associates and a great linguist Kevali Venkata Lakshmaiah helped him find and translate most of the collected works. After Mackenzie's death, Lakshmaiah could have been the best person to have succeeded him to carry the work forward, however, he was succeeded by H. H. Wilson and William Taylor who had little familiarity with the South Indian languages (Habib, 2006). Their biases were so strong towards Mackenzie's work that they declared the collection "non-historical" (Habib, 2006). On the contrary, these two successors used Mackenzie's Collection to prove that the natives are so uncivilised that they are incapable of distinguishing between truth and falsehood. Perhaps, that is how such collections were shelved almost at the end of the building premise which even today is followed *verbatim* without realising that what we follow is an impression of the colonial design of segregating Indian history into history, non-history, and myth. Similar issues were faced while addressing the idea of sexuality and gender relations in ancient India. Ruby Lal (2011) argues that for the British it was a sign of oriental backwardness and thence the absence of documents that explored the issues of gender, body, and masculinity from the pre-British times. It was therefore the attitude of the archivists and record keepers that also justified what would qualify as 'authentic' facts of the land (Aziz, 2017).

How does one deal with this absentia? Ruby Lal (2011) suggests that one can create their own archive. That brings us to an important notional understanding that an agency can also be an individual and the archive thus can also be 'Private'. In colonial India, the rajas and nawabs maintained their own state archives. For instance, we have Patiala State Archives maintained by the Maharaja of Patiala and the Raja of Travancore also created a State Archive of his state pre-independence. Once the freedom movement gained ground individuals also began to create their own archival collections depending on the ideology that they followed. One could see a lot of sections within an archive, for instance, P. C. Joshi collection in Modern India Archive, Jawaharlal Nehru University and Tagore Collection at Viswa Bharati, Shanti Niketan. One can also make an archive on their own today. Ruby Lal (2011) extends her suggestion by taking the example of collecting marriage invitations or marriage advertisements to trace the genealogy of the customs of arranged marriages in different states of India. Ruby Lal (2011) describing the inherent bias in the NAI, takes example of Dyce Sombre, the first ever Anglo-Indian Prince and Asian to join the British Parliament in the nineteenth century. In all the documents of the archives, he is declared a 'lunatic' and thus he had to undergo a prolonged legal battle to claim his property of Sardhana (near Delhi) that would have come down to him from her foster mother, the famous Begum Samru (called Begum Sombre in archival records). The records of the archives are replete with him being a 'lunatic' and the legal battle that followed for the claim over the property, however the records mention nothing about him as a parliamentarian, issues concerning race and even his existence as the legal inheritor of the property of Begum Samru. According to Edward Said (2003), since the colonists thought they already knew enough about the natives as they saw them preserving their practices, would burden the bureaucracy with unnecessary excesses. Therefore, one finds an absence of indigenous knowledge in the colonial archives. One such reference can be made to the absence of Madrasa Rahimia, the focal point of Islamic

intellectualism of eighteenth-century Delhi in the archives. We find their references in details in the contemporary Persian and Urdu literatures and yet they find no official mention in British records. Another example of absentia and the erasure of a significant attribute of pre-modern Bengal was the infamous Inam Commission of 1828. Almost, the same time when Persian was replaced by English as the official language of correspondence by Lord Bentinck, Inam commission was set up to resume the *ma'afi* land grants that were given to the educational institution to maintain the native scholastic traditions (Hunter, 1871). Sana Aziz (2017) argues that it practically destroyed the native education set up as the said grant was not recognised by the British bureaucracy. Consequently, Hunter (1871) in his famous Hunter Commission recorded that "between 1828 to 1846 a panic was created among the Mohemadans that left a bitter legacy of hatred," and subsequently a cause of the growing discontent whose zenith was reached during the Revolt of 1857. The knowledge of the destruction of the Muhammadan education system would have been lost, had the history of the native education system be written on the basis of colonial archives alone.

The third phase began to take shape post1857. Although there was no direct inclusion of native material in the archival records, while describing the state of affairs to the Secretary of State, a lot of correspondences mentioned the issues discreetly. Such correspondences that were once rare had become a norm once the power shifted hands from the Company to the Crown. These correspondences were preserved in the Oriental and India Office Collection in British Library. The collection constituted of Board of Commissioners for the Affairs of India (1784-1857) and India Office Records (1858-1947). Post-independence several archival exchanges between NAI and the India Office brought copies of these correspondences in the micro-film. The digital archiving, thus, marked the third phase of the evolution and development of the archives in India.

The fourth stage began with declaring the archives as part of the Central List of the Seventh Schedule of the Indian Constitution. With this began the linking of several state archives, which were once mostly the private collections of the princely states. This process was completed with the establishment of several regional archival offices in Bhopal (1956), three record centers in Jaipur (1977), Pondicherry (1979) and Bhubaneshwar (1996). Authority-ship over all the premier state archives was established in this phase. The importance given to NAI as an edifice of national treasure can be surmised by the fact that it finds mention from the first Five Year planning onwards. From almost no financial outlay to a corpus of ☐ 802.69 crores in the VIII- Five Year Plan was given to the NAI. First to the Seventh Plans concentrated on building our cultural institutions and establishing cultural relations with the neighbouring nations. The exchange of records from the India Office, Britain was part of the same extension programme. From the Fourth Plan onwards awareness of our heritage was made an intrinsic part of the Central Education Curriculum both at school and university levels. Various modern India institutions like The Akademies became the agencies for supplying the new forms of documents that were to be turned to become the records of post-Independence India. This included the targeting of tribals and other regional communities at large. The Sixth Plan focused on the interlinkages of various cultures with Education at various levels. By the Seventh Plan, the thrust was given the contemporary creativity, documentation, and preservation. Institution like ASI, Museums, Tribal Arts, Oral Traditions were given funds to sensitise the youth. INTACH and NCSM were allocated funds to conserve, preserve and document the tangible and intangible heritage and to popularising Science and Technology among the students. The process of unlearning and relearning completed its full circle in the Seventh Plan, where the National Education Policy gave emphasis on the growth of a child's personality in tandem with the promotion of an inexpensive material culture of India. CCRT and several cultural centres became operational during this plan. The promotion of modern Indian regional languages was also a pivotal

component in the NEP of 1986. Under the Eight Plan, a lot of emphasis was given to the preservation of the tangible heritage of India (that we would see in the section on Museums). In the post-Independence phase the archives had been unleashed from the colonial hegemony and were converted into the edifice of nationalism.

The emphasis on the revival of archives got reflected in the establishment of A School of Archival Studies in 1976, that even today offers one-year diploma course and several short-term courses with an intention to create archivists, preservationist, curators and conservationist of the archival records (Perti, 1987). Since the NAI holds records that has legal sanctity in any court of law, the functions of NAI are backed by a legal system that has evolved parallelly with it. The notification under the title Historical Records Rules was formulated in 1970. By 1982, all non-current records were given access to any adult Indian Citizen defined by the Constitution of India. The Public Records Act of 1993 gave legal accession of records to NAI of Central Government Offices, PSUs, Union Territory administration, statutory bodies, commissions and corporation. The Public Records Rule of 1997 further strengthened the legal accession and management of NAI.

The fifth stage of development was marked by the process of digitisation of records. Many projects were taken to document and conserve, what may have been lost otherwise in various states. For instance, the government of Uttar Pradesh gave financial assistance for the documentation of the local and regional records pertaining to the Revolt of 1857. One of the prominent historians involved in this mammoth's task was S.A.A Rizvi. This project could document several such pivotal pieces of the event of revolt that would have been lost otherwise. For instance, Queen Victoria's proclamation of 1857 that transferred the power into the hands of the Crown was a piece of archival records under British India. However, very few knew that Begum Hazrat Mahal, the queen of Awadh, who was sent to a forced asylum to Nepal after the revolt wrote point by point rebuttal of this proclamation. Since the rebuttal was almost lost in the Urdu documents, this project was able to revive it from oblivion. Many weekly, monthly and bi-annual magazines and papers in regional languages were preserved in the form of several projects of NAI. The case in point is the famous Urdu paper *Jam-i-Jahan-Numa,* that has been preserved by NAI whose cataloguing is awaited. In the 125th year of NAI, i.e., 2017 NAI launched its e-portal *Abhilekh Patal*. This marks the beginning of digital accession of the millions of records kept at the archives. A joint partnership with the Ministry of Communication and Information Technology is helping the digitisation process that is regulated by the Centre for Development of Advance Computing (C-DAC). The history and development of NAI that has its beginning in colonial legacy is moving towards a more people-oriented and research friendly structure. However, a lot of efforts are required to make great leaps in that direction.

THE 'ENEMIES' OF RECORDS

Most part of the expenditure of NAI is spent in the preservation of the records and artefacts that they house. Preservation differs from the general understanding of the term – it has to be preserved in a way that it could be used as well. The dual attribute that these institutions have to manage makes both-keeping and preserving on the one hand and showcasing and physical contact on the other, equally important.

Preservation is required from nature – dust, light, fire, water, heat, time, atmospheric gases, fungi, vermin, rodents; and humans. These problems are more acute because India, geographically speaking, falls in the tropical zone and so it experiences extremes of all climate. The records are therefore destined to perish and the primary role of an archivist and curator is to prolong it as far as possible. A record kept at NAI is principally made of paper, palm leaf, parchment, (the seals are made of ink, carbon, pencil wax, and typewriter ribbon),

cloth, leather, photographic film, sound recording and prints. A simple fire can turn them into ashes; "Acts of God" like earthquakes and lightning or man-made wars and bombing can destroy these records in a fraction of a second and so it is beyond archivist's or curator's area of expertise (Ghosh, 2012). Thence, the enemies of records which an archivist and a curator prepare themselves against are dust, light, heat, time, atmospheric gases, fungi, vermin, rodents and humans (Ghosh, 2012). One such initiative post-Independence was taken up in 1985, under the aegis of South and West Asian Regional Branch of the International Council on Archives (SWARBICA) with NAI, an international seminar was held on "Conservation of Traditional Records – Papers and Allied Materials" from 16th-19th December at Vigyan Bhawan, New Delhi. Foreign archivists from Australia, Nepal, Iran, Sri-Lanka and Pakistan also participated besides NAI and other major state and regional archives of India.

PRE-INDEPENDENCE DEVELOPMENTS AND RESEARCHES

The Indian Historical Records Commission (IHRC) was set up in 1919 by the Government of British-India. It marked the first official attempt to preserve records that were of permanent value. With the help of government funding, J. J. Sudborough and M. M. Mehta undertook the study *The Perishing of Paper in Indian Libraries* in 1920s. In their study they concluded that the paper and ink used should be acid-free and all those records which are important for permanent keeping should be transferred onto them and must be kept in an air-conditioned room. The National Bureau of Standards, Washington D.C (US) had concluded that optimal benefit is obtained when the room is maintained at a temperature of 80 Fahrenheit and the relative humidity is maintained at 50 per cent (Shahani & Wilson, 1987). The use of air-conditioning rooms also had other advantages. It helped in neutralising atmospheric gases and keeping the dust out. Back in the days of the Raj when the steam engines were in vogue and the coal and oil fuelled factories in towns vented out gases through the chimneys adversely affecting the records (Sudborough & Mehta, 1920). The most dangerous among the gases was Sulphur Dioxide (SO_2) whose dilution to even 0.5 to 1 per cent in the air was readily absorbed by the paper fibers. The gas then combined with the oxygen and moisture present in the air would produce Sulphuric acid which affects the cellulose fibre and consequently destroys the fibre structure of the paper (Sudborough & Mehta, 1920).

$$2SO_2(g)+O_2(g)+2H_2O(l)\rightarrow 2H_2SO_4$$
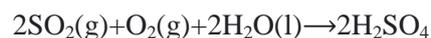
With time the increase in the amount of sulphuric acid would accelerate the effect on papers. Thus, freeing the air from the sulphur dioxide was an essential part of the preservation of records. The air-condition system would cut out the supply of outer air in the repository room and a regulated air is pumped into the room through the spray chambers of the air-condition where chilled water is used for controlling the moisture in the room and when treated with alkaline solutions like Soda ash (Na_2CO_3), Potassium dichromate ($K_2Cr_2O_7$) and Sodium silicate (Na_2SiO_3) effectively oxidises the air and removes sulphur dioxide from it. The alkaline wash also removed a large proportion of the dust in the incoming room. However, owing to the Great Depression of 1929 and its prolonged effect in the 1930s on India and the subsequent call for the World War II, derailed the process until 1940s. The scientific preservation to be put to practice had to wait for two decades (Sudborough & Mehta, 1920).

It was one such India specific study that relieved archivists and preservationists from a lot of confusion that they had in those days. For instance, their study revealed that a paper is less susceptible to 'perishing' if it has more than 70 per cent fibre, not more than 2 per cent rosin with normal acidity of pure alum and not more than 10 per cent of total mineral matter (Table 1). In fact, the study gave scientific explanation to why the old medieval books, *insha* and *firmans* were less susceptible to perishing than the books that were written quarter of a century ago in the beginning of the twentieth century.

Table 1: Comparative composition in percentage of a sound and a perishable paper finding on books across libraries of India, US & Britain in 1920

Material	Sound/ Perfect Condition (In per cent)	Distinctly Perished or quite brittle (In per cent)
Cotton	51	38
Flax	40	36
Flax and Cotton	38	40
Esparto	18	64

Source: (Sudborough & Mehta, 1920)

Esparto grass was first introduced in 1860, while the use of straw in making paper had begun from 1851 onwards. The study revealed that Esparto and straw are free from gelatine, a material that binds the fibre in the paper and provides tensile strength to the structure (Morris, 1898). The printing of books shifted to straw pulp papers in 1851 and by 1860 the esparto grass became a regular component (Table 2). It was cheaper than cotton and flax however its shelf life was mostly seventy years (Perti, 1987). Since the medieval paper makers didn't use esparto or straw or bamboo the shelf life of those records survived the test of time, unlike those papers that were produced post-1860s (Sudborough & Mehta, 1920). Perhaps this is one of the finest examples of modernisation and technology innovation having disastrous effect.
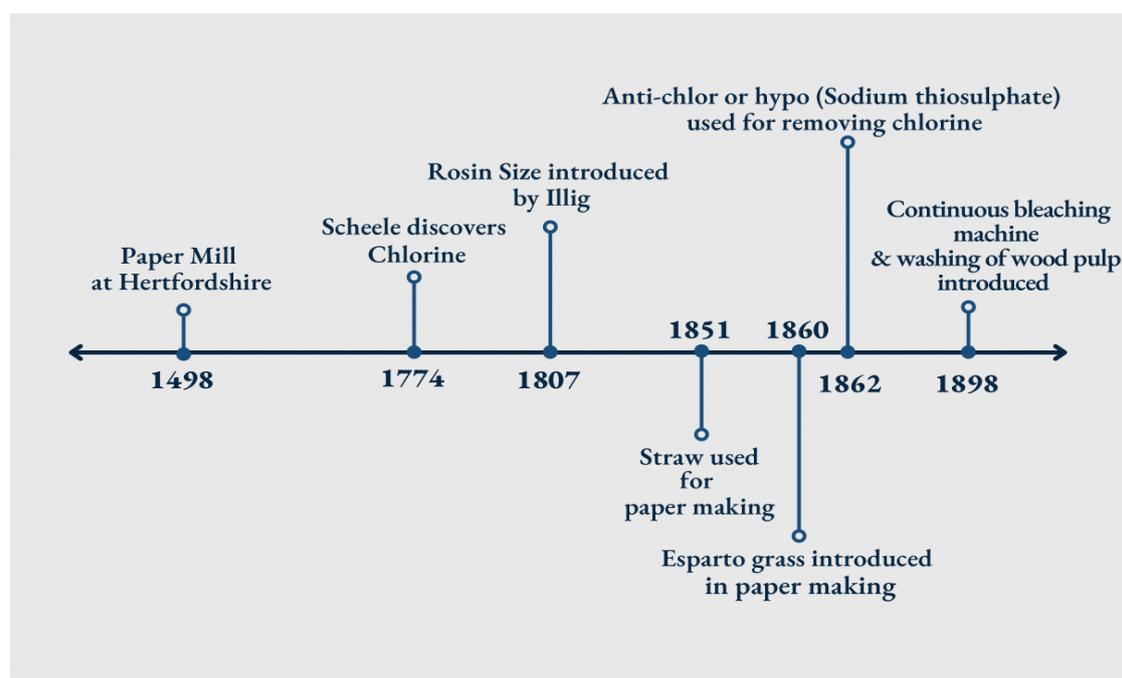

Figure 1: Timeline of the major developments in the paper making industry in last six centuries before the first scientific study of 1920

TECHNIQUES, METHODS AND DEVELOPMENTS POST-INDEPENDENCE

Post-World War II, the IHRC began the first programme for the restoration of the records on the basis of scientific technologies that were practised in France, Germany, Britain and

America. A Research Laboratory was established for this purpose at the Imperial Record Department that was later renamed National Archives of India (NAI). Post-Independence, the IHRC started a Post-War Development Programme for NAI in 1948 whose objectives included air-conditioned rooms, usage of vacuum fumigation technique and adoption of lamination of weak and fragile records. The laminating hydraulic vacuum fumigation vault and air-conditioning unit were imported from USA and Canada respectively. In 1950, NAI introduced a mechanical document-restoration programme. The first major breakthrough of the Research Laboratory suited for the Indian conditions came in the form of development of solvent lamination technique (NAI Report, 1952). Since this technique was a cold press technique it replaced the high pressure and heat method used in the mechanised lamination process. Cutting of heat and high pressure, the two enemies of record, marked the first step towards a successful archiving system in India. By the 1960s, this technique was in vogue for preserving paper documents across all major archives and libraries of the world.

The study conducted by J. J. Sudborough and M. M Mehta (1920) was implemented finally with the launch of a new programme for formulating Standards for "Paper for Permanent Records", "Permanent Writing Ink" and other connected concerns regarding the usage of material in collaboration with Indian Standards Institution. The programme bore fruits for restorers when they were able to develop a new variety of hand-made paper and the very fine silk gauze (chiffon) for repairing the document. The Forest Research Institute, Dehradun successfully created a high-grade tissue paper that was to help the archivists in restorations (Tucker, 2012). The other material required for restoration, the cellulose acetate foil, was expensive. The issue of availability, accessibility and affordability of cellulose acetate foil made archivists look for alternatives, and that, led them to collaborate with the Jewish National Library, Israel, Archives in Austria and Federal Republic of Germany and learn from them the leaf casting process technique.

Preservation can delay the decay however it cannot reverse or stop the process completely. The methods and technologies that were either imported or created through various programmes to cater to the preservation process required painstaking commitment, trained and skilful people and their regular engagement with refresher and re-orientation workshops. It necessitated funds and permanent arrangements in the repositories of records – and both could hardly be managed by the NAI let alone the plight of regional and the state archives. As mentioned, putting out the air-conditioning system was delayed by almost 40 years even after the risks were known to the incumbent directors and chairs. Most of the regional centres had to depend on make shift arrangements and whatever month of the year one visited, the building or the system required repair of something or the other. The famous National Library, Kolkata that was housed in the 200 years old building, now called Bhasa Bhawan, since 2005 was in news because of the destruction of more than 20,000 rare archival records. The destruction could have been avoided if the maintenance of the ceiling that costed ☐ 148 crores in 2005 would have been done with some sense of the requirement of the building and employment of skilful staff who are trained to take care of the records. The state of denial of the top officials of the library, including the Director, can be gauged from the fact that Bhasa Bhawan had a broken back door, no security, leakage in the AC duct from where the waterdrops would directly fall on the records. Among many important records a rare newspaper collection of the colonial era *Anglo-Indian Recorder* was completely destroyed.

Table 2: Financial Outlays on Art, Culture, Library, Archives, Museum Informatics, Book Production and Language Development from I to VIII Five Year Plan

S.No.	Year Plan	☐ in Crores	
		Outlay	**Expenditure**
1	I (1951-56)	-	*
2	II (1956-61)	4.00	3.00
3	III (1961-66)	10.00	7.00
4	IV (1969-74)	13.00	12.00
5	V (1974-80)	37.00	28.00
6	VI (1980-85)	84.00	115.63
7	VII (1985-90)	482.00	451.00
8	VIII (1992-97)	802.69	#

Source: Report of the Steering Committee for Formulation of Ninth Five Year Plan (1997-2002) on Art and Culture Libraries and Informatics, Language Development and Book Promotion, 1997

*Not available sector wise   *#Central/State actual figures not available*

The NAI building required to be planned scientifically and after much derailment and delay at the hands of the colonial bureaucratic machinery it finally got designed in collaboration with Indian Standards Institution – "Indian Standards: 2663: 1977 – Code of Practice Relating to Primary Elements in the Design of Buildings of Archives" was formulated (NAI Report, 1952).

A scientifically planned building has mechanised muniment rooms keeping in mind the air-conditioning and cooling system on the one hand and humidity control system on the other hand with a proper electricity panel system that does not cause fire. An archival building therefore requires much more planning than any ordinary building. The safety measures against fire, calamities like flood and earthquake are also important aspects of planning. The "act of God" may not be stopped but the affects can be controlled. Indigenously invented smoke alarms system coupled with automatic gas sprinklers like Halon and Carbon Dioxide installation is thus required. If one looks at the flooring of the archive it is also very interesting. Usage of wooden flooring is a generally accepted as a norm from the colonial age. The wood of Sal tree was most favoured amongst the others because it dried without cracking or losing shape, was much lighter and yet 65 per cent harder than all wood varieties used in constructional works, easy to work on by tools, was anti-insecticidal attack and most importantly fire resistant. By the first quarter of the nineteenth century the British Navy had replaced their oak variety ships with Indian Sal woods. It increased the shelf life of a ship in the saline waters of the oceans from 12 to 35 years. The Sal wood was therefore the first choice when it came to archival flooring. The second choice was Deodar, however, due to its distance from the transportation routes in the Kumaon belt this variety remained less desired due to inaccessibility. The variety of tree which was never used for this purpose was Chir, as it produced resin which is highly inflammable and is one of the most common causes of forest fires (Robertson, 1936).

Another enemy of records are the insects and vermin and so a planned fumigation mechanism becomes an important aspect of preservation. The NAI used thymol in wooden rooms and Para dichlorobenzene in steel vaulted rooms (NAI Report, 1952). A vacuum fumigation chamber was also installed at NAI were Ethylene dioxide and Carbon dioxide solutions were used (NAI Report, 1952). However, owing to disastrous effects on the health of the staff the usage of Ethylene dioxide was stopped and was gradually replaced by Methyl bromide (Perti, 1987). Although it is too to be handled with caution thus making the custodian of an archive at high risk, if not skilled and trained.

The training and locating professionals and skilled craftsmen were always a problem in a country obsessed with a sense of supremacy of collar job orientation. To reduce the problem of shortage of manpower The School of Archival Studies, NAI introduced two diploma courses in 1980, namely – "Conservation of Documentary Archives and Library Materials" and "Servicing and Repair of Records". The syllabus and the model of the courses were designed by National Research Laboratory for Conservation of Cultural Property and the National Museum. Until many diploma courses have been launched by NAI and it undertakes the skill development workshops for the young professionals who want to work in library sciences and archive management – a field which still remains highly under-explored by the youth of the country.

WHEN FUTURE MEETS THE PAST: DIGITISING THE RECORDS

In order to restore the most fragile records, the method used is Digitisation. Gradually all the records are being digitised across the major archives of the world. Digitisation that includes photography, audio recording, micro-filming gives perpetual lease of life to documents that would be lost one day. However, contrary to the general belief, digital archiving of records is much more susceptible to permanent loss than the physical method of archiving system (Choudhury, 2004). A digital record is prone to virus, spyware, malware and corrupt internal or external drive. It requires further training and meticulous preservation and record saving understanding, otherwise the records would become obsolete. Every age has transformed itself through their sense of technology. And we have moved from what we may refer to analog data on clay terracotta seals, stones, ceramic, bark leaves and paper to digital methods (Jantz & Giarlo, 2005). The twentieth century technology revolution brought information handling to the archives as well and with that a new age record preservation method developed that was way faster, easier and made gradually cheaper.

Table 3: Evolution of conservation media and their life expectancy

Medium Type	Data Medium	Age/Year of Invention	Ideal Expected Life Expectancy of Medium
Analog	Clay/Stone Tablets	8000 BCE	>4000 years
Analog	Pigment on Paper	3500 BCE	>2000 years
Analog	Oil on Paper	600 CE	Centuries
Analog	Silver Halide (Black & White) Photographic Film	1820	>100 years
Analog	Modern Colour Photographic Films	1860	Decades
Analog	Phonograph Record	1877	>120 years
Analog & Digital	Magnetic Tape (VCR)	1928	Decades
Analog & Digital	Magnetic Disk (Floppy)	1950	3-20 years
Analog & Digital	Polycarbonate Optical WORM Disk (CD)	1990	5-20 years

Source: (Conway, 1997)

Table 3 well describes that the digital method of recording has less life expectancy than analog systems. Despite that, the digital method is used across the major libraries of the world. The reason is the storage capacity and less involvement of physical spaces including human interference. That can be understood through Table 4. A lot of encoding techniques have developed particularly in the last two decades that has improved digitisation manifolds.

Table 4: Increased density means increased capacity that gives more storage capacity for record keeping

Medium Type	Audio Data Medium	Recording Capacity (minutes per square meter)
Analog	6.35 mm wide 190.5 mm per second Reel to reel magnetic tape	13.8
Analog	33-1/3 RPM vinyl album	411
Analog	90- minutes audio cassette	184
Digital	Compact Disk	8,060
Digital	60-meter digital audio tape	500
Digital	2 Terabyte 89-milimeter hard disk	4,680,000

Source: (Conway, 1997)

NATIONAL MISSION FOR MANUSCRIPTS (NMM)

The inception of National Mission for Manuscripts (NMM) in 2013 was a positive outreach programme with regard to comprisal of 49 Manuscript Conservation Centers (MCCs) and 54 Manuscript Resource Centres (MCRs). The methods and technologies pertaining to documentation, scientific cataloguing, capacity building, digitisation and various publication programmes complemented the scheme besides the establishment of The National Mission for Manuscripts (NAMAMI, n.d.), an autonomous organisation under Ministry of Culture, Government of India. The former, while it focuses on the methods of collating, collecting and preservation, the latter aims at locating such records, enhance its accessibility, awareness and educational organising workshops. The Mission initiated in February 2003, by the Ministry of Tourism and Culture, Government of India and Indira Gandhi National Centre for the Arts (IGNCA), is the nodal agency for the execution of this project. Collaborations with Indological Institutes like BORI, Pune; libraries like NAI; universities like Br. Ambedkar Central Library, JNU; non-government organisations like Nagari Pracharini Sabha, Benaras is a pivotal aspect of outreach programme under this project (NAMAMI, n.d.).

The Table 5 depicts, so far, zone wise distribution of manuscripts i.e., North, South, East, West and Central. It includes both the States and the Union Territories.

Table 5: Distribution of manuscripts and MRCs across various zones

Zones	Number of States & UTs included	No. of Manuscript Records Centres (MRCs)	MRCs in per cent	No. of Manuscripts	Per cent of manuscripts
North	8 (6 states + 2 UTs)	17	31.48	421409	30.53
South	5 (4 states + 1 UT)	15	27.78	374307	27.12
East	6	11	20.37	250124	18.12
West	3	8	14.81	255555	18.52
Central	1	3	5.56	78810	5.71
Total	23	54	100.0	1380205	100.0

Source: (Arora, 2004)

Cataloguing is one of the major activities and objectives of the Mission. The Mission has evolved three standard formats - Questionnaire, CAT-CAT and Manus (Ahmed, 2009). The objective of questionnaire is to prepare a National Directory of Manuscript repositories, whereas CAT-CAT is a catalogue of catalogues (compilation of published catalogues by different institutions) and Manus deals with the data sheets of manuscripts with detailed information on each manuscript such as title, author, commentary, language, script, name of the repository, name of the scribe (if available), date of the manuscript number of folios and pages and other such relevant details (Ahmed, 2009).

NMM is quite a success story, since they have been able to digitise a total of 55,255 manuscripts across 11 archival institutions across India divided in zones (Arora, 2009). The National Mission for manuscripts has taken the initiative to nominate Indian Manuscripts for inclusion in UNESCO Memory of the World Register (Ahmed, 2009). Under this programme, UNESCO provides recognition to the most valuable documentary heritage of the world and facilitates its preservation and provides universal access to it (Ahmed, 2009). The Shaiva manuscripts in Pondicherry were awarded the status of UNESCO's Memory of the World in 2005; whereas "Gita Govinda" and "Chikitsha Manjari" Manuscripts from Odisha State Museum, Bhubaneswar, Odisha achieved the same status being included in the 'Memory of the World' of UNESCO in 2005 (Ahmed, 2009).

CONCLUSION

The process of knowledge conservation went hand in glove with the coloniality of the knowledge creation. The archive not merely saved documents, rather it created the viewpoint as to how one perceived India. Thence, the politics of archiving was quite imperialistic in approach. To add to the positives, the scientific endeavour promoted at the wake of industrial capitalisation of the imperial world paved way for preservation and documentation; and the foundation was laid with the inception of first colonial archives of Calcutta. The preservation was more than what it looked to a general public. It was more scientific than it looked and the burden of the safe keeping of records had to be shouldered by the skilled and technically sound people who not only understood the pivotality of the records but also the responsibility they shouldered. At the crossroads of what to preserve and how to preserve, many outliers became generalisations. The colonial bureaucratic set-up had structured the legacy of an independent nation on occidental models of record keeping thus defining the trajectory of the future. In the last couple of decades a lot more have gone into preserving the popular culture and regional histories in order to conserve and connect with the micro-histories of the country, and that has paved the way for unearthing many references to the pasts that may have been lost. The digitalisation and conception of the idea of online archiving has made connecting with one's collective past available, accessible and affordable. As a nation we must be conscious of our heritage and the importance of its safe keeping – after all the records do not only tell us about our past but it lays the foundation of the future before us which is carved from relics of the material culture and the philosophies that are hidden to be unearthed in such records or are waiting to be added on as records.

CONFLICT OF INTEREST

The author declares that there is no conflict of interest.

ACKNOWLEDGEMENT

SOURCE OF FUNDING

Nil

REFERENCES

Ahmed, F. (2009, February 25-27). Digitization as a Means of Preservation of Manuscripts: Case study of Osmania University Library (conference presentation).7th International CALIBER, INFLIBNET Centre, Ahmedabad, 93- 97. Retrieved from: https://caliber.inflibnet.ac.in/caliber2009/CaliberPDF/12.pdf

Arora, J. (2004). Network-enabled digitized collection at the Central library, IIT Delhi, The International Information & Library Review, *36 (1)*: 1-11. Retrieved from: https://doi.org/10.1016/j.iilr.2003.08.001

Aziz, S. (2017). National Archives of India: The Colonisation of Knowledge and Politics of Preservation. Economic & Political Weekly, LII (50):33-39.

Barrier, N. G. (Ed.). (1981). *The Census of British India*. Delhi: Manohar.

Barringer, T., & Flynn, T. (Eds.). (1998). *Colonialism and the Object*. London: Routledge.

Basu, P. (1960). *Archives and Records: What are they?* Delhi: Ministry of Education, GOI.

Bhattacharya, N. (2019). *The Great Agrarian Conquest: The Colonial Reshaping of the Rural World*. New Delhi: Permanent Black.

Bhattacharya, S. (2019). *Archiving the Raj*. New Delhi: Oxford University Press.

Brooks, P. C. (1949). *Public Records Management*. Illinois: Public Administration Services.

Chakravorti, S. (1949). Preservation of Records. *The Indian Listener*, XIV (16), 5 – 12.

Chatterjee, P., Thakurta, T. G., & Kar, B. (2014). *New Cultural Histories of India: Materiality and Practices*. New Delhi: Oxford University Press.

Choudhury, G. G. (2004). *Access to Information in Digital Libraries: Users and Digital Divide* (conference presentation). TERI-ICDL: International Conference on Digital Libraries: Knowledge Creation, Preservation, Access and Management, Delhi, 24-27.

Cohn, B. S. (1996). *Colonialism and Its Forms of Knowledge: The British in India*. Princeton: Princeton University Press.

Conway, P. (1997). Preservation in digital world. Microform and Imaging Review, 25(4): 156-171

Filliozat, J. (1950). Archives and Their Make-up in Ancient India and the Countries with Indian Culture. Indian Archives, 4(2):126–35.

Foucault, M. (1988). *Power Knowledge*. New York: Random House.

Ghosh, R. (2012). Palm leaf Manuscripts Conservation - A study. Global Research Methodology Journal, Volume 4. Retrieved from: http://grmgrlaranya.org/Journals/4th %20issue/PALM%20LEAF%20MANUSCRIPTS%20CONSERVATION.pdf

Habib, I. (2006, November 20). Indian Historians Are Not Lazy, *Outlook*. Retrieved from: https://www.outlookindia.com/magazine/story/indian-historians-are-not-lazy/233147

Hamilton, C. (1791). *Hedaya*: *A Commentary on the Mussulman Laws* (reprint). (Shaikh Burhan-ad-Deen Alee Marghinani, Trans.), (Original work published in 1152 CE in Arabic). Karachi, Pakistan: Dar-ul Ishat Publications.

Hunter, W. W. (1871). *The Indian Mussulmans* (reprint). Lahore: Premier Book House.

Jantz, R., & Giarlo, M. J. (2005). Architecture and Technology for Trusted Digital Repositories. *D-Lib Magazine*. 11 (6). Retrieved from: https://www.dlib.org/dlib/june05/ jantz/06jantz.html

Karp, I., & Levine, D. S. (Eds.). (1991). *Exhibiting Culture*. Washington: Smithsonian Institution Press.

Lal, R. (2011). The Lure of the Archive: New Perspectives from South Asia. *Feminist Studies*, 37 (1). 93 -110. Retrieved from: http://www.jstor.org/stable/23069885

Mantena, R. (2007). The Question of History in Pre-colonial India. *History and Theory*, 46 (3). 399-401. Retrieved from: https://doi.org/10.1111/j.1468-2303.2007.00417.x

Morris, D. (1898). Report of Committee on the Deterioration of Paper". *The Journal of the Society of Arts,* 46 (2387). 785 - 796. Retrieved from: http://www.jstor.org/stable/41334405.

National Archives of India Report 1948-1952. *A Quinquennial Review*. 1-57. Retrieved from: http://www.nationalarchives.nic.in/writereaddata/html_en_files/html/NAI1948-1952.pdf

National Mission for Manuscripts. (n.d.). *Digitization – Our Programmes*. Retrieved from: https://namami.gov.in/our-programmes

Panikkar, K N. (2003). Colonialism, Culture and Revivalism. *Social Scientist*, 31 (1–2). 4 -7. Retrieved from: https://doi.org/10.2307/3518287

Perti, R. K. (Ed.). (1987). *Conservation of Traditional Records: Paper and Allied Material*. New Delhi: Navchetan Press Pvt. Ltd. Retrieved from: http://nationalarchives.nic.in/writereaddata/html_en_files/html/23.Conservation traditional records paper allied Matrials.pdf

Report of the Steering Committee for Formulation of Ninth Five Year Plan (1997-2002) on Art and Culture Libraries and Informatics, Language Development and Book Promotion. (1997). Education Division, Planning Commission, Government of India. Retrieved from: http://14.139.60.153/bitstream/123456789/238/1/Report-Committee Formulatio Ninth201997-.pdf

Robertson, F. C. F. (1936). *Our Forests*. United Province, India: Superintendent, Printing and Stationery.

Said, E. W. (2003). *Orientalism*. London: Penguin Classics.

Shahani, C. J., & Wilson, K. W. (1987). Preservation of Libraries and archives. *American Scientist*, 75 (3), 240 - 51. Retrieved from: http://www.jstor.org/stable/27854604

Sudborough, J. J., & Mehta, M. M. (1920). The Perishing of Paper in Indian Libraries. *Journal of the Indian Institute of Science*, 3, 119 – 226.

Thakurta, T. G. (2004). *Monuments, Objects, Histories: Institutions of Art in Colonial and Post-Colonial India*. Columbia University Press. Retrieved from: https://doi.org/10.7312/guha12998

Tucker, R. P. (2012). *A Forest History of India*. New Delhi: Sage.

Yale, E. (2015). The History of the Archives: The State of the Discipline. Book History, 18, 332-359. Retrieved from: http://www.jstor.org/stable/43956377