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SAARC Culture is an annual research journal of the SAARC Cultural Centre, Colombo. It seeks to provide a platform to the academics, practitioners, policy makers and other stakeholders of various dimensions of culture of the South Asian region (including Afghanistan, Bangladesh, Bhutan, India, Nepal, Maldives, Pakistan and Sri Lanka) to present their research findings and to debate on issues of mutual and common interests.

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From the Editor's Desk

Often referred to as a 'salad bowl' of cultures, South Asia is home to an array of diverse cultures, traditions, languages, religions and rituals, all of which at once contribute to vivid distinctions and an identity unique to the region. The peculiarities of diverse cultures are all connected by a common thread that is the glorious ancient history the region boasts of, dating back to 3000 BCE.

SAARC Culture, the annual journal of the SAARC Cultural Centre, is one of many attempts of the Centre to explore the cultural heritage of the region and to celebrate the rich and thriving civilisation the region is heir to. The journal provides regional intellectuals a platform to debate and discuss issues of common interest pertaining to culture.

The first two issues of the journal ran along themes of 'Rituals, Ethics and Societal Stability in the SAARC Region' (Vol. 1: 2010), and 'Diminishing Cultures in the SAARC Region' (Vol. 2: 2011). From the third issue onwards, SAARC Culture catering to an even wider readership has focused on various aspects and dimensions of South Asian culture. This volume, the fifth in the series, too, therefore, is non-thematic. The papers included in this volume are divided into two main categories. The first part includes papers covering a range of subjects related to traditional knowledge, literature, art, music, oral traditions and heritage of South Asia, while the second half consists of select papers presented at the SAARC International Conference on Development of Archives in South Asia: 'The Future of Archives and Archives of the Future' held in Colombo, Sri Lanka from 3-5 December 2013 and strictly pertains to the field of archives.

A journal is, as is very well-known, the effort of many individuals, without whose tireless efforts and constant support and encouragement, would remain a mere concept. I would, therefore, like to thank all the contributors for sharing their ideas and opinions through the papers included in this journal. I earnestly hope that this volume of the journal too would be warmly welcomed by the readers like the previous ones. I also take this opportunity to invite other interested scholars to contribute papers to the future issues of this journal.

G.L.W. Samarasinghe,

General Editor, *SAARC Culture* and Director, SAARC Cultural Centre, Colombo.

Patterning Storytelling: Oral Traditions and History in Modern Animation Media in India

Lopamudra Maitra Bajpai

Abstract

Modern animation media in India has come a long way, especially over the last decade to make its presence felt in the global sphere of childrens' entertainment as well as education. As the process repeats, packages and delivers the age-old art of storytelling in myriad new formats, it also helps to highlight an important aspect of non-written history, oral traditions.

Various print-publishing houses and audio-visual broadcasting networks are aiding in the process of weaving folk art and oral traditions to 'tell a story for the young audiences.' In the process, it helps to preserve and conserve an important part of intangible heritage. Though often criticised with allegations of distorting and altering patterns of history and cultural symbols, the reach and influence of animation media for children however, cannot be belittled in the modern global world of intra and intercultural interactions.

An ode to the 100 years of Indian cinema, this paper is an attempt to understand the transformations and reflections of oral traditions and folk culture and their influences and survival in the modern age of animation media in India. The paper looks into popular audio-visual examples from television as well as New Media, including CDs, DVDs and the internet produced over the last five years in India. The paper explores the topic with the help of the theory of Three Worlds of Experiences of the author

that attempts to explain the art of storytelling and communication in modern media for children.

"The king of good forces, Barong fights the evil forces of the queen of underworld, Rangda when she wreaks havoc on the city of Bali (Indonesia)" (*Chhota Bheem and the Throne of Bali* 2013) and thus, the storyline of a recent animation movie for children in India, kept the young audience enthralled for nearly two hours during the summer vacation of 2013.

The above storyline speaks of an evil force which is also a child-devouring, queen of ghouls and witches, Rangda who brings down tragedy in the kingdom of Bali. A character from the animation movie, who is also a household name and an immensely popular animation 'hero' for children in India-Chhota Bheem (Fig. 1), joins hands with the royal family of Bali and the good force of Barong to defeat the evil forces and bring back peace to the land. This animation movie - Chhota Bheem and the Throne of Bali (released on 03 May 2013)¹ based on the popular animation television series, Chhota Bheem by Green Gold Animation, was inspired by a popular folktale from Bali, Indonesia. The film very cleverly wove a pattern of storytelling that utilised not only regional folktales, but also folk art (for instance the significant display of the popular shadow puppetry of Indonesia, Wayang Kulit).

The trend in animation media in India has been fast changing, especially over the last ten years and so has the art of storytelling through it. It has come a long way to make its presence felt in the global sphere of childrens' entertainment as well as education. As the process repeats, packages and delivers the age-old art of storytelling in myriad new formats, it also helps to highlight an important aspect of non-written history, oral traditions. Thus, today, we have immensely popular

animation series made into television shows as well as feature films which effectively draws inspiration from not only various stories of mythology from the Indian palate, but from various other countries of the world as well. In the process, the art of storytelling, utilising oral traditions is remoulded and produced in a new format for a global audience.



Figure 1: Chhota Bheem and the Throne of Bali- An Animation Show where the Name of the Lead Character is Inspired by the Character of Bheema from the Indian Epic, The Mahabharata. Image Courtesy: http://moviegalleri.net/2013/04/chhota-bheem-and-the-throne-of-bali-animation-movie-wallpapers.html?pid=460975

Despite severe criticism from conservative critics around the globe regarding shortcomings of the efforts of conservation and preservation of intangible cultural heritage, the public needs to take notice of the changing patterns of our socio-cultural texture as changes are omnipresent and efforts at tackling those would not be fruitful without public awareness. This paper is an attempt to understand the important changes that have taken place in modern animation media for children in India over the last decade that includes a significant change in the pattern of storytelling. The paper also looks into how the medium of

animation, borrowing heavily from Indian mythology and oral traditions, has infused a new guise to the age-old art of storytelling. It further attempts to justify the use of folklore in modern animation media as a learning process for the young minds as is explained in the theory of 'Three Worlds of Experiences' of the author in 2013. The research of the paper is based on observation of a list of animation movies and television shows for children in India over the last ten years.

Weaving History and Oral Traditions in Animation

An important part of oral traditions across the globe is storytelling. This not only includes significant parts of fables, folklore and legends, but also rhymes, poems and riddles. In India, folklore forms an important aspect of storytelling and incorporates both popular mainstream as well as regional folklore of the sub-continent. However, this division should not be strictly considered and are merely 'analytical categories' (Datta 2002: 91-2) and "the lines dividing the two categories are not always as clear, and often merge into one another" (Datta 2002: 91-2). Thus, folklore in India can primarily be divided into two basic categories (Datta 2002: 94):

- One that consists particularly of myths of the Vedic and Puranic lore- these have been referred to as 'classical myths'.
- One that consists of myths of various tribal lore across India which is also called the regional lore. The present paper will refer to this category as regional lore instead of tribal lore.²

It is also important to mention that these two categories, which are evident across India, have been thought to designate particular messages:

Often, the myths of the 'classical' or literary category have been designated as 'higher' myths and those of the oral and folk category as 'lower' myths. The 'higher' myths, representing sophisticated literary and artistic formulations are said to be more artificial in comparison to the 'lower' myths, which in spite of being artistic expressions, are objects of down-to-earth faith and belief. (Datta 2002: 94)

Though the division is not water-tight, various folktales and characters within specific tales refer to these two basic divisions of folklore. For the lay audience in India, folktales and folklore belong to two basic groups i.e. the mainstream popular mythology (the two Indian epics, *The Ramayana* and *The Mahabharata* and other well-known texts from ancient India such as *The Jataka Tales* and *Pancatanra*) and lesser known regional folklore.

The animation industry in India started functioning with this basic understanding of the Indian socio-cultural fabric. Popular mythology and folklore acted as the main forms of entertainment and education of oral traditions for centuries. Armed with this understanding, the animation industry in India started with a basic emphasis on this particular theme about three and a half decades ago in 1974.

The very first animation movie was made by Doordarshan in 1974 and was popularly known as *Ek Chidiya* (original name *Ek Anek Aur Ekta* or "One, Many, and Unity"). Following very traditional patterns of animation, the movie was released on Doordarshan, the government-owned as well as the only existing

television channel in India at that time. It became very popular among children over the years. In the years that followed India witnessed a different genre gaining popularity among the masses in general and children in particular, mythology. Over the decades, popular demand as well as financial assistance grew for the trend of mythology, folklore and legends and these are being used extensively as direct or indirect influences to format new characters and movies.

Writing to the *Hindu*, S. Aishwarya notes:

Ever since the Indian animation companies began to roll out animated feature films, mythology and epic have been their favourite picks. For over five years, the animation feature film market has been ruled by the chubby Ganesha, rosetinted Krishna or lanky Hanuman who with their supernatural reflexes battle the demons and with their jigs impresses their friends. (Aishwarya 2009: Online)

Explaining the subject matter and the popularity of animations in India she quotes Vijay Paranjpe, Chief Financial Officer of Crest Animation Studios, a popular studio that deals with animation:

Animation films in India do not have a good market at present. They mainly rely on mythological characters, a niche market limiting the films largely to an Indian audience. In Hollywood, over 60 animated films have been made in 10 years and more are on the anvil. (Aishwarya 2009: Online)

And thus, the trend has continued for over a decade, though certain variations have occurred over the years. Yet what remains as the basic trend continues unabated. Thus, the first animation movie to be made completely in India took after a mythological character, *Hanuman* in 2005. The remarkable

popularity of Hanuman inspired many more movies in later years. Sequel of *Ganesha* and its sequels *Dhruv*, *Ghatotkacha*, *Krishna* and *Dashavataara* and the sequel of *Hanuman* are few such movies inspired by various characters from the Indian epics, *The Ramayana* and *The Mahabharata*. What also followed closely was the creation of several television animation shows for children after various characters and stories of *The Ramayana* and *The Mahabharata* including *Krishna*, *Balaram* (**Fig. 2**), *Shiva*, *Parvati* and *Ganesha*.

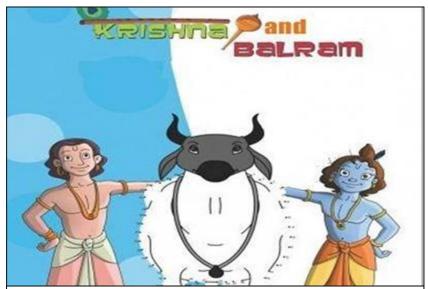


Figure 2: *Krishna and Balram* - Animation Show Inspired by the Characters *Krishna* and *Balaram* from Indian Mythology. Image Courtesy: http://www.in.com/tv/shows/cartoon-network-3/krishna-and-balaram-5340.html

Another popular trend soon followed suit especially over the last five years. This trend witnessed the borrowing of characters from Indian mythology for stories that were the creation of different production houses. Here the main characters had names borrowed from Indian mythology such as *Bheem*, *Arjun*, *Krishna*, *Balaram*, *Radha*, *Shiva*, *Parvati*, *Ganesha*, and *Laxmi*.

As the animation movies for children in India gained popularity over the years and mythology witnessed a comeback in myriad avataars, it reminded a similar set of incidents that established the Indian film industry a hundred years back i.e. the influence of mythology. As the Indian film industry celebrates a centenary of the first show of its movie, Raja Harishchandra back in 1912, the remoulding and production of animation movies have taken a cue from this historical process of mass communication.

When Dhundiraj Govind Phalke (popularly known as Dadasaheb Phalke) went ahead to give shape to his dream in the form of *Raja Harishchandra*, the first silent movie of India, released at the Coronation Cinema in Mumbai in 1912, he observed to follow a trend that he believed would bring success. Inspired by the English movie, 'Life of Christ,' Dadasaheb Phalke imagined a movie with characters from Indian mythology thus, followed his movies such as *Lanka Dahan* and *Krishna Janma* which were based on stories from the Indian epics and the Puranas. These became so popular that they were in circulation for a decade. Phalke also did not care if his topics on Indian mythology did not appeal to a niche section of the audience who considered Hollywood counterparts far superior. He continued to make movies which he believed will be liked by the masses (Mehta 2013: Online).

The popularity of his movies often had people standing up and bowing down in front of the screen as and when any important characters from Indian mythology would appear (Mehta 2013: Online).

Thus in reality, the Indian film industry repeated its beginning in entirety once again with the mushrooming mythological animation movies sweeping across the nation about a decade back. Added to this popularity was the genre of folklore being explored through animation for the first time. Thus movies and television shows and also various New Media including DVDs, CDs and the internet were flooded by inspirational and educational tales from various regions across India. Popular examples of the same are the series of movies of *Krish Trish and Baltiboy* (**Figs. 3 & 4**) made by Children's Film Society of India, short animation movies by National Institute of Design (NID), Ahmedabad, series of animation movies made by the Amar Chitra Katha publishing house and others.



Figure 3: Krish Trish and Baltiboy - Animation Show Inspired by Indian Folklore. Image Courtesy: http://www.cgtantra.com/index.php?option=com_content&task=view &id=502&Itemid=40

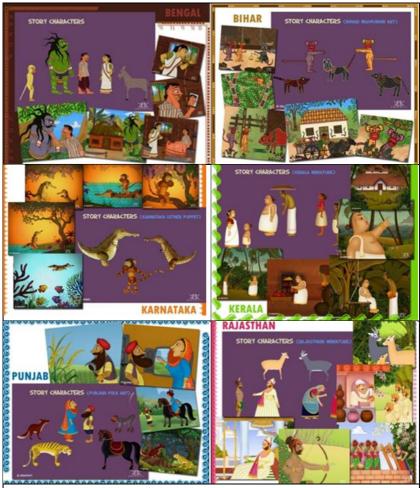


Figure 4: Krish Trish and Baltiboy - Various Forms of Folk Art and Folk Tales used in the Animation Movie- (From Top to Bottom) Patachitra from West Bengal, Madhubani Painting from Bihar, Karnataka Leather Puppets, Miniature Painting from Kerala, Punjabi Folk Art, Rajasthan Miniature Painting. Image Courtesy: http://www.cgtantra.com/index.php?option=com_content&task=view &id=501&Itemid=55

The Theory of the Three Worlds of Experiences

The representation of mythology and folklore over audio-visual media (both mainstream movies as well as animation over the last hundred years in India) is also a reminder of the basic popularity and immediate recollection of and fondness towards stories from oral traditions that one is exposed to as a child and grows up being 'fed' by various elders in the family and outside, which have been later on replaced by graphic novels, television, videos, CDs, DVDs, television shows and movies. As the child grows and learns from these stories, a major factor of communication and storytelling is established. Over the years, with the inclusion of various forms of New Media and publications, there seems to have occurred a change in the mode of communication as well as in the learning experiences these stories provide children with. This is explained below with the theory of 'The Three Worlds of Experiences' of the author (Maitra 2013: 44-5).

The mesmerizing magnificence of folklore lies in its ability to captivate and capture the attention of the listeners and thereby, helping the self to be associated with the lead character. This is closely associated with an aspect of creation of aura with which the self of the listener associates with. Here, I borrow the term, often used to describe a typical genre of painting- Abstract Realism- where the reference to the subject matter of a lore is only the vehicle and not the reason for the stories. I proceed to explain the terms in two simple steps- where the 'abstract' personifies the entire subject or body of the text, situations and circumstances that the folklore narrates and the 'realism' personifies the very subject matterconsisting of the main and supporting characters of

the stories- which can vary from humans and animals to any living objects as well as non-living oneswhoever is rendered a voice and speaks as the characters within the stories. (Maitra 2013: 44-5)

In terms of the knowledge gained by the listener or the child, 'abstract realism' can affect the 'self' of a child in three different methods. In terms of being a learning experience for the child, these methods can be classified as experiences of three different worlds.

The term 'worlds' are used here to denote three different comfort zones that a child encounters as s/he gradually steps out of the house- which is the first comfort zone. Here, the child is the listener or the recipient of the messages and the folklore is the message itself, while communication is the medium-which can be audio, video or audio-visual. (Maitra 2013: 44-5)

The working of 'abstract realism' in folklore and its influence on children as an educational medium can be explained through a diagram (as shown in **Fig. 5**) according to the 'Three Worlds of Experiences' theory.

The lessons learned through folklore, can be broadly divided into three basic 'Worlds of Experiences' in terms of knowledge gained by the listener or the 'self' (the child in the present study). However, at the very beginning, it should also be mentioned that the three divisions are not segregated into watertight compartments and thus, often overlaps with one another. Nevertheless, the focus is to separate the experiences that a child encounters, 'teaching' him/her various 'lessons' about different sets of understandings of the socio-cultural and religious interactions that s/he has in the process of growing up.

Primarily, folklore involved children to deal with two sets of 'worlds'- the 'Inner' and the 'Outer'. As the 'Inner World' taught the behaviour and disciplines and various household duties and responsibilities, the moral responsibilities towards the 'Outer World' taught the child the duties and obligations towards the region outside the family and home. Thus, the household included experiences pertaining to the parents, siblings and other members of the families, teachers, subjects (in case of kings and royalty), relatives, including pets. On the other hand, the other experience included various types of relationships that one encounters while stepping out of a homeincluding fellow pupils, fellow colleagues. shopkeepers, panchayat pradhans villageor headmen, moneylenders, barbers, farmers, singers, vagabonds, royalty, ministers, etc. As the former set of practices formed the inner sanctum of experiences, the remaining set formed the outer section of the sanctum. In between the basic two worlds of experiences, there is the world of 'Immediate Outside'. Comprising peer groups, this is the sanctum that helps to prepare the child as s/he gradually steps out of the primary household and out of the first comfort zone. Primarily, they used to encompass mostly people of the same age-groups who used to act as advisors and confidants in folklore. It is also important to note that often these confidents would be from various socio-economic classes. This was important to deliver a message of social equality for the young listener. (Maitra 2013: 44-5)

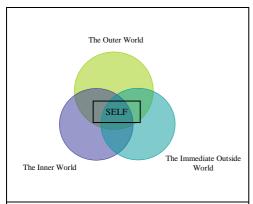


Figure 5: The Three Worlds of Experiences Acting upon the 'Self' of a Child (Maitra 2013: 44-5).

The changes in the mode of communication and the learning experiences resulting from transformation of folktales and mythology into modern audio-visual medium. follows pattern explained in the theory of 'The Three World of Experiences.' increasing With an emphasis on 'Immediate Outside.' the

characters and stories from Indian mythology seem to impart a sense of social need to network and communicate across geographical boundaries. This is most evident as several of the animation movies, which are originally either made in Hindi or English are also translated into other 'most spoken' languages of India, including Tamil, Telugu, Marathi and Bengali. Thus, the 'learning experiences' are emphasised through the peer-group. This is important as the peer group exerts maximum influence as the young mind ventures out of the comfort zone of the household and steps out into the world outside. The initiation and the association with the peer group also renders a degree of comfort that makes the 'learning experience' stress-free, informal and easy. Thus, the character of Chhota Bheem is always seen to be assisted by his troop of friends namely, Jaggu the monkey, Chutki and Raju. Similarly, Krishna and Balaram, Little Ganesha, Hanuman or Ghatotkacha are all assisted by various friends from time to time including animal friends. This also helps to keep the aspect of fables alive through the animation movies, as the animals act and talk like human beings and often impart moral lessons about right choices in life and in critical situations. Thus, the mixture of fables, legends and folktales render a new perspective to the approach of new animation media in India.

Conclusion: New Perspectives for Communication for Children in India

With the significant increase in audio-visual medium over the last 100 years, cinema in India has come a long way. Technological advancements over the last few decades have witnessed a remarkable increase in the animation industry as well. What started as a simple animation film to emphasis the message of 'solidarity' and 'unity in diversity' has flourished to make its mark felt around the globe. Thus, as several animation studios in India help to sketch, draw and finally 'make' many animation movies in collaboration with Hollywood (as is evident from animation movies like *The Ramayana*), Indian mythology and folklore have secured a special place in New Media over the last ten years.

Emphasising on 'new' socio-cultural roles, the characters from Indian mythology are not only transformed, but are often changed through new stories which are solely written for animation movies. Such a phenomenon also has its loopholes as the fear of losing the basic ethos of the story looms large, especially for children who are only exposed to the characters and storylines on New Media. This is also true for children who might be residing and growing up in far off places away from their region, culture and family. For such young minds, the essence of regional culture has a different connotation as against many who reside in the same vicinity and is exposed to the same

throughout life. In such a scenario, often the distortion of facts in the animation movies results in a completely different message being portrayed, one that is synonymous with any other animation movie, video game or graphic novel character.

On the other hand, the process is a reminder of the fact that 'culture is not constant.' Thus, as new stories are moulded, packaged and reproduced in new formats, a whole new genre of storytelling is created to compliment the global reach of each regional folktale. As Chhota Bheem and Krishna display their valour through multifarious activities and adventures which has no resemblance to the actual characters from the Indian epic, The Mahabharata, new methods of storytelling are framed which draws inspiration from the essence of Indian mythology. Portrayal of superheroes through modern animation media in the form of Bheem, Krishna, Balaram, Ganesha, Hanuman, Ghatotkacha, Shiva, Vishnu and others is also a reflection of the essence of cultural continuity. The cognitive resemblance of these characters as saviours and superheroes relates to the very first thought that led to the birth of folklore many thousand years ago. These speak of the anxiety, the uncertainties and apprehensions related to 'time' and 'circumstances' often arising out of deep socio-cultural and religious contexts. Returning to tradition, culture and ethnic identity are also attempts to find a rigid foothold amidst changing circumstances in a global world. Thus, Krishna and Chhota Bheem win over Batman, Superman or Spiderman in all the movie theatres across the nation (according to Box office collection results between May-July 2013).

Weaving new paradigms, animation and mythology in India have found a new voice of expression. Future will decide how this medium which is still in its nascent stage exploring further

possibilities and challenges including facing the wrath of many critics and conservatives, will take shape. Till then, as Bheem and Krishna or the simple village characters from a Krish, Trish and Baltiboy movie that is framed after a regional folktale unravel incidents, the stories from Indian mythology and folklore continue to enthrall thousands across the nation. 'Storytime' finds a new meaning as New Media takes the center stage and the good old days of hearing stories from grandparents is gradually replaced by a narrator and a monologue that describe the adventures and quests of age-old superheroes from Indian mythology. Thus, as Bal or little Ganesha, Krishna, Balaram, Kumbhakarna, Hanuman or Ghatotkacha romps skyscrapers, landscapes or rivers with 'modern-day urban children' speaking English and Hindi with same ease, Indian folklore re-discovers itself through a new medium of expression, weaving new patterns of storytelling and communication in the process.

End Notes

¹Made by Green Gold Animation and distributed by Yash Raj Films on 03 May 2013 in India. (Directed by- Rajiv Chilaka, Produced by- Rajiv Chilaka and Samir Jain, Music- Sunil Kaushik, Studio- Green Gold Animation, Date Released- 03 May 2013, Running Time- 130 minutes, Country- India, Languages - Hindi, Tamil, Telugu, Box Office- Rs 4.65 crores). (Source:

http://en.wikipedia.org/wiki/Chhota_Bheem_and_the_Throne_o f Bali).

²This is primarily because all tribal lore is regional lore, but all regional lore is not tribal lore. Specific considerations like influence of classical lore, technology, migration, etc. act upon

various regional lore to give them a unique shape and character and this is different from tribal lore. On the other hand, tribal lore often consist of the lore of non-literate societies, but regional lore are often the results of juxtaposition of thought process of rural and urban worlds and thus, they do not always represent non-literate societies. Thus, the paper chooses to use the term regional lore and not tribal lore.

References

- Aishwarya, S., "Indian Animation Movies Ready for World Market." *Hindu*, 17 November 2009, Online edn.: http://www.thehindu.com/arts/indian-animation-movies-ready-for-world-market/article49985.ece (last accessed 15 April 2014).
- 'Chhota Bheem and the Throne of Bali Animation Movie Wallpapers', *Moviegalleri*, Online: http://moviegalleri.net/2013/04/chhota-bheem-and-the-throne-of-bali-animation-movie-allpapers.html?pid=460975 (last accessed 12 November 2014).
- 'Chhota Bheem and the Throne of Bali', *Wikipedia*, Online: http://en.wikipedia.org/wiki/Chhota_Bheem_and_the_Thro ne_of_Bali (last accessed 05 April 2014).
- Datta, Bratindranath, Folklore and Historiography, (Chennai, 2002).
- 'Krish Trish & Baltiboy- A Series of Animated Movies Retelling Indian Folklore', *cgtantra*, Online: http://www.cgtantra.com/index.php?option=com_content&t ask=view&id=502&Itemid=40 (last accessed 15 April 2014).

- 'Krish Trish & Baltiboy- A World of Folktales', *cgtantra*, Online:
 http://www.cgtantra.com/index.php?option=com_content&t ask=view&id=501&Itemid=55 (last accessed 20 April 2014).
- 'Krishna and Balaram', *In.com*, Online: http://www.in.com/tv/shows/cartoon-network-3/krishna-and-balaram-5340.html (last accessed 12 November 2014).
- Maitra, Lopamudra, 'Indian Folk Lore and the Three Worlds of Experiences: A New Theory to Understand 'Learning' from Folk Lore in Modern Audio Visual Media for Children', Indian *Journal of Comparative Literature and Translation Studies*, vol. 1 (1), 2013, pp. 53-75.
- Connecting Oral Traditions with the Global Age across a Century', *Heritage and Us*, vol. 2 (1), 2013, pp. 40-52, Online edn. : http://go.epublish4me.com/ebook/ebook?id=10023475#/0 (last accessed 15 April 2014).
- Mehta, Kandarp, "100 years of Indian Cinema- The Creative Roots", *Creatologue Blog*, 3 May 2013, Online: http://creatologue.com/tag/dadasaheb-phalke/ (last accessed 13 November 2014).

Traditional Knowledge as Cultural Heritage in Sri Lanka: Post-colonial Interpretation

Nirekha De Silva

Abstract

The paper is an attempt to understand the status of traditional knowledge in Sri Lanka from a postcolonial theoretical lens. First, the paper deals with theoretical interpretations definitions and traditional knowledge and post-colonial theory. Next, relates the colonial influence on destroying traditional knowledge systems in Sri Lanka. Third, it discusses efforts taken to revive traditional knowledge in the country. Finally it discusses the current status of traditional knowledge in Sri Lanka, in light of global forces such as capitalist influences and social changes. Based on the emerging trends of traditional knowledge, the paper questions the need and way forward to safeguard traditional knowledge.

Understanding the Concepts

Traditional Knowledge

Traditional knowledge is connected with such notions as modernity, rationality, memory, history and ideology (Dissanayake 2005: 15). Max Weber conceived tradition as one of the sources of authority and legitimacy (Weber 1947 as quoted in Dissanayake 2005: 15). A tradition allows one to construct a narrative of the past, present and future on the basis of a certain present dealing with a certain past (Dissanayake 2005: 15). The traditional notion of traditional

knowledge stresses the idea of handing down of ideas, objects, practices, assumptions and values from a generation to another.

The Transcendentalist approach argues that the timeless and transcendental qualities traditions assume, grow out of specific historic conjunctures (Dissanayake 2005: 17). According to Watson (1997)

The concept of tradition remains anomalous, one of those ancient but paradoxical 'transcendentals' that, as Heidegger or Foucault recognized, underwrites philosophical analysis- although only perhaps by betraying the non systematicity and historicity of philosophical systems. (As quoted in Dissanayake 2005: 17)

According to T.S. Eliot (1932), the Creative Assimilationist approach to traditional knowledge involves all those habitual actions, habits and customs, from the most significant religious rites to our conventional way of greeting a stranger, which represents the blood kinship of the same people living in the same place. Tradition is the living formation of belief. It is not the maintenance of certain dogmatic beliefs.

Marxists consider traditional knowledge as part of the superstructure along with law and arts as well as a surviving past that is relatively inert, historicised and is a segment of a social structure. It consequently does not appear to be a fundamental driving force. On the other hand, if one aims to give it a materialistic interpretation it becomes a force of considerable significance (Dissanayake 2005: 19).

Hobsbawm and Ranger (1983) (as quoted in Dissanayake 2005: 20) believe in an Invetionalist approach to Traditional Knowledge. They argue many of the traditions in different parts

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of the world are not handed down from generation to generation from ancient times but are inventions in response to current needs and further state that many of the traditions deemed historic are in reality creations of the eighteenth and nineteenth centuries (Dissanayke 2005: 20).

Michel Foucault (1982) demonstrates a powerful approach to history and tradition based on his concept of genealogy as opposed to historicism. Foucault (1982: 5) opines:

... the great problem presented by such historical analyses is not how continuities are established, how a single pattern is formed and preserved, how for so many different, successive minds there is a single horizon, what mode of action and what substructure is by interplay of transmissions, implied the resumptions, disappearances, and repetitions, how the origin may extend its sway well beyond itself to that conclusion that is never given- the problem is no longer one of tradition, of tracing time, but one of division, of limits; it is no longer one of lasting foundations, but one of transformation that serve as new foundations, the rebuilding of foundations.

Non-linearism is a school of thought that does not believe in the linear progression of tradition. According to this school of thought, the temporal structure of tradition has to be explored very carefully and it should not be interpreted as the handing down of a static body of knowledge and values over homogeneous time. It is important to understand the complex temporality involved in tradition (Asad 2003 and Kosseleck 1985).

Post-colonial Theory

The Post-colonial theory analyses the impact of colonisation on former colonies in the post-colonial era. It is a theory about how ex-empires continue to dominate their former colonies in an indirect manner.

Post-colonial theory conceptually reorients the perspectives of knowledge as well as needs developed outside the west (Young 2003: 6). It is a theory that looks into the colonial impact on identity formation, traditional knowledge, socioeconomic relations, ethics and politics. The theory analyses the impact of colonisation on the shaping of cultural, national, ethnic, gender and racial identities of the colonised peoples in a post-colonial society. It discusses how traditional knowledge of the colonised was misused by the colonisers for their benefit and how traditional knowledge faced extinction due to changes in social structures, policies and laws implemented by the colonisers. The implications of endorsing western knowledge as the dominant form of knowledge are also discussed in postcolonial theory. The theory explains how ideological legitimacy of imperial domination via the promotion of western cultural hegemony, has a subordination effect, on socio-cultural, psychological, economic and political arenas of the colonised in a post-colonial society.

Post-colonialism acknowledges inequalities and divisions in society and strives for social justice by morally committing itself to transform conditions of exploitation and poverty into something better (Young 2003: 2-6). The origin of Post-colonialism as a self-conscious political philosophy can be traced to the Bandung Conference in 1955 (Young 2003: 17). 29 countries, mostly newly independent African and Asian countries participated in the conference. The Non Aligned

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Movement (NAM), an independent power bloc with a third world perspective on political, economic and cultural issues was initiated at this conference.

The Tri-continental Conference held in Havana in 1966 further developed ideas that supported Post-colonialism. The conference brought together Latin America, Africa and Asia for the first time. Che Guevara, addressing the conference highlighted the need to eliminate the foundations that sustain imperialism in order to truly liberate the peoples.

Interpreting the Status of Traditional Knowledge from a Post-colonial Theoretical Lens

Traditional Knowledge is usually owned by tribal and indigenous peoples. In the pre-colonial era, the life-styles, religion, values, beliefs, ethics and laws of a community were inter-related. Traditional knowledge was based on religious beliefs and the value system. Traditional knowledge determined the life style of the community. Colonial influence changed the traditional legal system, destroyed the indigenous education system, enforced a new religion and changed the pre-colonial social system.

Colonisation has resulted in introducing a Western way of life. It has disoriented the colonised from their art of living which includes life styles, religious beliefs, rituals, healing practices, occupations, arts and crafts. It thus has destroyed the traditional art of living. As Coomaraswamy (1909: ix) states:

The highest ideal of nationality is service; and it is because this service is impossible for us as long as we are politically and spiritually dominated by any Western civilisation, that we are bound to achieve our freedom. It is in this spirit that we must say to Englishmen, that we will achieve this freedom, if they will, with their consent and with their help; and if they will not then without their consent and in spite of their resistance.

Post-colonial theory thus questions whether we are truly independent from Western civilisation despite being granted independence? whether we are successful in re-establishing the traditional art of living? and whether we utilise traditional knowledge systems for the purpose of development and wellbeing of the community?

Education

Missionary education by the colonial rulers introduced the English way of life and the English value system. Such education oriented young generations to the colonial language thus laying the foundations to a history dominated by Western ideas. Coomaraswamy (1946) aptly capturing the situation, states, colonial education will form a class of persons "Indian in colour, but English in taste, in opinion, in morals and intellect" (31). Re-educating the western educated was an issue in gaining independence. Coomaraswamy (1940: 10) states, "I have no idea how many it might take to outgrow a missionary college education, or to recover from a course of lectures on Comparative Religion offered by a Calvinist."

Academic colonialism or dependency on ideas, technologies, theories and concepts perpetuated by the West is another negative dimension of indirect colonisation of post-colonial societies. According to Alatas (2006: 17), global division of intellectual labour in the social sciences i.e. between theoretical work carried out by the First World and empirical work carried out predominantly by the Third World, has caused

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a state of academic dependency. Asian Universities and members of the Asian intelligentsia import, market and consume mainly the ideas of the American, the British and the French at both abstract and theoretical levels (Madan 1966: 9-16). The academic dependency in turn makes European and American ideas dominate Asian societies.

In order to combat such intellectual dependency, it is pivotal to synthesise both Western and non-Western knowledge taking into account the relevance and peculiarities of both sources. The important question here is, whether there are any indigenous alternative theoretical traditions outside of the West?

A turn back to the old system that prevailed prior to missionary education been introduced, will provide satisfactory answers to this question. Earlier systems which rose giving due respect to contextual peculiarities and societal needs of the community, is in fact an invaluable source of traditional knowledge. An education system that revives traditional knowledge systems in turn will be a strong weapon that could be used to combat Western concepts along with the imperialistic undertones they carry.

Religion

While religion is presented as a universal concept, the understanding of what makes up religion in phenomenological, historical and sociological terms is often derived from Christianity (Matthews 2000: 98). This practice has adverse effects when it comes to the protection of traditional knowledge based on certain religious practices.

Identity Formation, Imperialism and Hegemony

Imperialism has created hegemony as well as captive minds that have resulted in identity tensions and negotiation of new identities. Initially it was the military might of the West that helped her dominate the world on both economic and political fronts. This in turn assisted in such domination being developed in to a fully-fledged domination in almost all spheres of human life including politics, economics, culture, religion, education and most importantly ideology.

Hegemony is understood as domination by consent. It is the power of the ruling class to persuade other classes to accept their interests as common interest. Hegemony is created through state apparatuses such as education and media as well as through inclusive control of the economy (Hardt and Negri 2000: 116). Foundations laid for hegemony during the colonial period, continue to date giving way to imperial domination. Hegemonic ideology is a systematic negation of the other person and is also a furious determination to deny the other person all attributes of humanity (Fanon as quoted in Young 2003: 139). Hegemony has been a threat to the practice and development of traditional knowledge as well as traditional ways of lives due to the adoption of western ways of life.

When people are politically, economically, socially and intellectually conquered by another group of people exploitation, tutelage, conformity, relegation of the dominated to a secondary role in society and intellectual rationalisation of imperialism (Alatas 2000: 24) take place thus making traditional knowledge of the conquered die a forced death.

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Captive Mind

Alatas (1974) presents the idea of a 'captive mind' which is an uncritical and imitative mind dominated by external sources (47). This specifically speaks about intellectual imperialism of the Europeans and the Americans that instill Western ways of thinking in former colonies that are not properly situated within the countries' context. The prestige attached to Western Knowledge makes these countries adopt Western practices blindly, which in turn adversely affect traditional knowledge systems.

Identity Tension

Using the case of the Native Americans, Kidwell (2009) analyses the concept of identity tension. According to Kidwell (2009) natives upon whom an imperial culture is forced, have two options i.e. either to maintain essentialism or to adapt and assimilate (6). Essentialism is the practice of unearthing hidden knowledge of the natives that have now gone underground due to imperialism. Adaptation or assimilation is the ultimate disappearance of distinct native identities due to them been absorbed into the imperialistic culture.

For Champange (2007), native studies cannot be centered on a critique of the colonial experience but rather must focus on the individual and community choices natives (in this case the American Indians) make to realise their culture, values and political and economic interests within the constraints and opportunities presented by the changing colonial contexts (360).

Colonisation and Destruction of Traditional Knowledge Systems in Sri Lanka: Analysing History

Sri Lanka has a long history of foreign influence dating back to the third century BCE. However, it was only the Europeans who attempted to colonise the country. Three European colonial powers including the Portugese, the Dutch and the British, occupied Sri Lanka from 1505-1948 CE. Colonial influence in controlling material resources and the ideological influence on socio-political decision making seriously hampered traditional knowledge of the country.

Colonisation resulted in introducing a Western way of life. It disoriented the colonised from their traditional life styles, religious beliefs and arts and crafts which were all based on traditional knowledge of the community. Missionary education imparted by the colonial masters introduced an English way of life and an English value system. The introduction of a Capitalist Mode of Production too resulted in destroying the rich ancient civilisation Sri Lanka was heir to. Colonial masters were too quick to introduce new institutions and value systems without understanding the moral basis of the Sri Lankan society thus resulting in an erosion of traditional knowledge systems.

Portuguese Influence

The naval power of the Portuguese as well as their interest in trade in Asia brought them to Asia in the sixteenth century CE. Sri Lanka being located at a strategic naval point became a targeted destination to spread their power and control. In 1580, Portuguese achieved a milestone in controlling Sri Lanka when Dharmapala bequeathed the Kingdom of Kotte to the Portuguese monarch (De Silva 1981: 114). The first twenty years of

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Portuguese rule saw the introduction of several important modifications in land tenure system, religion and education.

The traditional land tenure system was changed during the first twenty years of Portuguese rule. The Portuguese settlers entered into the ranks of village landholders and the royal villages (*gabadagam*) were gradually alienated (De Silva 1981: 123). Ownership of lands owned by Buddhist temples which were called *Viharagam* and *Devalagam* was transferred to Roman Catholic missionaries (De Silva 1981: 124). Control and ownership of land played an important role in determining social relationships and social control.

Roman Catholicism was introduced by the Portuguese to Sri Lankans. In order to convert Sri Lankans, the Portuguese ruthlessly destroyed Buddhist and Hindu temples (De Silva 1981: 127). Buddhist and Hindu religions played a key role in nurturing traditional knowledge in Sri Lanka. Introducing a new religion and not giving due recognition to existing religions, severely hampered the traditional knowledge base that was nurtured for centuries.

Education was a key tool in converting natives to Catholicism and introducing a Western way of life. Missionary education was imparted through missionary organisations.

The following words of Barros (1540) aptly capture the impact of Portuguese colonisation:

The Portuguese arms and pillars placed in Africa and in Asia, and in countless isles beyond the bounds of these continents, are material things, and time may destroy them. But time will not destroy the religion, customs and languages which the Portuguese have implanted in those lands. (As quoted in Boxer 1953: 244)

Dutch Influence

Sri Lanka was occupied by the Dutch from 1656-1796 CE. The Dutch were mostly interested in trade. They also introduced Protestantism to Sri Lanka through the Dutch Reformed Church (Yogasundaram 2010: 187).

The VOC (Vereenigde Oost-Indische Compagnie (in Dutch), The Dutch East India Company which was established in 1602) adopted the indigenous administrative structure for its own benefit (De Silva 1981: 188). They vested greater powers with the caste headmen granting them with wider areas of authority than was under the traditional system. According to the administrative structure adopted by the Dutch, Salagamas, Karavas and Duravas no longer came under the jurisdiction of the Govigama Disavas and Korala Vidanes. It also meant that the Govigama caste was excluded from a limited number of higher positions they enjoyed in the traditional hierarchy (De Silva 1981: 190).

In pre-colonial Sri Lanka, laws were based on religious beliefs. For instance, Sinhala Law as portrayed in the *Niti-Niganduwa* was influenced by Buddhist principles and the Theseawalami Law which was applied to Hindus was influenced by Hindu principals. The pre-colonial law promoted and safeguarded traditional social systems, value systems and institutions. The Dutch promoted laws and customs of the Tamils of Jaffna by codifying Tesavalamai as a law for the first time. Laws of Muslims were safeguarded by applying Islamic law to that community. Unfortunately for the Sinhalese, the Dutch introduced and applied the Roman-Dutch Law. This Law

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was alien to the Sinhalese community. The new law did not have a relationship with the traditional spirituality of the Sri Lankan community. The new legal system thus changed values, customs and social practices of traditional Sri Lanka.

The Dutch Reformed Church replaced the Roman Catholic Church. The Dutch were more tolerant of the indigenous religions than the Portuguese had been. They did not harass the Buddhists for the fear of offending the Kandyan ruler who regarded himself as the trustee of Buddhist rights in the Island. But harassment of Hindus and Muslims continued (De Silva 1981: 196).

British Influence

Entire Sri Lanka became a British crown colony in 1815 after signing the Kandyan Convention. During their reign, the British continuously tried to suppress traditional ways of life and ethnocentrically introduced western knowledge and culture. Sri Lankans continuously struggled against the changes introduced by the British in order to preserve their identity.

Traditional social structure based on the *Rajakariya* system promoted and safeguarded traditional knowledge in the society. A few months after the British conquest, Robert Andrew introduced reforms abolishing *Rajakariya* system and increasing tax. This affected all strata of the Sri Lankan society and every ethnic group in the population (De Silva 1981: 212-3). The reforms alienated them from traditional ways of life including duties and occupations practiced for generations. The new reforms provoked immediate and widespread opposition. Thus, the newly appointed Committee of Investigation recommended restoring the status quo (De Silva 1981: 213). The fight for freedom from colonisation and for the establishment of

nationalism continued throughout the British colonial period. The most formidable insurrection during the whole period of British rule in Sri Lanka was the great rebellion of 1817-8 (De Silva 1981: 235).

Promoting Christianity too was instrumental in bringing forth social reform desired by the British. Requests for licenses to erect temples and places of worship by the Buddhists and Hindus were turned down and Christian ideologies were in turn promoted thus changing traditional social practices.

The plantation agricultural system introduced by the British changed the traditional relationship with land by introducing the land sale policy which targeted the creation of a land market for plantation. The introduction of specialised technical departments such as medical, education and public works which provided Sri Lankans with the widest choice and greatest opportunities for responsible if not remunerative employment, since the last quarter of the nineteenth century, significantly changed the role of the traditional caste system and occupations related to these castes based on the traditional division of labour.

Mass education initiatives of the British in the early nineteenth century included a dual system of schools where the government assisted both the English medium schools which were patronised by the elite and schools administered by the state in the vernacular for common people. Although the government promoted English education, it was not accessible to all. The government maintained only a few superior English schools known as Central Schools (De Silva 1981: 329) admitting only a limited number of students each year.

The systematic denial of access to indigenous education was common to all colonies during the colonial period and this

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in turn adversely affected the protection of traditional knowledge. Local languages too were losing their importance in an increasingly colonised context thus paving way for the extinction of traditional knowledge systems that were kept alive by indigenous languages. Colonisers were also responsible for neglecting traditional methods of healing and knowledge related to such methods that resulted in a steady decline of traditional knowledge related to health and well-being.

Revival Efforts of Traditional Civilisation in Sri Lanka

Traditional cultures, religions, arts and crafts and occupations were interrelated. Due to the colonial impact, traditional knowledge was facing the threat of extinction. In the second half of the nineteenth century, a number of revival movements sprung up in the country in order to counteract the negative colonial influence. These movements were instrumental in creating a 'national consciousness' to revive traditional knowledge by perpetuating ideologies on cultural nationalism that advocated the value of safeguarding the pristine Sri Lankan culture.

Affluent Buddhists, Hindus and Muslims sponsored and funded the revival of their respective faiths and established modern schools where the medium of instruction was English and catered to student populations from the respective faiths (Jayawardena 2012: xxv).

Buddhist Revival

The introduction of Christianity and the loss of state patronage had a drastic negative effect on Buddhism. The Buddhist Revival Movement immensely contributed towards the growth of national consciousness and the recovery of national pride via the promotion of Buddhism. The movement witnessed various interpretations of Buddhism by the Buddhist laity.

The early reformers or the Protestant Buddhists reacted against and imitated Christianity. The traditional or Neotraditional Buddhism resurged during the Buddha Jayanthi period. The V*ipassanā Bhāvanā* (Insight Meditation) Movement re-interpreted meditation for the laity. Buddhism was reinterpreted in order to address social and ethical issues that rose based on Buddhist ideals. Sarvodaya Shramadana Movement was established based on Buddhist interpretations of addressing issues in the society. Re-interpretation and branching out of Buddhism contributed greatly towards the revival of Buddhism.

The Panadura debate of 1873 was the most notable Buddhist-Christian confrontation. The establishments of the Vidyodaya Pirivena in 1872 and the Vidyalankara Pirivena in 1876 as centers of Oriental learning were initiatives taken to revitalise the oriental culture. The initiation of the Buddhist education movement, establishment of an education fund and a Buddhist national fund, the celebration of Vesak, and the design and adoption of a Buddhist flag were contributions by Olcott for the revival of Buddhism, with the support of leading Bhikkhus and laymen (De Silva 1981: 342). One important aspect of the Buddhist revival was that it was a religious and ideological revival and not a cultural revival.

Hindu Revival

The Hindus were in a more advantageous position in relation to resistance to the intrusion of the Christian missions, as it was possible to draw on the resources of Hinduism in India and the Tamil elite. In the nineteenth century Hinduism as a religion and 38 Nirekha De Silva

a culture was revived. The Hindu revival pre-dated that of Buddhism by a whole generation (De Silva 1981: 351).

Muslim Revival

The arrival of Arabi Pasha (1829-1911) and his key lieutenants in Sri Lanka in January 1883 roused Muslim interest in reviving their identity and culture. Pasha became a symbol around which the Muslim could gather. He was not the champion of the cause in Sri Lanka and he was cautious of and sensitive to the opinion of the colonial authorities in Sri Lanka. Education was the initial focus of the Muslim Revival Movement. Muslim revivalism was viewed as an effort taken to heighten the collective identity of Muslims as a community and a distinct group (Samaraweera 1997: 308).

Education Revival

Sri Lanka's education system was revived at the beginning of the twentieth century when Buddhist and Hindu religious organisations established their own schools. These religious schools were an outcome of the nationalist movements' efforts to promote national consciousness. Education based on traditional religions practiced in the country for generations, was a means of promoting the traditional value system, transmitting traditional knowledge and safeguarding traditional identity. Yet, all the schools of the country followed the National Education Curriculum which was greatly influenced by Western thinking and Western forms of Knowledge. However, the education received from a Christian school was different from that what was received from a Buddhist or Hindu school since the religions taught and language of instructions were not the same.

Language Revival

Official Language Act No. 33 of 1956 prescribed Sinhala as the sole Official Language of Sri Lanka (then Ceylon). The act is an example of an effort taken by the Sri Lankan Government in the post-colonial era to revive Sinhala, the language used by majority of the Sri Lankans. The following statement by Phillip Gunawardene, illustrates the important role of the Sinhala Only Bill in National revival:

We are completing by this [Sinhala Only] Bill an important phase in our national struggle. The restoration of the Sinhala language to the position it occupied before the occupation of this country by foreign powers marks an important stage in the history of the development of this island. (Gunawardene 1956: Hansard)

Munidassa Cumaratunga's (1997-1944) contribution to language revival is noteworthy. Being a scholar of Sinhala he revived the cultural landscape of the country through his Sinhala writings. Cumaratunga's three books, *Sidat Sangara Vivaranaya* (1935), *Kriya Vivaranaya* (1936) and *Vyakarana Vivaranaya* (1938) are extremely important in reviving the structure and distinctiveness of the Sinhala language (Dissanayake 2005: 41).

Revival of Traditional HealthCare

Although the Colonial powers wanted to eradicate the Ayurveda system of Medicine and replace it with the Western medical system, the system survived due to popular demand. Public agitation for the revival and development of indigenous medicine and vehement calls for a change of policy could not be disregarded by the colonial powers.

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Present Status of Traditional Knowledge

Western scientific traditions are being adopted and practiced in Sri Lanka as new legitimised knowledge in universities and centers of science and technology. This has been a practice since the eighteenth century (Goonetilake 1998: 24). The very process of legitimising Western knowledge in Sri Lanka has resulted in de-legitimising the rich heritage of traditional knowledge.

An enormous share of our traditional knowledge has been lost during the colonial period due to colonial administrative policies. A close look at the efforts taken to revive traditional knowledge in the country makes it evident that only a few efforts have been taken especially in the post-colonial era. Most revival attempts were spearheaded by leaders in the Ceylon National Movement during the colonial rule. With granting of independence in 1948, such efforts seem to have paled in comparison to earlier efforts, against a backdrop of post-colonial tensions and also because colonial presence was not felt physically like during direct colonial era and therefore the indirect obscure threats imperialists present were/are not taken seriously. Therefore, although some minor post-colonial revival efforts have reactivated some aspects of traditional knowledge, it still faces the threat of extinction. Reasons for the threats of extinction include not having a systematic procedure to pass down traditional knowledge from generation to generation, present education system not catering sufficiently to transmitting traditional knowledge, the death of the knowledge bearers and the young generation not been interested in following the footsteps of their parents who were engaged in traditional knowledge based occupations.

Bio-piracy which is the misappropriation of genetic resources and/or traditional knowledge through the patent

system; and the unauthorised collection of genetic resources and/or traditional knowledge for commercial gains, are also great threats to traditional knowledge in the country.

The Capitalist mode of production, the new religion, new ethics and values introduced by the colonisers as explained above created concerns and identity tensions related to caste, ethnicity, religion and gender. The abolition of $R\bar{a}j\bar{a}kariya$ in 1802 disintegrated the caste system as a mode of division of labour but the caste consciousness did not disappear (Gunasinghe 1990 as quoted in Jayawardena 2012: xxiv). According to Uyangoda, "the archaic Sinhala caste system was replaced by the colonial caste system" (As quoted in Jayawardena 2012: xxiv).

The capitalist mode of production enabled all castes access to capital and employment. As a result, the hierarchies changed. The abolition of Rājākariya and the reduced significance of the Sinhala caste system directly impacted the traditional knowledge system of the country. Traditional knowledge was passed down from generation to generation. Due to the social obligations in place, engaging in traditional knowledge and traditional cultural expressions related occupations was considered as a duty and obligation in pre-colonial Sri Lanka. Social status and honour were based on traditional practices. The system in place made it possible to keep the traditional knowledge alive and thriving. Abolishment of the system invariably signaled the passing away of traditional knowledge and practices embedded in the system. Added to this was the introduction of a free market economy in the 1970s that accelerated the process of extinction of traditional knowledge. With no proper mechanism in place to protect traditional knowledge and traditional cultural expressions, such 42 Nirekha De Silva

drastic changes spelled the elimination of the invaluable resource of traditional knowledge.

Conclusion

The paper analysed the history and the current status of traditional knowledge from a Post-colonial theoretical lens. It presented the case of ruthless colonialism unleashed by the West that resulted in the destruction of traditional knowledge systems in many colonies. Taking Sri Lanka as a case study, it analysed how traditional knowledge and structures were disrupted by colonial masters (in this case the Portuguese, the Dutch and the British) and what revival efforts have been taken to correct the erroneous situation. It argues that efforts taken to counteract imperialistic influences and revive traditional negative knowledge are not satisfactory in a post-colonial context. Much needs to be done in legal, educational, health, performing arts and religious spheres in order to preserve and protect the rich traditional heritage of Sri Lanka and to pass it on to generations to come.

End Note

¹The power and authority Buddhist temples had by being the largest land owners of the country ensured protection of Buddhism as the state religion for thousands of years. The traditional customs performed by the people who lived in temple land ensured the prevalence of traditional knowledge of various forms of arts and crafts for many generations. It also ensured the protection of the Sri Lankan cultural heritage and unique identity based on Buddhism. The transfer of ownership of temple lands to Roman Catholic missionaries resulted in the breakdown of the structure in place to protect traditional

knowledge and cultural heritage of the country.

Glossary

Disavas A feudal title associated with the high office of

the Kandyan and Central Region of Sri Lanka.

Durava A Southern Sinhalese Caste in Sri Lanka whose

chief traditional occupation was making toddy.

Govigama The most influential caste in Sri Lanka who was

traditionally responsible for the cultivation of

lands.

Karava The traditional military race of Sri Lanka.

Korala

Vidanes A form of Headman in Feudal Sri Lanka.

Rajakariya Compulsory service that was prevalent in

traditional Sri Lanka including two features, personal service rendered to the king or his agents by landholders who enjoyed land granted by him; and the liability of all landholders, irrespective of nature of their tenure, to provide

labour services on public works.

Salagama A caste traditionally associated with weaving

and the cultivation and management

of cinnamon.

References

Alatas, Syed Farid, Alternative Discourses in Asian Social Science: Responses to Eurocentrism, (New Delhi, 2006).

Alatas, Syed Hussein, 'The Captive Mind and Creative Development', *International Social Science Journal*, vol. 36 (4), 1974, pp. 691-99.

- Traits and Problems', Southeast Asian Journal of Social Science, vol. 28 (1), 2000, pp. 23-45.
- Asad, Takak, Formation of the Secular, (Stanford, 2003).
- Boxer, C.R., *The Portuguese in the East 1500-1800*, H.V. Livermore ed., (London, 1953).
- Champagne, D., 'In Search of Theory and Method in American Indian Studies', *American Indian Quarterly*, vol. 31 (3), 2007, pp. 353-72.
- Coomaraswamy, A.K., *Essays in National Idealism*, (Colombo, 1909).
- -----, East and West and Other Essays, (Colombo, 1940).
- -----, "Indian Culture and English Influence: An Address to Indian Students and Their Friends", Speech, Massachusetts Institute of Technology, Ann Arbor, 1946.
- De Silva, K.M., A History of Sri Lanka, (Colombo, 1981).
- Dissanayake, Wimal, *Enabling Traditions- Four Sinhala Cultural Intellectuals*, (Boralasgamuwa, 2005).
- Eliot, T.S., Selected Essays 1917-1932, (London, 1932).
- Foucault, Michel, *The Archaeology of Knowledge*, (New York, 1982).
- Goonetilake, Susantha, *Towards a Global Science- Mining Civilizational Knowledge*, (New Delhi, 1998).

- Gunawardene, Philip, 'Sri Lanka Parliament Debate Hansard', (14 June 1956).
- Hardt M., and Negri A., Empire. (Cambridge, 2000).
- Jayawardena, Kumari, *Nobodies to Somebodies: The Rise of the Colonial Bourgeoisie in Sri Lanka*, (Colombo, 2012).
- Kidwell, C.S., 'American Indian Studies: Intellectual Navel Gazing or Academic Discipline?', *American Indian Quarterly*, vol. 33 (1), 2009, pp. 1-17.
- Kosseleck, Reinhart, Futures Past, (Cambridge, 1985).
- Madan, T.N., 'For a Sociology of India', *Contributions to Indian Sociology* IX, vol. 7 (22), 1966, pp. 9-16.
- Matthews, J., 'Religion in the social sciences: A Socio-epistemological Critique', *Akademika*, vol. 56, 2000, pp. 85–105.
- Samaraweera, Vijaya, 'The Muslim Revivalist Movement: 1880-1915', in *Sri Lanka: Collective Identities Revisited*, M. Roberts ed., (Colombo, 1997), pp. 293-321.
- Yogasundaram, Nath, A Comprehensive History of Sri Lanka from Prehistoric Times to the Present, (Colombo, 2010).
- Young, Robert J.C., *Postcolonialism- A Very Short Introduction*, (Oxford, 2003).

A South Asian Community of African Descent: Continuing Linguistic and Musical Traditions

Shihan de Silva Jayasuriya

Abstract

In the Indian Ocean, there are only a few Afro-Asian communities today. South Asians of African descent are the result of easterly migration streams from the African continent and its offshore islands. Whilst drawing attention to African movement to the Sub-continent, this paper explores the cultural memory of an Afro-Sri Lankan community. The history and identity of Afro-Sri Lankans is expressed in artistic forms that have survived the process of indigenisation. Their music, song and dance establish connectivity not only to Africa but also to other South Asians. Micro histories and ethnographic studies contribute to the larger picture of diasporas. They feed into the macro level, enabling scholars to theorise on global migration patterns, processes of assimilation and integration.

African Movement to South Asia

A few hundred Afro-Indian elite remind us that Africans once ruled the princely states of Janjira and Sachin, situated in Maharashtra and Gujarat today. But most Afro-Asians live in villages, forests and on the periphery of society. Those who live in urban areas are not easily identifiable either and are lost in South Asia's cosmopolitan cities; they are mistaken for tourists until they begin to speak in the local languages. Identifying Africans in South Asia is problematic and their hidden presence is enhanced by the process of assimilation.

Problems of identification are magnified by numerous ethnonyms and exonyms; Africans were known by various terms throughout time and space (de Silva Jayasuriya 2006a: 275). The continent was not always called Africa and the term Habshi, for example, associated Africans with the region that they originated from - al Habash or Ethiopia. Pakistanis of African descent are called Makranis associating them with the area they settled down - the Makran Coast. Those who live in the Sindh (Pakistan) are known as Shidees. In India, Africans are now mostly known as Sidis. In Sri Lanka, they are known by their ethnonym Kaffir, a term adopted by the British. The local terms are Kāpiri (Sinhala) and Kāpili (Tamil). The Portuguese borrowed the Arabic word qafr (meaning 'non-believer') and referred to East Africans as Cafres. The Dutch, French, British and Asians borrowed this word but the term does not have any negative connotations as when it was used in South Africa some years ago. The multiplicity of terms, nevertheless, makes identification of Africans problematic both within archival records and in contemporary societies. Terms such as Afro-Asian, Afro-Indian and Afro-Sri Lankan which imply a hybrid identity are also used within recent scholarly works.

Narratives on forced African migration dominate the field of African diaspora studies due to its entanglement with economic enhancements, commercial transactions, and the availability of archival records. But free movement did not stop while the slave trade was moving Africans involuntarily and the distinction is blurred. Janjira, an island off the west coast of India, was a base for African traders from the thirteenth century CE (de Silva Jayasuriya 2012a: 60). In the sixteenth century CE, Janjira became the powerbase for African rulers who rose to power through elite military slavery. Given the lack of histories, the ultimate lands of origin and the pushes and pulls of

migration are not always clear. Joseph Harris (1996: 7), an African-American Historian, cautions against attempting to understand the African diaspora only through the prism of the slave trade.

Enslavement was not unique to Africans though a significant number of Africans became victims of the trade in humans. Commodification of human beings resulted in chattel slavery, which ripped slaves of all human rights. Slaves were bought and sold, and became the legal property of fellow human beings and bequeathed in Wills to benefactors. The antiquity of the slave trade is apparent in the anonymous Greek source, the Periplus Maris Erythraei (Periplus of the Red Sea), written around the first century CE. The Periplus illustrates that extensive trade was conducted between Adulis, the Aksumite port on the Red Sea coast of Africa and Western India. Aksumite exports were mainly ivory and rhinoceros horn, but according to Pliny, the Roman writer, slaves were among the exports (Pankhurst 2003: 189). According to the Periplus, slaves were also shipped from Opone (which became known as Ras Hafun), on the Indian Ocean coast of Africa, ninety miles south of Cape Guardafui (Pankhurst 1961: 16-24). Arabs trading along the East African coast exported 'slaves of the better sort' obtained from the landmass running from Somaliland to Egypt (Coupland 1938: 17). Such movements continued until around 700 CE (Coupland 1968: 134). Thereafter, slaves were obtained from Africa's interior as domestic workers for Arab colonisers. Regarded as marketable commodities, slaves were bartered for manufactured goods, cloth, metal work and beads of India, Persia, Iraq, Turkey and Arabia.

But eastwards movement of Africans was not driven by economic motives alone; concubines were not in gainful employment (de Silva Jayasuriya 2006b: 215-25). When European traders intersected Indian Ocean commerce, they inevitably intervened in the eastern slave trade. More players became involved in the market and demands for slaves received a further impetus. In the last half millennium, commerce, colonisation, slavery and migration have been indispensible elements for European expansion. Thalassic and land networks facilitated an international slave trade throughout the Indian Ocean. Re-migration and acculturation was common as Africans were sold and re-sold at various points in the Indian Ocean.

Pertinent observations of the British traveller, James Bruce, in the early nineteenth century CE, highlight differences between the transatlantic and easterly slave trades:

the treatment of the Asiatics being much more humane than what the Africans sold to the West Indies meet with, no clamour has yet been raised against this commerce in Asia, because its only bad consequence is apostasy (Bruce 1813: 393).

These silences may have been exacerbated by indigenous systems of slavery and servitude and the experience of migrants within a multicultural context. Whilst westwards African migration has received much publicity, particularly around the anniversary of British Abolition of the transatlantic slave trade, in 2007, the easterly dimension of this trade has been almost unnoticed. The diversity of the region and the process of assimilation have, undoubtedly, contributed to this.

Afro-Sri Lankans: Enhancing Diversity

A few Afro-Asian communities remind us that Africans were displaced eastwards. Our knowledge of African movement to Sri Lanka, both voluntary and involuntary, is inevitably patchy and

incomplete due to its long duration and the lack of documentation. Narratives of Cosmas Indicopleustus indicate that as early as the sixth century, Ethiopians were trading in Mannar, on Sri Lanka's northwest coast, when the island was an emporium in the region. Being at the crossroads of Indian Oceanic trade, Sri Lanka was ideally situated for exchanging goods and the mixing of diverse peoples from far off lands. Eight hundred years later, Ibn Batuta the fourteenth century Moroccan traveller, noted that 500 Abyssinians served in the garrison of Jalasti, the *wazir* (ruler) of Colombo (Gibb 1983: 260).

From the sixteenth to the nineteenth centuries CE, the Portuguese, the Dutch and the British colonisers, brought Africans to Sri Lanka to serve in a variety of tasks including the military. Overseas expansion stretched Portugal's resources and those who spearheaded the voyages were innovative in their operations. Rounding the Cape itself cost one third of the lives on board the ships and Africans from the eastern coast of the continent had to be engaged as sailors in order to continue to India. Indian and African sailors manned the Portuguese ships that sailed even beyond to Macau and Nagasaki in the sixteenth century (de Silva Jayasuriya 2010: 17-28).

African sailors and soldiers were a significant factor in the Portuguese commercial venture with a missionary zeal which eventually resulted in territorial control. The Portuguese played on their superiority in military and sea power by mobilising forces from one holding to another in order to avert crises. An army commanded by Don Philip Mascarenhas consisting of 1,200 *Kaffirs* and Kanarese marched towards Colombo on 5th January 1623 (Raghavan 1962: 198). Seventeenth century records illustrate that African soldiers were paid one fanam per

day by the Portuguese authorities in Sri Lanka (de Silva 1972: 232). The costs associated with maintaining the slaves - rice and clothing - were also recorded.

The Dutch Governor, Van Goens Junior, who served in Sri Lanka from 1675 to 1680, refers to the existence of a large colony of around 4,000 *Kaffirs* in Colombo (Brohier 1973: 27 and de Silva Jayasuriya 2003a). The Dutch Commander of Jaffnapatam in his *Memoir for the Guidance of the Council of Jaffnapatam 1697* (Zwaardecroon 1911: 51) recorded payments to *Lascoreen* and *Caffir* soldiers and sailors. Malagasy slaves were *grof van leeden* (strong, robust and sturdily built) and were deployed for heavy work by the Dutch (Barendse 1995: 142). Antonio Bertolacci, Secretary to the first British Governor, Frederick North (1798 to 1805), remarked that the 9,000 Africans recruited to Sri Lanka by the Dutch government had out-married by then (Bertolacci 1817).

African soldiers were valued by both colonial and local armies. King Rājasinha's personal guard was composed of *Kaffirs* (Pieris 1918: 27). An African who came from Mauritius, during the Dutch era, Joseph Fernando, led the Kandyan army to victory defeating the British Major Adam Davie's detachment, in 1803. Fernando delayed the fall of the central Kandyan kingdom by more than ten years. Nevertheless, in 1815, at the third attempt, the British were able to take over the Kandyan kingdom which had remained independent throughout Portuguese and Dutch rule of the Maritime Provinces. Taking over the whole island was a costly exercise and required strengthening the British army. The slave trade provided a mechanism to feed the demand for good soldiers and Africans were brought to Sri Lanka to form the *Caffre* Corps regiments of the Ceylon National Infantry. Whilst the Third Ceylon Regiment

consisted solely of Africans, the Fourth Regiment included Malays and Africans. The British skillfully managed a multiethnic army consisting of Muslim-Malays, Hindu-Sepoys and Catholic-Africans, whose habits and customs were diverse.

The records that I consulted in the National Archives (Kew), illustrate that African slaves were recruited from Mozambique due to the pressure of defending territory under British control and the need to take over the Kandyan kingdom which had remained independent throughout Portuguese and Dutch rule of the maritime provinces (de Silva Jayasuriya 2011a: 23). These records also show that Africans were purchased from other parts of the Indian Ocean World. For example, in 1804, Governor Frederick North (1798-1805) purchased 70 men and 8 women from Goa¹ and in another transaction, he purchased 100 slaves (79 men, 19 boys and 2 women) from Bombay². In 1810, Governor Thomas Maitland (1805-1811) purchased African slaves: 104 men at £40 each, 23 women at £30 each and 8 children at £10 each from Diego Garcia³. Slaves had complained of ill-treatment by the French and wished to get away from Diego Garcia. This news was well received by Thomas Maitland who greatly valued African soldiers. These Africans were transported to Galle on the ship Sir Francis Drake and the men were enlisted to the Third Ceylon Regiment.

Markets are demand-driven and the slave market is no exception (de Silva Jayasuriya 2008a: 15). Actions of the British governors appear controversial when we take into account the moral awareness of the slave trade in Britain particularly during the period leading up to abolition. But this Act was not effective in the Indian Ocean where the trade continued for several decades afterwards.

According to Raghavan (1962: 200), the Third Ceylon Regiment was formed entirely of Africans from the West Indies quartered in Slave Island. Perhaps the British turned to the West Indies when the supplies from the Indian Ocean became scarce but this remains to be researched further.

Emerson Tennent (1860: 259), Colonial Secretary to the Government of Ceylon (1845-1849), remarked that the Dutch had kept up the strength of the *Kaffirs* by immigration from the Cape, and the British had maintained the numbers by buying slaves from the Portuguese. Slaves from Diego Garcia were purchased from the French. These examples illustrate the problems of curtailing the slave trade in the Indian Ocean which involved several agents and multiple political authorities.

The history of Afro-Asians is multi-layered and their oral histories and archival sources indicate that their roots extend to several parts of Africa and the offshore islands. In a 1970s documentary film, *Sarangi*, televised by *Rupavāhini*, M.J. Elias, a member of the Afro-Sri Lankan community in Sirambiyadiya, stated that their ancestors came from an island called Kaffa, and therefore called *Kaffir*. Oral histories become juxtaposed with archival histories and are also coloured by information fed by the scholars to the community. The community now foster the idea that their ancestors came from Mozambique. DNA finger printing would throw further light on their ultimate African roots. Africans who came via Mumbai and Goa could have also originated from Ethiopia, Somalia, Tanzania or Kenya which fuelled the slave trade to India.

Demand for Africans in Sri Lanka varied over the centuries. Accordingly, Africans contributed to the military, political, economic and social life of the island as soldiers, bodyguards, musicians, nannies, servants, palanquin carriers, water carriers, building workers, fortress repairers, road and railway construction workers.

Though the need for a capable army continued even after the British captured the whole island, maintaining an underemployed army was a financial strain and the regiments were gradually disbanded. In 1865, the African garrison in Puttalam on the northwestern coast was disbanded and the soldiers were given land to settle down in the area.

Oral Traditions and Cultural Continuity

Fifty years ago, Raghavan (1962: 200), an Ethnologist at the Colombo Museum, noted that "on the Puttalama-Anuradhapura Road, we have what perhaps is the largest settlement in Ceylon of the Kafir, fast changing, mixed with the indigenous population." The Sirambiyadiya Afro-Sri Lankan community which I came across when researching Indo-Portuguese Creole of Ceylon/Sri Lanka is situated off the Puttalam-Anuradhapura Road. Africans also lived or still live in other parts of the Kala Oya, Puttalam district such as Sellan Kandel. Senakuduruppuva, Tabbova and Puttalama Town. Out-marriage, assimilation and migration have contributed to the reduction or disappearance of these communities from various parts of the island. Phenotype is not always a guide to African roots in an island that is at the crossroads of Indian Ocean traffic which has harboured genetic mixing. Whenever there is a community with a shared history and heritage, identification of ethnicity is less problematic even though variation in phenotype prevails.

It is not surprising, however, that their ancestors became mother-tongue speakers of the lingua franca of the day-Indo-Portuguese of Ceylon - which is related to other varieties of Indo-Portuguese spoken in India. Until English replaced IndoPortuguese in the mid-nineteenth century, Indo-Portuguese was the bridging tongue for, not one, not two, but three colonial powers. Afro-Sri Lankans were empowered as speakers of the language of international trade and communication and the prestige language of the day. Creole lost ground to English as the new prestige language but not surprisingly, this community has now almost shifted completely to Sinhala, the language spoken by the other villagers and the language through which they receive a formal education in the local schools (de Silva Jayasuriya 2011b).

The octogenarian, Emiliana (**Fig. 1**) has no one to speak with in Creole on a day-to-day basis and she cannot hold a conversation in Sri Lanka Portuguese Creole. During my field trip to Sirambiyadiya in 2013, I started to question Emiliana in Sri Lanka Portuguese Creole. Her fluency increased during my repeated visits to the village. Even during the brief description about her close relatives, Emiliana disclosed significant features in Creole.



Figure 1: Emiliana of the Sirambiyadiya Afro-Sri Lankan Community. Photo Courtesy: Author.

Sri Lanka Portuguese Creole is a language in its own right, with a distinctive grammar and literature. In the late nineteenth century, Creole caught the attention of the German linguist Hugo Schuchardt (considered the 'Father of Creole Languages') who wrote an essay on the Indo-Portuguese of Ceylon (de Silva Jayasuriya 1999: 52-69). Sebastião Rodolfo Dalgado (1900), Vicar General of Sri Lanka, who spoke the Creole, wrote a book on this once

important language. Thirty five years ago, its Phonology was the subject of Ian Russell Smith's doctoral research (1977). More recently, history, linguistics and literature of the Indo-Portuguese of Ceylon were the focus of the doctoral research of Shihan de Silva Jayasuriya (2003b).

Creole is not an inferior version of European Portuguese but a bridging tongue that filled the communication gap between the Portuguese and the Sri Lankans. For about three and a half centuries, Indo-Portuguese was the lingua franca of Sri Lanka (the predecessor of English), the language of external trade and communication. It still is the mother-tongue of a few Sri Lankans and is spoken in several households in the Eastern Province (de Silva Jayasuriya 2013a). Although Portuguese Burghers are multilingual and speak Sinhala, Tamil and English to varying degrees of fluency, Portuguese is considered an important part of their heritage.

Creole was also the mother-tongue of Afro-Sri Lankans but now they have shifted away to the local languages (de Silva Jayasuriya 2011b: 179-194). The Sirambiyadiya Afro-Sri Lankans have lived in Puttalam for several generations though their families have connections with Afro-Sri Lankans in other towns. Emiliana's father, Martin Anton, was a Fiscal in the Puttalam Court and later worked in the saltern. Her uncle was an $\bar{A}rachchi$ (headman of a village) who worked in the Puttalam $Kachch\bar{e}riya$ (government office). Afro-Sri Lankan women, who had moved out of the village after marriage returned when their husbands died; their children had grown up and left home or they did not have any children. The Sirambiyadiya community knows that some of their relatives live in Palauttuva, Trincomalee. In 2011, I interviewed Marcelīnu Alphonso and Greiz, both Afro-Sri Lankans in their eighties, who were well

assimilated with the locals in Trincomalee. In 1981, Afro-Sri Lankans in Palauttuva and Sirambiyadiya dressed up as Africans, with painted bodies and feathers on their heads and acted in John Derek's production of 'Tarzan the Ape Man.' They were paid 300 Rupees per day for acting in the film and shooting continued for three days. They then realised how little they knew of their origins and heritage (Gankanda 2007: 119).

Even though Afro-Sri Lankans live in other parts of the island, the Sirambiyadiya community has attracted attention to their presence through their musical traditions and dance forms which they learned from their elders. The community calls their songs *manjas* but Miguel Goonatilleke (1983), in his report 'An interview with the Portuguese speaking community in Puttalam, Sri Lanka' called them *manhas* (**Fig. 2**). The etymon of *manhas* could be 'morning songs' that are sung in church. Raghavan (1962: 198) makes the pertinent observation that the Afro-Sri Lankans' "vocal music is a sing-song chant." The chant-like rhythm is characteristic of the *manhas*.

Fifty years ago, Raghavan (1962: 199) noted that the main instrument of the Afro-Sri Lankans is a musical bow with a gourd resonator, which provides rhythmic notes when struck with a rod. This important observation links Afro-Sri Lankans to Sidis (Afro-Indians) in Gujarat who play the *malunga* (braced musical bow). The instrument described by Raghavan is now not played in Sirambiyadiya. Instead, the *rabāna* (small round hand-held drum) and *dōlak* (a barrel-shaped drum) are played. Ad hoc instruments such as a glass bottle beaten with a metal spoon providing an upbeat triplet (a rhythmic figure which signals a connection to East African, Ethiopian and Swahili coast music), metal vessels beaten with wooden sticks providing a metallic sound at different pitches and coconut halves beaten on a wooden chair providing an

accompaniment to the music are also used. Skin, wood and metal in the percussion instruments provide different voices.



Figure 2: Sirambiyadiya Afro-Sri Lankans Singing *Manhas* and Dancing in Puttalam. Photo Courtesy: author.

Some *manhas* begin slowly, gather momentum, increase in intensity and end abruptly. But others have a uniform speed. Generally *manhas* have a chorus and several verses. The entire community participates in the performance with those not playing an instrument clapping and marking time on the beat. Call and Response, asymmetric rhythms and polyrhythms characterise *manhas*. Singing stops at the cry of *machete*, but the music continues. The *machete* is a stringed instrument better known as a *cavaquinho*. Interludes of utterances such as *hoi hoi* and *ari ari* bring out the African connections.

Three forms of music in Sri Lanka are associated with Africa – *baila*, *kaffrinha* and *manha*. *Kaffrinha* is, understandably, often mistaken for *manhas*. The Afro-Portuguese connection of *Kaffrinha* is signalled through its etymon. As *nha* is the

Portuguese diminutive, Kaffrinha could be translated as 'a bit of African'. The cross rhythms and syncopations signal an African connection in Kaffrinha. Earliest records of Kaffrinha songs and music are available from the late nineteenth century. Nineteenth century Kaffrinhas have been included in a manuscript of Indo-Portuguese songs in the Hugh Nevill Collection at the British Library, London. The section called "Cantiga De Purtiegese – Kaffrein - Neger Song Portigiese" (Songs of the Portuguese-Kaffrinha-Portuguese Negro Songs) includes the lyrics, but not scores, of Singellenona (Sinhalese Lady), Korra Jannethaie (Blush Joanita), Bastiahna (Bastiana), Chekoetie (Whip) and Ama die none Frencena (Love of Lady Francina). My translations of these songs into Standard Portuguese and English are published in the Journal of the Royal Asiatic Society of Sri Lanka (de Silva Jayasuriya 1995; 1997a; 1997b) and in Tagus to Taprobane (de Silva Jayasuriya 2001a). Creole languages are rarely standardised and are instead allowed to evolve freely but this poses a challenge to the translator. The meaning is ambiguous or elusive in places. My commentaries, together with Standard Portuguese and English translations of the songs in the Nevill manuscript were published in An Anthology of Indo-Portuguese Verse (de Silva Jayasuriya 2001b).

As cultural brokers, the Portuguese introduced western concepts of music to the East (de Silva Jayasuriya 2008b: 183). Pioneering research on Portuguese music in Sri Lanka, by a Sinhalese lawyer, C.M. Fernando, gives the earliest insight into *Kaffrinha* music. Fernando, who graduated in Law from the University of Cambridge, was also a pianist. After presenting his seminal paper almost 125 years ago, to the Royal Asiatic Society, Colombo, he accompanied Portuguese Burgher musicians. The 'Ceylon Portuguese' orchestra consisted of a *banderinha* (mandolin), *rabana* (tamborine) and *viaule* (tenor

violin). The last player of the thirteen-stringed guitar-shaped *viaule* was not able to accompany the musicians on that historic occasion due to ill-health.

Titles of scores in Fernando (1894) and titles of songs in the Nevill manuscript (nineteenth century) are similar: *Singallenona* (Sinhalese Lady), *Bastiana* (Bastiana), *Chikothi* (Whip) and *Coran Janita* (Blush Joanita). Songs entitled *Velanda Mazambicu* (Mozambican Town-dweller) and *Caffri* (African) in Fernando's paper confirm an African connection. Africans, brought to Sri Lanka, originated from various parts of the African Continent, and Mozambique continued to be a source of supply for British administrators who recruited soldiers (de Silva Jayasuriya 2011a).

Fernando (1894: 187) describes dances of the Portuguese Burghers- *Cafferina* (*Kaffrinha*) and *Chikothi* in detail: a man and a woman, standing on opposite sides of a room, dance towards each other and exchange old-fashioned courtesies when they meet in the middle of the room. He contrasts the "Grotesque attitudes and alert movements" of the *Kaffrinha* with "the slow measures of the *Chikothi*" which called for "stately and dignified steps." *Kaffrinha* was 6/8 in time (six quavers to a bar) fast and had a "peculiar jerky movement" while *Chikothi* was in 3/8 time (three quavers to a bar), "slow and stately" (Fernando 1894: 186). Contemporaneous with Fernando's narratives are those of Leopold Ludovici, a surveyor and the editor of *Examiner*. Ludovici visited a *kaffir* village in Puttalam at the end of the nineteenth century, and mistook *Kaffrinha* for being a fight (MLR 1895). The vibrant music had given the impression of an angry mob fighting.

Fernando's observations of *Kaffrinha*, however, are similar to a "*Caffre dance*" described 50 years earlier by Colonel Augustus de Butts in his book *Rambles in Ceylon*.

The dance somewhat resembled the fandango of Spain; but the resemblance, it must be confessed, was that of a caricature. Two individuals of opposite sexes gradually approach each other with an air of coquetry, making indescribable contortions and grimaces. The female slowly retires from the ardent advances of her lover, who, suiting the action to the word, endeavours to capture the fair fugitive, while he pours forth his tale of love in the most moving tropes that his eloquence can command. 'The lady of his love' at length abates somewhat of the air of scorn with which she at first affects to regard her impassioned swain, who, emboldened by this evidence of a favourable impression, and again alarmed at his own audacity, alternately advances towards and retreats from the object of his adoration. (1841: 206-207)

The spectators were compelled to encourage the dancers by howling or yelling throughout the performance. Audience participation added to the popularity of these dances.

From paintings such as those by J.L.K. Van Dort (1831-91), the Dutch Burgher painter, we get an artist's impression of the *Kaffrinha* dance. This lively dance was popular with Europeans in Sri Lanka during the nineteenth century and by the early twentieth century it filtered through to Sri Lankans who embraced Western modernity.

During the early twentieth century, *Kaffrinha* was danced in the fashionable Colombo suburb of Cinnamon Gardens, where parties ended with this lively and energetic dance. *Singale Nōna* (Sinhalese Lady), with Indo-Portuguese lyrics, was the favourite finale to these parties.

Carl Muller in *Jam Fruit Tree* vividly describes the entertainment value of *Kaffrinha* music and dance:

... and revels they were. The band had arrived: three boys in bow ties, two fiddles and a tom-tom and Jessie Ferdinands produced a harmonica and Finny Jackson played the spoons, clickety-clack on his knees and a rollicking *kaffrinja* [Kaffrinha] set everybody in motion with Colontota's uncles hitching up their sarongs and jerking around shouting 'adi-ji adi-ji' and the ladies holding the sides of their skirts and high-stepping to the beat. (1993: 58)

Kaffrinha music at times assumes a comical character. A pioneer Sinhalese playwright, C. Don Bastian, introduced Kaffrinha to the theatre by opening Rolina Nādagama (1879) with the jester singing a Kaffrinha (Sarachchandra 1966: 131). Ediriweera Sarachchandra (1966) identifies Kaffrinha as a body of music introduced by the Portuguese. Sunil Ariyaratne (1999), draws attention to the Sinhalese input to contemporary Kaffrinha music. The lyrics of today's Kaffrinhas are mainly Sinhala and they are also called Baila. Musicians distinguish the two genres by the differences in rhythm, Kaffrinhas being generally faster than Bailas.

The surveyor and writer, Richard Leslie Brohier (1973), described the music in Sellan Kandel, a village in Puttalam as *Kaffrinha* and *Chikothi* (27-30). He wrote that the *Kaffir-Portuguese Chikothi* and music had been absorbed into Sri Lankan popular culture, surfacing at gatherings which sought an outlet for hilarity, and were given the heterogeneous term *Baila*. Brohier compares the *Chikothi* to the square dance, a European dance, which requires stately and dignified steps, but adds that it is 'mirth provoking.' Echoing C.M. Fernando, Brohier (1973) explains that

the *Kaffrinha*, on the other hand, called for "lively tunes and alert movements" (27). Brohier visited the '*Kaffir* colony' in Puttalam almost hundred years ago, in 1915, on a Saturday evening when the colonists were having a *tamasha* - a "feast of merriment and sound, with music as its strongest impelling force" (Brohier 1973: 27); young and old were singing and dancing for their own enjoyment. Festive evenings were associated with christenings, birthdays, anniversaries of any kind or even a simple moonlit night. The climax to the *tamasha* was the *Chikothi* accompanied by the *viaule* and *banderinha*, the tinkle of the triangle and the clash of tambourines, all with interludes of prancing figures, much shouting and the gleeful clapping of hands. Many of these 'Kaffir airs' had been published by the Band Master of the Ceylon Rifle Regiments under the title *After Supper Kaffir Quadrila* (Brohier 1973: 27).

According to Sunil Ariyaratne (2001: 32), the first collector of Kaffrinha music was Herr Somers, the Band Master of the Ceylon Rifle Regiments. His scores entitled "After Supper Kaffir Quadrila" have not been traced so far. Twentieth century Kaffrinhas were arranged for the piano by the Rodrigo brothers, Norbert and Vincent, and Professor Lord. Norbert Rodrigo's score of Ceylonese Dances (Ariyaratne 1999), Vincent Rodrigo's score of Ceylonese Lancers on Kaffrinha Airs (Ariyaratne 1999) and Professor Lord's score of Caffarina Quadrilles, (given to me by Srimanie de Fonseka), have survived. The three scores consist of five movements each of which correlates with five different dances. Kaffrinha is characterised by cross rhythms and syncopations, the cross rhythms occurring with interplay between 6/8 (six quavers to a bar) in the treble and 3/4 (three crotchets to a bar) in the bass. Syncopation involves shifting the accents to where they are not supposed to be in Western music and accenting the parts in-between beats. Syncopation or playing 'off the beat', drives the music and makes it exciting, and also links *Kaffrinha* with African music. Accented notes are not marked on the scores but musicians learn to emphasis on the appropriate note through an oral tradition. There is also scope for improvising. In the bass, the accent is on the first beat and also on the third beat at times, while beats are on the first, fourth and fifth notes in the treble. These cross-rhythms and syncopations spark off the *Kaffrinhas*.

Kaffrinha of the Batticaloa Burghers calls for alert movements and lively tunes. Their dance involves four couples and is typically performed at weddings. Marriages are not complete until the Kaffrinha is danced. The bride and the groom open the dance followed by the bridesmaid and best man and two further couples. Dancing continues for about two hours with only short breaks of about ten minutes in total between the five movements when the musicians change mode. These dances are not a courtship ritual or a display of virtuosity but they require considerable stamina to sustain continuous dancing for a long duration.

The father of Alex Van Arkadie (Personal communication: Alex Van Arkadie), a Sri Lankan Burgher with Dutch and Portuguese ancestry, was a close acquaintance of Wally Bastianz, the originator of *Chorus Baila* (generally known as *Baila*). Van Arkadie recalls Colombo's *Kaffrinha* dancers (de Silva Jayasuriya 2002), travelling entertainers, in the 1950s, who performed once a year, in affluent Dutch Burgher houses. This practice was not confined to Colombo but was also found among the Burgher communities in Batticaloa, Trincomalee, Kandy, Galle and Jaffna. *The rabāna* (tambourine), triangle, viola, violin, piano accordion and gourd rattles (*maracas*) were played. Payment was made in the form of cash donations or gifts and the performers were invited into the house to share snacks, sweets and drinks. Children

followed the entertainers in order to feast on the sweets. The most popular item in the variety entertainment performance was the Kaffrinha, performed by a Burgher couple disguised as Africans by blackening their faces right down to the neck. Fingers were encased in white hand gloves to cover their paler skin. The man wore a prominent red bow-tie around his neck which fluttered freely against his long-sleeved satin shirt which was of a bright colour - yellow, green, blue, pink or orange. The woman wore a wig of raven black hair in a mass of fine curls bunched together in tassels to hang from under a neatly draped bandanna ('scarf' from the Portuguese word banda). She wore a colourful pair of large earrings and a string of large beads plunged down from her neck to her heavily endowed, perhaps padded, bosom. The woman's taffeta blouse blended finely with her clothes but was in contrast to her partners. The man was dressed in a long tail-coat. He wore a black top-hat which he tipped each time he bowed before the lady who swung her flared skirt provocatively in order to respond to his charming gestures. Her sleeves held layers of frills which dangled and danced down from her shoulders to the rhythm of the beat. The provocative swing of her hips was exacerbated by her pronounced hips, which was due to a cushion that she tied for this purpose. Her rich satin skirt was flashily decorated in polka dots all-over, or broad bands of coloured borders at the hemline, and her underskirt was lace-edged or hand-embroidered. Kaffrinha was a feast of captivating colourful flashes, entrancing movements and jubilant sounds made to the cheers and yells of the audience. Van Arkadie's and C.M. Fernando's descriptions of Kaffrinha stand in contrast to the Batticaloa Burghers dance in terms of costume and context.

But *Kaffrinha* is the traditional dance of the Portuguese Burghers (de Silva Jayasuriya 2013b: 7). The Afro-Sri Lankans (*Kaffirs*) and Portuguese Burghers are co-religionists, Roman

Catholics. They also had a common mother-tongue, Indo-Portuguese of Ceylon/Sri Lanka Portuguese Creole. Religion and language signalled 'Portuguese-ness' not merely in Sri Lanka but throughout the Lusitanian empire. Acculturation (or cultural assimilation) obscured 'otherness.' Ethnic origins were over-written and assimilation between the Portuguese and 'others' was therefore possible throughout the colonised Portuguese world.

Manhas remain an oral tradition, and although the community knows the context of the songs, they cannot provide a word for word translation. My transliteration and translation of the manha called 'Ayō lumara estralate diyanthi' serves to illustrate. Translations of manhas are open to interpretation as dictionaries for creole languages are inadequate. Creoles are allowed to evolve freely and are rarely standardised. I have used my knowledge of Sri Lanka Portuguese Creole to recover the meaning of this song. A compact disc with a few manhas was released by Thidora (Theatre Institute for Disability Oriented Research and Advocacy) and CEPA (Centre for Poverty Analysis) a few years ago.

(Sri Lanka Portuguese Creole: My transliteration)

Ayō lumara estralate diyanthi Minya ru lumāra estralate diyanthi Sarungelete pidimentū Mamma su kasamentu

(Standard Portuguese: My translation)

Olhai o luar diante das estrelas, Na minha rua luar diante das estrelas, Pedindo ao papagaio de papel Pelo casamento da mãe

(My translation)

Look moonlight in front of the stars In my street moonlight in front of the stars Asking the kite For mother's marriage

Scholarly and journalistic interest in the Sirambiyadiya community has resulted in increased public performances of *manhas* (de Silva Jayasuriya 2012b: 31). They have performed at several venues: Barefoot Gallery (Colombo), Jaffna, Galle Literary Festival, Mahiyangana and Bolgoda (near Moratuwa) and also overseas in South Africa at a Sri Lankan Independence Day celebration in 2013. During my visit to the community in August 2012, they told me that they wish to make their music known throughout Sri Lanka.

Ana Miseliya, Emiliana's mother, who died several years ago, predicted that it is only through music and dance that their descendants would be identifiable, once their physiognomical features are diluted by out-marriage. At present, several Afro-Sri Lankans, particularly the older generation and the middle-aged are phenotypically identifiable as 'Africans.' But as the younger generations are mainly the results of out-marriage, they are blending in with other Sri Lankans.

Discussion

Afro-diasporic music and dance take on a variety of contexts and can be linked to religious practices, beliefs and spirit possession or to day-to-day struggles resulting in work songs or songs for entertainment. What is perceived as a form of entertainment amongst the Afro-Sri Lankans could be interpreted as codes and symbols of heritage and ethnic identity.

Their strong cultural memories are tied to Sirambiyadiya where a few hundred Afro-Sri Lankans live. The lyrics of *manhas* are preserving the vestiges of Sri Lanka Portuguese Creole even though Creole is moribund in the spoken form. *Manhas* enable Afro-Sri Lankans to connect to the populous at large through their perceived connection to *kaffrinhas*.

Conclusion

The history of the Sirambiyadiya Afro-Sri Lankan community is embodied in their dance movements and the sound of their music. They illustrate how migrants hold on to their music and dance forms, when all other cultural elements have been transformed or lost in the process of adaptation. Music and dance differentiates this community from others in Sri Lanka. Cultural memories of Afro-Sri Lankans are symbolic of their African past, and enable them to emerge from invisibility by pronouncing their otherness.

End Notes

References

Ariyaratne, Sunil, *An Enquiry into Baila and Kaffirinna* (Sinhala Text), (Colombo, 1999).

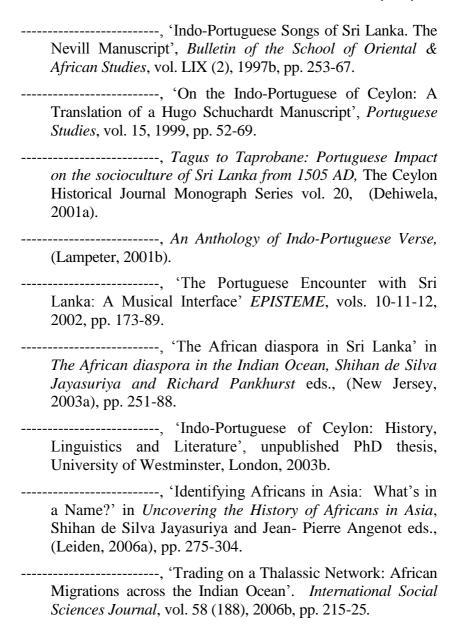
-----, *Baila Kaffirinna: An Investigation*, E.A. Gamini Fonseka trans., (Colombo, 2001).

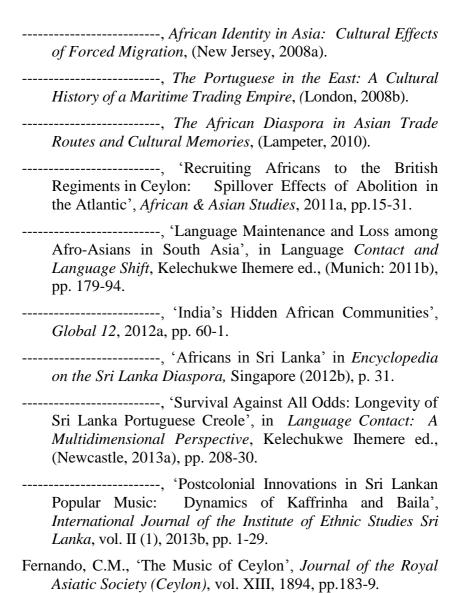
¹National Archives, Kew (UK) CO54/11. North to Hobart. 17 June 1804.

²National Archives, Kew (UK) CO54/11. North to Hobart. 25 September 1804.

³National Archives, Kew (UK) HCA 32/1814/2739.

- Barendse, Rene, 'Slaving on the Malagasy Coast 1640-1700', *IIAS University of Leiden, Working Paper Series* 2, 1995, pp. 137-55.
- Bertolacci, Antonio, A View of the Agricultural, Commercial and Financial Interests of Ceylon, (London, 1817).
- Brohier, Richard Leslie, Discovering Ceylon, (Colombo, 1973).
- Bruce, James, *Travels to discover the source of the Nile in the years 1768-73*, (Edinburgh, 1813).
- Coupland, Reginald, East Africa and its Invaders from the earliest times to the Death of Seyyid Said in 1856, (Oxford, 1938).
- -----, The exploitation of east Africa, 1856-1890: the slave trade and the scramble, (London, 1968).
- Dalgado, Sebastião Rodolfo, *Dialecto Indo-Português de Ceylão*, (Lisboa, 1900).
- De Butts, Augustus, Rambles in Ceylon, (London, 1841).
- De Silva, Chandra Richard, *The Portuguese in Ceylon 1617-1638*, (Colombo, 1972).
- De Silva Jayasuriya, Shihan, 'Portuguese and English Translations of Some Indo-Portuguese Songs in the Hugh Nevill Collection', *Journal of the Royal Asiatic Society Sri Lanka*, vol. XL, 1995, pp.1-102.
- -----, 'Hugh Nevill Collection of Indo-Portuguese Verses: Portuguese and English Translations of Oersaan and Falentine', *Journal of the Royal Asiatic Society Sri Lanka*, vol. XLII, 1997a, pp.107-211.





Gankanda, Nuvan, Ape Nodanna Lānkikeyō, (Colombo, 2007).

- Gibb, H.A.R. trans., *Ibn Battuta Travels in Africa and Asia*, 1325-1354, (London, 1983).
- Goonatilleka, Miguel, An interview with the Portuguese speaking community in Puttalam, Sri Lanka, (Colombo, 1983).
- Harris, Joseph, 'African Diaspora Studies: Some International Dimensions', *A Journal of Opinion*, vol. 24 (2), 1996, pp. 6-8.
- Modern Language Review (1895), New Series, vol. III, No. 6, pp. 133-4.
- Muller, Carl. Jam Fruit Tree, (New Delhi, 1993).
- Pankhurst, Richard, *An Introduction to the Economic History of Ethiopia*, (London, 1961).
- -----, 'The Ethiopian Diaspora to India: the Role of Habshis and Sidis from Medieval Times to the end of the Eighteenth Century', in *The African Diaspora in the Indian Ocean*, Shihan de Silva Jayasuriya & Richard Pankhurst eds., (New Jersey, 2003).

Personal Communications:

Alex Van Arkadie, Rome, 2001.

Emiliana, Sirambiyadiya, 25 July 2013.

- Pieris, Paul, Ceylon and the Hollanders 1658-1796, (Ceylon, 1918).
- Raghavan, M.D., Ceylon: a pictorial survey of the peoples and arts, (Colombo, 1962).
- Sarachchandra, Ediriweera, Folk Drama in Ceylon, (Colombo, 1966).

- Smith, Ian Russell, 'Sri Lanka Portuguese Phonology', PhD dissertation, Cornell University, 1977.
- Tennent, Emerson, Ceylon: An Account of the Island Physical, Historical and Topographical, (London, 1860).
- Zwaardecroon, Hendrick, *Memoir for the Guidance of the Council of Jaffnapatam 1697*, (Colombo, 1911).

Hellenistic Elements in the Depiction of Life Story of Buddha in Gandhara Art

Vinay Kumar

Abstract

In Gandhara art, architecture, sculpture and painting, one finds a vast number of panels depicting the life story of Buddha. These panels were produced to decorate numerous stupas of the monasteries. These narrative panels contain stylistic elements of Greek, Roman and Greco- Iranian schools of Art. Many scholars are also of the opinion that these panels contain many Hellenistic elements. In these panels the artistic efforts, the icons, legends and monuments together with their motifs are evidently Buddhist but the form is strongly Hellenistic. The present paper attempts to prove that Buddha's life story in the Gandharan tradition is purely dependent upon the Greek art frame and in its depiction one finds many Hellenistic elements.

Introduction

The term Gandhara art is applied to the school of architecture, sculpture and painting which flourished in north-western India from first to fifth century CE. Gandhara art is the product of amalgamation of various cultural elements; Hellenistic, Iranian, Roman and Indian. It displays evolved technical skill and introduces new foreign motifs. Nevertheless, it is primarily religious in character, serving the Buddhist faith (Marshall 1960: 42). The patronage of foreign artists by the Kushan is actually no more difficult to understand than their espousal of Buddhism.

Being foreigners in India, they could not be accepted into Hindu faith, and presumably both their adoption of Buddhism and support of a foreign culture were parts of a policy designed to maintain their autonomy in the conquered land (Marshall 1960: 76).

In Gandhara art the artistic efforts, the icons, legends and monuments together with their motifs are evidently Buddhist. The form is strongly Hellenistic, while the matter is yet Indian. Consequently, many of the old motifs of the early school have also been retained, while some are modified and a few entirely transformed. Therefore, we notice in addition to the Indianised motifs such as atlantid, fantastic creatures like griffins and the flora and fauna of India, the new motifs of vine, the acanthus, cupids and garlands. Other fabulous creatures like the hippocampus and triton, marine divinities, the gods of Olympus are also introduced (Gordon 1971: 10-11). According to Agrawala (1965)

... with the life story of Buddha and also the legendary *jataka* taken from the art of Eastern India, the Gandhāra sculptors show a wide acquaintance with Iranian and Greco-Roman motifs. The Gandhāra art was naturally a blend of Indian, Iranian and Greco-Roman art elements. (273)

Among the Greco-Roman motifs the more common are the motifs of Corinthian, Ionic and Doric pillars, cupids, garland-festoons or garland bearing erotes, Bacchanalian scenes, Graeco-Roman costumes, laurel wreath on the forehead of females, vine-scrolls, mythical creatures like the centaur, tritons, marine deities, Demeter-Hariti holding cornucopia, *Amorini* - yakshas corresponding to Indian maladhari devas, Athena-Roma, Harpocrates, Silenus, Satyr, GaruOa and Ganymede.

Hence, we can find that although the subject matter of Gandhara art is Buddhist, many of the motifs discernible in the sculpture are of either Western Asiatic or Hellenistic origin. All the above forms and motifs were all part of the repertory of Hellenistic art introduced by the Romanised Eurasian artists in the service of the Kushan court. A similar view is supported by A.K. Coomaraswamy. He is of the opinion that:

Gandhāra art is iconographically in part, plastically almost altogether, a local phase of Hellenistic descended from the art of Greek period but applied to themes of Indian origin. It may be described as representing an eastward extension of Hellenistic civilization mixed with Iranian elements, from another as a westward extension of Indian culture in a western garb. (Coomaraswamy 1972: 52)

The Gandhara School of sculpture is based in part on classical models of the Greco-Roman school. It has often been disputed which of the two Western Schools, Greek or Roman contributed more to the Gandhara style? Pro-Hellenistic theories are put forward by scholars like Alfred Foucher (1951) and Sir John Marshall (1960) while Hugo Buchthal (1989), Sir Mortimer Wheeler (1949), Benjamin Rowland (1958) and Alexander Soper (1951) consider Roman art as the main source of inspiration in this School of art. Daniel Schlumberger (1953: 232-8) who excavated Surkh Kotal in 1951 stressed in addition to these sources, the Iranian influence and close connections with the art of Palmyra. Unquestionably, all of these schools had influenced in the formulation of the Gandharan style that incorporated indigenous Indian characteristics According to Benjamin Rowland (1958), actually, the Gandhara sculptures have little to do with Greek art either in its Hellenic or Hellenistic phase, and are much more closely related to Roman art. The Gandhara School is, indeed, perhaps best described as the eastern most appearance of the art of the Roman Empire especially in its late provincial manifestations.

Hellenistic art in the form of architecture and sculpture was introduced into north-western India during the reign of the Iaka-Parthian dynasties, as may be illustrated by a number of temples and sculptured fragments from the city of Sirkap at Taxila (Marshall 1936: 78). Hellenistic background for Gandhara art was unquestionably the introduction of bands of foreign worksmen from the eastern centres and Roman Empire from the time of Flavions that led to the creation of Buddhist sculptures in Peshawar valley. Vincent Smith also declared the 'art of Gandhara essentially Roman in style', its models 'Greco-Roman and not pure Greek', developed by artists of Peshawar adopting the 'Roman system of design and decoration' and probably belonging to a foreign colony resulting from trade connections (Smith 1889: 107). As evidence he cited the diffusion of the Roman form of Corinthian capital with its use of human figure, resemblances with Christian work and sarcophagi, vine-scroll and garland motifs and Bacchic subjects (Smith 1889: 107). The successive stages of Roman art styles were also seen in Gandhara works and iconography too was believed to have been copied. According to Wheeler (1949: 4) "the Western art came from Alexandria in the course of trade and around 100 AD gave mahayana Buddhism the central figure of the Roman emperor as the model for a Buddha hitherto only symbolized." The other Western elements, such as occasional illusionism and various motifs were transmuted, perhaps, also by migrant craftsmen, into a Buddhist context, aided by the diffusion of stucco, a cheap and easily worked medium characteristic of Alexandria (Wheeler 1949: 4).

The Bihistun inscription of emperor Darius is found indicating Gandhara as a separate province of Persia (Majumdar 1980: 44) dated to 516 BCE, which remained the capital till the time of Alexander. It is through this territory that Alexander the Great passed with great difficulty in the battle at Massaga in 327 BCE (Stein 1975: 42). According to Jatakas, the Gandhara valley was rich in Buddhist art and crafts. The Kushana ruler Kanishka gave the royal patronage to Buddhism. During his reign and his successors' rule Gandhara enjoyed greatest prosperity; especially in the field of art, many sculptures were made depicting the figures of Buddha and Bodhisattva. It is important to mention here that the Buddhist art of Gandhara gracefully introduced the figure of Buddha in human form as conceived by the Mahayana school. The image of Bodhisattva, however, indicated the figure of a prince with all its compositional beauty, adorned with the elegance of jewellery. In the base relieves of Gandhara, the figure of Buddha, depicts him simply dressed and seated on a throne in the form of a reversed lotus bloom. The iconography was purely native as the seated Buddha is almost always cross-legged in the traditional Indian style. The Buddha figure can be noticed with usnisa, the urna and elongated ears indicating his distinguished position. The Gandhara Buddha is always shown with four significant hand gestures/mudras namely abhaya, dhayana, dharmachakra and the *bhumisparsa*.

Depiction of Jataka Stories in Gandhara Art

The *Jatakas* are collections of stories referring to the pervious births of Buddha. The Indians believed in rebirth or reincarnation of men. The Hindu belief was adopted by Buddhists too, so that they speak of various births of the Buddha. These reincarnations took place before he attained

Buddhahood. It was believed that Buddha before attaining Buddhahood was born and reborn in different forms of existence (Human and Animal) but tried to attain high human ideals and virtues all along. The *Jataka* stories present the various scenes and instances of the Buddha's quest for perfection and they contain important moral lessons that can be found at many places. The important *jatakas* that are depicted in Gandharan sculptural art are as follows:

- 1. The story of six Tusked Elephant: The elephant with six tusks represents one of Buddha's past lives. Buddha born as an elephant had two elephant wives with whom he lived happily until the second wife in jealousy killed herself. Later she was born as a queen of Banaras. She convinced the king, her husband to send a hunter to kill the six tusked elephant. The hunter succeeded in hunting the elephant but the strange animal without any thought of revenge allowed him to take off his tusks. When queen saw the tusks, her heart broke and she learnt a lesson.
- 2. **The story of Devotion (Dipankara** *jataka*): Dipankara was the earliest of the 24 predecessors of the Buddha. The young Sumati, had problems in getting flower to offer. He borrowed some lotuses from a girl standing at the city gate. Sumati offered the flowers and spread his hair on the ground for Dipankara as an act of devotion. The Buddha predicted that Sumati would be reborn as a *Sakyanmuni*.
- 3. **Buddha born as Maitra Kanyaka:** This is about the story of the son of a ship-owner who died at sea. The son wanted to earn the money needed for his mother's comfort. The mother wanted him not to follow his father

and not to become a seaman. One day when she was reiterating and her son got angry for not been allowed to become a seaman, he kicked her on the head and went to become a seaman but was sad about what he did to his mother. During the sea adventures his uncomforting sole decided to make a palace at the place where his mother was killed.

- 4. Story of Visvantra: Buddha was born as Prince Visvantra, the son of King Sivi. They had a white elephant capable of bringing rain, as needed. The neighbouring kingdom was suffering with lack of rain. A delegation requested Visvantra for the miraculous white elephant. Visvantra handed over the elephant. The generosity of Visvantra resulted in his exile from the kingdom of his father. He was sent from Sivi to Varshapura. On the way he gives away his horse, royal chariot, his son and wife to a Brahman. Later, Asoka accepted Buddhism and visited the place and built a Stupa. This place is called Chanakdheri, the white elephant temple.
- 5. **The story of Amara:** Amara was a beautiful lady whose husband was away from home most of the time. Four men were interested to meet her. She eventually fixed different times to meet everyone in the same night. She tricked them and packed everyone in a basket. Next day, early morning, she brought them to the King.
- 6. **The story of Syama:** A Brahman spent a lot of time to gain knowledge and then got married. Then the wife gave birth to Syama. Both parents decided to renounce the world. They left for the forest and lived in separate huts. After some time both parents of Syama become

blind and Syama was taking care of them. One day Syama went to bring water and king of Banares was hunting and Syama accidently got killed. The king of Banares grieved and decided to serve her parents. While they were grieving over the dead body, Syama returned to life.

Physical Appearance of Buddha in Gandhara Art

The greatest contribution to the Indian art, resulting from the union of Hellenistic genius and Buddhist piety, is the figure of Buddha. It was the Hellenistic artist of Gandhara, familiar with the comprehensive pantheon of the Greek art who first portrayed the master. The Buddha image was the creation of the Greco-Buddhist artists; took its origin in Gandhara and later became the source of inspiration to the artists of Central Asia and Far East (Coomaraswamy 1926: 165). The Buddha figure is, undoubtedly a triumph of Asian art, though unmistakably, it reveals the impress of the imperial Roman styles, especially the draperies. The introduction of Roman themes such as drinking parties and externalities of the life in the Gandhara art is again a result of the Hellenistic impact.

The reliefs of the Hellenistic and Roman periods developed their individual characteristics, but the underlying narrative concept does not seem to have altered in any fundamental way from its formulation in classical Greece (Bieber, 1961: 478). The majority of the Gandhāran reliefs appear to be an adaptation of this narrative mode. The life of Buddha is conceived as a chronological sequence of separate incidents or stories, with each story distilled into a single moment, and Buddha's life cycle is visualised as a linear progression of these moments, separated by motifs like Corinthian pilasters dividing one

incident from the next (Ackermann, 1975: pl. XXXV). The reliefs are presumably arranged in linear sequence, placed either horizontally, to cover perhaps the body of the stupa drum, or vertically, on gables and uprights at other points of the stupa complex, to record the life of Buddha in its broad chronological sequence.



Figure 1: The dream of Queen Maya. Image Courtesy: Indian Museum, Kolkata.



Figure 2: Interpretation of the dream by the sage Asita, from Gandhara. Image Courtesy: Indian Museum, Kolkata.

A representation of 'Maya's dream' (Fig. 1) for example, is usually followed by the interpretation of the dream and the birth in the Lumbini Garden. The 'Return to Kapilavastu' (Fig. 2) and the 'Reading of the horoscope' (Fig. 3) too are similarly depicted. A representation of 'Life in the Palace' is generally followed by the 'Great Renunciation' and the 'Great Departure' (Ingholt 1957). The scenes are separated from each other by artistic devices such as Corinthian pilasters or Salabhanjika figures. Some of the Gandharan reliefs are compositionally very akin to some Roman examples of continuous narration. A representation of 'White dog that barked at Buddha' (Fig. 4), 'the Conversion of Angulimala' and 'the Ordination of Rahula' all from Jamal-garhi, now in Indian Museum, Kolkata can be

cited as examples. The synthesis of Indian and Greek forms occurred in the Gandhāran statues of the Buddha as well. The statues were drawn to classic proportions, following Hellenic models for physiognomy, gestures and drapery.



Figure 3: Reading of the Horoscope, from Gandhara. Image Courtesy: Indian Museum, Kolkata.

A relief depicting the 'Descent of the Buddha from Trayastripsa Heaven' has stylistic parallels to the 'Arch of Galerius' in Thessalonica (**Figs. 5** and **6**). We can notice the Hellenistic influence in the steatite panel of a stair-riser from a site in the Buner region (**Fig. 7**). Sometimes this relief is identified as the presentation of the Bride to Prince Siddhartha but the subject of the relief is more like a Dionysian scene. The carving is characterised by the isolation of the figures against a plain background, although the forms are related by their postures and gestures. These features, together with the fully rounded carving

of the individual forms remind us of Flavian or Hadrianic reliefs and other examples based on the Greek relief style of the fifth century BCE. According to Benjamin Rowland (1953: 132) the closest classical parallel to this relief is to be found in the silver hoop of the Marengo Treasure in the Turin. Patricia E. Karetzky asserts that due to contact with the West during the early centuries of the Christian era Buddhist narratives were radically altered (Karetzky 1988: 163-8).



Figure 4: Panel showing the white dog that barked at Buddha, from Jamal-garhi. Image Courtesy: Indian Museum, Kolkata.



Figure 5: Descent at Sankisa from the Trayastripsa Heaven, Gandhara. Image Courtesy: Victoria and Albert Museum, London.

Figure 6: Arch of Galerius, Thessalonica. Image Courtesy: http://upload.wikimedia.org/wiki pedia/commons/c/cb/Thessalonik i-Arch of Galerius (detail).jpg



Figure 7: Dionysian scene from the Buner region. Image Courtesy: Victoria and Albert Museum, London.

The famous Parthenon frieze (Fig. 8) of Classical Greece depicts the Panathenaic procession, one of the most important religious festivals of Athens and one of the grandest in the entire ancient Greek world. This holiday of great antiquity is believed to have been the observance of Athena's birthday and an honour to the goddess as the city's patron divinity, Athena Polias (Athena of the city). The procession was held on the last day of the festival, and involved the ritual of bringing a new peplos, or cloak, to the ceremonial statue of Athena. The procession is shown as a chronological sequence of separate incidents, with each incident distilled into a single moment. Thus, the procession is shown as a linear progression of individual moments. The use of space between each scene expresses the isolation of one moment from the next. The division of time into separate arrested moments and the movement of time as a linear progression of these moments represent the basis of Greek narrative vision. Even when an episode is depicted by means of a single incident as in the Parthenon metopes, the narrative concept and treatment follow the same basic principles.



Hellenistic inspiration again can be seen quite clearly in the treatment of space in Gandharan reliefs. The analysis of the treatment of space follows three basic expressions of space in narrative: its distribution within a composition, the definition of space as a physical setting for narrative and the rendering of spatial depth. The distribution of space into two groups of Gandharan reliefs, clearly show the Western inspiration. The first group is the so-called Buner series, in which the treatment of space is indicative of Classical Greek and Hellenistic compositions (Marshall 1960: 33-37). The second group of reliefs shows Roman sources. The dramatic restlessness in a Parinirvana panel from Loriyan Tangai now housed in the Indian Museum, Kolkata or the depiction of the visit of the sixteen ascetics in Victoria and Albert Museums, London (Figs. 9 and 10) is very similar to the dramatised representations on many Roman battle sarcophagi from the period of the Antonines and the Serverids (Ingholt, 1957: Fig. 116). A striking Roman prototype for this relief is the enormous sarcophagus of the Battle of Romans and Germans in the Museo delle Terme. Found in the Portonaccio area of Rome, along the Via Tiburtina, this sarcophagus is carved in high relief and dates back to 180-200 CE (Fig. 11). It seems to have been used for the burial of a Roman general involved in the campaigns of Marcus Aurelius, who is depicted as charging into battle on horseback near the center of the scene on the front of the sarcophagus. The figures are so carved that they move like flickering lights against the darkly shadowed background and both in the Gandhara panel and its Roman counterpart there is a sense of dynamic movement and of intense pathos, both in the movements and in the facial expression of the tortured forming a spiritualised quality. Like the Terme relief, the Nirvana relief is a composition in form, light and colour, in dazzling light and shade. At first glance it might almost be mistaken for a Roman carving of the time of Septimus Servus. The many tires of figures emerging from the depths of the shadowed background are carved in such a way so as to provide a very rich and dramatic contrast in light and shade. The relief is a perfect illustration of the strangely unhappy stylistic mixture resulting from a combination of the technically advanced and realistic methods of Roman craftsmanship and essentially archaic and conceptual point of view of the native Indian tradition.



Figure 9: The *Mahaparinirvana* of Buddha from Loriyan Tangai. Image Courtesy: Indian Museum, Kolkata.



Figure 10: Visit of the sixteen ascetics from Gandhara. Image Courtesy: Victoria and Albert Museum, London.



Figure 11: Sarcophagus from the Via Tiburtina, representing a battle between Romans and Germans. Image Courtesy: Rome, Museo Delle Terme.

The even spacing in the Gandharan reliefs show that the figures are set in fairly well defined rows, one above the other, thus infusing a schematicism which diffuses the movement of the compositions. The whole is a strange combination of the illusionistic depth and dramatised chiaroscuro of Roman relief combined with the old intuitive method of indicating spatial perspective by placing the consecutive rows of figures one above the other that we encounter at Sanchi and elsewhere. A dominant play of light and shade is created by deep carving and crowded compositions. But despite the variation in the way the heads and torsos have been directed, an even spacing in the Gandharan examples ensures that the figures are set in well-defined rows, one above the other, thus infusing a schematism which refracts the changed movements of the composition.

According to N.G. Majumdar (1937) Gandharan artists have made a definite attempt towards the realisation of the idea of perspective and the creation of a pictorial illusion in many reliefs. The figures when occurring in groups are delineated on different planes. The front rows of the figures are fashioned almost in the round, while the back rows are left flat, so that they may not cast shadow on the background. This is seen in the panel of mahaparinirvana of Buddha where we can find that the lower parts of the front row of the figures are completely isolated from the background, although the upper parts are connected with it. The light and shade are so well controlled in this relief that it conveys the impression of a painting rather than a sculpture. The treatment of shadow in the reliefs of the Gandhara School is reminiscent of the Greco-Roman, for instance the reliefs on the arch of Titus. The gateway of the city disposed of sideways as appearing on this arch has exact analogy in the representation of the Dipaekara jatakas in Gandharan reliefs.

Conclusion

From the above discussions it is derived that Buddha's life story is purely dependent upon the Greek art frame in the Gandharan tradition. The Buddhist art could not mature without the influence of the Greeks in Gandhara and moreover Greek policies were also prevalent in the region. Greeks ruled for 186 years and Greek frame of art that existed in the region had great popularity. Upon the decision of depicting Buddha's life story on stones the Greek art frame was shifted to Buddhist religious art and hence, Gandhara art absorbed all the natural art that were present at that time. Despite a widespread indebtedness of Gandharan sculptures to the Hellenistic tradition and in particular to the adoption of the Western concept of time in

reliefs, few Gandharan sculptures betray the realism of the Western style. The majority of the sculptures express, instead, varying degrees in the diffusion of that realism. The diffusion arises largely out of the Gandharan tendency to juxtapose the Western treatment with other norms, such as the Indian. Hence, we can see that there can be little doubt about the allegiance of the majority of the Gandharan narratives to the temporal perception of the West, though the Gandharan representation reflects an even more divisive notion of time. When we analyse the treatment of space in Gandharan reliefs we find that only in a handful of reliefs does the distribution of space clearly recall Classical Greek and Hellenistic compositions and in those which can be allied to Roman examples, the schematised treatment in Gandhara diffuses the charged movement of the compositions. The use of background elements as well as the practice of leaving the background clear could have been derived from the West as easily as from Indian narratives, or from both. Finally it may be pointed out that the stylistic correspondence in Hellenistic art and Gandhara art may not have been caused by external similarities, but such a relationship must have been brought about by a deeper involvement of one cultural sphere with the other.

References

Ackermann, Hans Christoph, Narrative Stone Reliefs from Gandhāra in the Victoria and Albert Museum in London, (Rome, 1975).

Agrawala, V.S., *Indian Art*, (Varanasi, 1965).

Andreae, Bernard, The Art of Rome, (New York, 1977).

- Arora, U.P., *Graeco-Indica: India's Cultural Contact with the Greek World*, (Delhi, 1991).
- Barthes, Roland, 'An Introduction to the Structural Analysis of Narrative', *New Literary History*, vol. 6 (2), 1975, pp. 237-72.
- Bieber, Margarete, *The Sculpture of the Hellenistic Age*, (New York, 1961).
- Boardman, John, *The Diffusion of Classical Art in Antiquity*, (London, 1994).
- -----, *Greek Art,* (London, 1985).
- Buchthal, H., 'The Western Aspects of Gandhāra Sculpture,' Proceedings of the British Academy, No. 31, 1945, pp. 151-76.
- Coomaraswamy, A.K., 'The Indian Origin of the Buddha Image', *Journal of the American Oriental* Society, vol.46, 1926, pp.165-170.
- -----, History of Indian and Indonesian Art, (New Delhi, 1972).
- Doshi, Saryu (ed.), *India and Greece*, (Mumbai, 1985).
- Dehejia, Vidya, *Discourse in Early Buddhist Art: Visual Narratives of India*, (New Delhi, 1997).
- Foucher, A., Graeco-Buddhist Art of Gandhāra, (Paris, 1951).
- Gordon, D.H., 'Hellenism in North West India', *Journal of the Royal Asiatic Society of Bengal*, vol. X, 1971, pp.10-21.
- Ingholt, Harald, Gandharan Art in Pakistan, (New York, 1957).

Karetzky, Patricia E., 'Hellenistic Influence on Scenes of Life of the Buddha in Gandhāra', *Oriental Art*, vol. 35 (3), 1989, pp. 163-8.

- Lyons, Islay, and Harald Ingholt, Gandhāran Art in Pakistan, (New York, 1957).
- Majumdar, N.G., The Greco-Buddhist School of Gandhara: A Guide to the Sculptures in the Indian Museum Vol-2, (New Delhi, 1937).
- Majumdar, R.C., The Age of Imperial Unity, (Bombay, 1980).
- Marshall, John, A Guide to Taxila, (Calcutta, 1936).
- of the Early School, Its Birth, Growth and Decline, (Cambridge, 1960).
- Richter, Gisela M.A., *Perspective in Greek and Roman Art*, (London, 1970).
- Rowland, Benjamin, 'Rome and Gandhāra', East and West, vol.9 (3), 1958, pp. 199-208.
- -----, Art and Architecture of India: Buddhist, Hindu, Jain, (London, 1953).
- Schlumberger, "Surkh Kotal: A Late Hellenistic Temple in Bactria", *Archaeology*, vol. 6, 1953, pp.232-8.
- Smith, Vincent A., 'Greco-Roman Influence on the Civilization of Ancient India', *Journal of Asiatic Society of Bengal*, vol. LVIII (I), 1889, pp. 107-98.
- Soper, Alexander, "The Roman Style in Gandhara", *American Journal of Archaeology*, vol. 55 (4), 1951, pp. 301-19.

- Stein, Aurel, On Ancient Central Asian Tracks: Brief Narratives of Three Expeditions in Innermost Asia and North-western China, (Chicago, 1975).
- 'Thessaloniki Arch of Galerius', *Wikimedia*, Online: http://upload.wikimedia.org/wikipedia/commons/c/cb/Thess aloniki-Arch_of_Galerius_(detail).jpg (last accessed 13 November 2014).
- Wheeler, Mortimer, 'Romano-Buddhist Art: An Old Problem Restated', *Antiquity*, vol. XXIII, 1949, pp. 4-19.

Traditional Water Harvesting Structures and Community Participation in Western Rajasthan

Kartikeya Misra and Neekee Chaturvedi

Abstract

The region of western Rajasthan in India faces frequent droughts and acute shortage of water. This has compelled the inhabitants to incorporate mechanisms to conserve water in their everyday living. These traditional methods have been developed over centuries and reflect the accumulated wisdom of many generations, of which community participation has been a crucial component. An investigation of the drought-affected villages of Phalodi in Jodhpur, Pokaran in Jaisalmer and Baytoo in Barmer has been undertaken to unravel various traditional structures that have been constructed using the indigenous knowledge and locally available material to cope with drought. A contemporary context of traditional sources of water like nadi, bera, beri, tanka, khadin, kuan, and daily life practices has been searched to arrive at suggestions to consolidate the ecological balance in the region.

The expanse of the Thar Desert in the western part of the state of Rajasthan in India conjures up mesmerising images of vast stretches of golden sand inundated with sporadically humped up dunes rarely ornamented by a stray oasis. The beautiful landscape on one hand epitomises barren simplicity and on the other is a manifestation of scarcity of an essential resource, namely water. "This is not a problem so much as it is a condition of their lives" (Bharucha 2003: 64). Therefore, the inhabitants of western Rajasthan have incorporated mechanisms to conserve water in their daily lives. With the onslaught of modernity, a threat and sometimes breakdown of this traditional

mechanism does not behove well for the region and the ecological balance at large. With this premise, it is pertinent to study, record and analyse traditional water harvesting, issues of ownership, maintenance and sustainability by looking into the methods adopted by the local communities to cope with the acute shortage of water resources.

The Indian subcontinent has presented historical evidences, both literary and archaeological, of the preservation of water. The concerns presumably stemmed from the dependence on monsoons. Water was an essential requirement for domestic use and irrigation. Human survival depended on it and the needs were neither seasonal nor capricious like the monsoon showers. The conservation of water was part of customs, rituals and state policy since ancient times (Raychaudhari 1964). Wells, water supply and drainage were meticulously planned in the Indus Valley Civilisation. Kautilya's Arthashastra, an ancient treatise generally attributed to the Mauryan Period, enjoins upon its officers to ensure judicious use of water and proper upkeep of man-made reservoirs (Kangle 1963). Ancient India epigraphic evidence furnishes regarding construction. maintenance and restoration of water storage structures. An important example is the Junagarh inscription of Rudradaman that describes the history of construction and maintenance of the Sudarshana Lake (Kielhorn 1981).

This tradition is basically indicative of human adaptation to local environment. It was clearly understood by the people very early that rain water needed to be preserved for dry spells. The methods adopted for this purpose differed according to the local needs. Western Rajasthan (**Fig. 1**)¹ has been a particularly arid

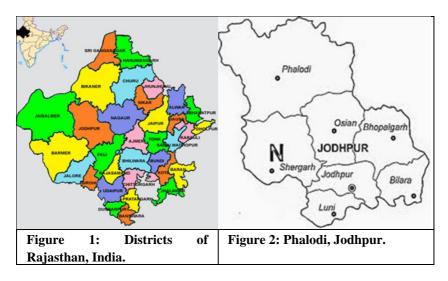
¹ All maps used in the paper are only to give an idea and do not confirm to any scale.

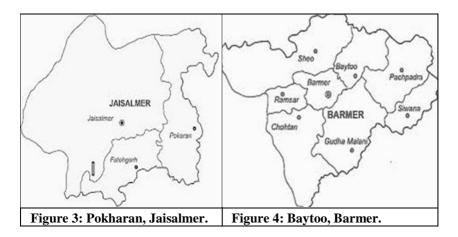
and dry area and traditionally faced acute shortage of water. The deficiency seemed heightened in severity in consonance with the scorching summers of the region. The traditional methods have been developed over centuries and reflect accumulated wisdom of many generations. Oral tradition is a very rich source of indigenous knowledge passed on to the next generation of specific communities. Community participation was crucial to traditional water harvesting and its neglect through modern bureaucratic channels might fail more often than not to yield desired results.

An attempt has been made in this paper to undertake a detailed investigation of the various traditional structures that have been constructed using the indigenous knowledge and locally available material to cope with drought. The investigation has been conducted in three villages each of Phalodi tehsil of Jodhpur (Fig. 2), Pokaran tehsil of Jaisalmer (Fig. 3) and Baytoo tehsil of Barmer (Fig. 4) districts respectively, as these districts are most severely affected by droughts. The Phalodi tehsil of Jodhpur faces a drought every three years historically. The water level has gone down considerably and the region is under dark zone for the last six years. The situation of Pokaran tehsil of Jaisalmer is worse. It is affected by drought three out of every four years. Baytoo tehsil in Barmer district is similarly affected.

There have been some attempts to record the traditional structures in detail. Anupam Mishra in his widely acclaimed book *Aaj Bhi Khare Hain Talab* (1993) has recorded fine details of many water harvesting structures from rural Rajasthan and has also thrown light upon the specific communities engaged in their construction. There have been studies on specific structure like *Nadis* (Khan 1995: 8), *Khadins* (Kolarkar 1993: 2-6) and

Tankas (Wangani et al. 1988). Milind Bokil (2000) provides a useful analysis on droughts in Rajasthan while raising pertinent questions of ownership, equity, distribution of water and impact of modern engineering. Using these studies as foundation, the field study was undertaken in select villages of western Rajasthan to observe the present state of traditional structures, their contemporary utility and to report the state in which they now exist. Another aim of the endeavour is to unravel the relationship of communities, both the creators and the targeted users, with traditional water harvesting. The aim is to assess the indigenous knowledge with a contemporary perspective and arrive at ways to strengthen it in such a way that empowers the people and safeguards ecological balance.





Geographical Backdrop

Western Rajasthan is relatively dry and infertile. This area includes a part of the Thar Desert, the Great Indian Desert also known as Maru-kantar or 'the region of death.' The oldest chain of fold mountains- the Aravali Ranges split the state into two geographical zones-desert on one side and forest belt on the other. The Thar Desert or Great Indian Desert encompasses about 61 per cent of the total landmass of Rajasthan and is, therefore, identified as the 'Desert State of India.' It is the biggest desert in India and encompasses the districts of Jaisalmer, Barmer and Jodhpur. The region becomes very hot during the summer and experiences extreme climate with an average annual rainfall of less than 25 cm. Days are hot and nights are extremely cold. Vegetation consists of thorny bushes, shrubs and xerophilous grass. In some areas, rainfall is less than 120 mm. Agriculture is extremely difficult and not very flourishing in this area. Due to the acute shortage of water, it is not possible to make elaborate provision of irrigation. This has led to a dependence on traditional methods of harvesting rain water.

The Rajasthan Desert extends primarily to three cities-Jaisalmer, Barmer and Jodhpur. Jaisalmer is surrounded by rocky mountain ranges. The early British Gazetteers mention that there were few villages in the region and the ones that existed were situated around wells. Luni, a river of the Aravali ranges, flows from Ajmer to the Rann of Kutch and is like a lifeline to the arid region. Many villages and settlements are found on both sides of the river. The river has great significance for Barmer and Jodhpur-its sandy deposits yielded watermelons and its silt, in case of flood, afforded cultivation of wheat and millets. While Jodhpur saw the construction of many ponds, wells etc. especially with the advent of Paliwal Brahmins, villagers in Barmer have traditionally stored rain water in indigenous structures called *kundi* (tanks) and *sar* (ponds).

The impact of drought is felt in many ways. Acute drought creates a scarcity of water and food. The impact of chronic drought is deep and long lasting. It impoverishes the biotic endowment, accelerates the depletion of natural resources, erodes agricultural capital, devours livestock and displaces and demoralises the human population. This has been happening in Rajasthan over centuries. In recent times, this process has been accentuated by rapidly increasing human population, indiscriminate use of natural resources and energy intensive lifestyles. Therefore, there is an emergent context of going back to refresh, recreate and reshape the link between traditional structures, lifestyles and communities.

The lives of the inhabitants of western Rajasthan, both in terms of survival and prosperity, are closely integrated to a skilful management of natural resources. Without the traditional coping mechanisms, the villagers could not have had even sufficient drinking water. The modes of quotidian living are harmonised with regional ecology and is the most important basis for the remarkable growth and development in the region in spite of such geographical handicaps.

The largely illiterate, rural population of Rajasthan wherein about 51 per cent of the entire population consists of tribal communities, has not demonstrated much dependence on governmental initiatives to provide succour from recurring drought, and seem to bank upon some indigenous knowledge and coping mechanism practices in dealing effectively with conditions of drought affecting them. Unearthing this abundant reservoir of indigenous knowledge and coping mechanism practices as is available with the most vulnerable communities of the state affected by drought over a large period of time is the intent of this research study.

Traditional Sources of Water

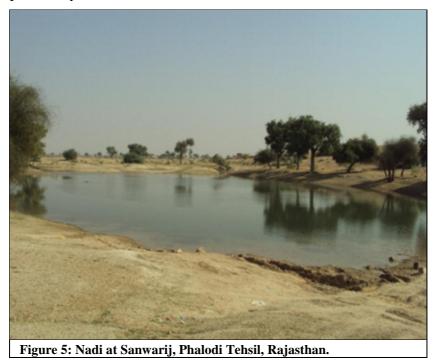
The traditional structures of water harvesting in the villages show a remarkable awareness of local needs and available material. Ironically, while rituals and religion play an important role in their maintenance, the current schemes and initiatives of the government have often led to their neglect, even if inadvertently. Broadly, the lifestyle of the villagers seems to integrate water harvesting as an indispensible practice and water is invariably treated like a precious resource. Through unstructured observation, informal interviews, field visit and participatory habitation, some interesting characteristics of the traditional sources and their functioning have been brought to light during the study which are presented below.

Nadi - These are small man-made ponds with embankments, wherein rainwater from the adjoining catchment area called agor is stored. Various aspects of the construction, including selection of appropriate site, depth to which digging is required to be done, indigenous techniques to conserve the structure when water overflows etc. are dealt in a scientific manner.

Most of the ponds in the Phalodi tehsil of Jodhpur district have been dug by the Paliwal Brahmins. The Paliwal Brahmins originally resided in Jaisalmer, but are said to have migrated to the region in a single night after a tiff with the Diwan of Jaisalmer darbar. There are two large ponds in Sanvarij village of Phalodi Tehsil in Jodhpur district. Their presence creates the kind of landscape that is difficult to believe in a largely desert terrain. They seem to justify the concept of 'an arid fairy tale' (*Turning the Tide* 2010). Such ponds are among the most potent structural coping mechanisms adopted by the local community in the desert-prone areas of Rajasthan (**Fig. 5**).

Every pond constructed by the Paliwal Brahmins normally has a *lakhota*, a mound like structure of sand, in the vicinity of the pond. It was only after the construction of *lakhota* and its *puja* (ritual worship) that the water of the pond could be used for drinking purposes. The practice of attaching sacred rituals to water bodies seems to be intended towards the maintenance of their hygiene and cleanliness. Another feature of the ponds constructed by Paliwal Brahmins is a pillar in the vicinity of the pond. The pillar depicts the date of construction of the pond and also contains a picture, presumably of a religious deity worshipped by the Paliwal Brahmins. Most of the ponds in the region have a religious significance attached to them. For example, the pond in Sanvarij village is dedicated to the local

deity, Bhomia ji and Maharaja Padam Singh, who apparently came from Jaisalmer to convince the Paliwal Brahmins to return to their native place. In fact, most of the villagers believe that the water of the pond has a curative value. The ponds in the region also have canopies or *chhatris* either in the memory of a deceased person or merely as a resting place for travellers and passers-by.



The *agor* and the base of the ponds in Sanvarij and other villages of Phalodi in Jodhpur are regularly cleaned through the donations obtained from villagers as also through the voluntary physical labour (*shramdan*) put in by them. The ponds were meant to fulfil the needs of local communities but denial of

accessibility of water from the ponds to the lower castes by the dominant class often led to a backlash by the members of the lower caste purely to maintain its survival. An important example is the *Meghwalon ki talai* (Pond of the Meghwals) in Ujla village of Pokharan tehsil of Jaisalmer district. The Meghwals were considered untouchable and not allowed to drink water from the common pond in pre-independence period. So, they dug their own pond.

It is amply clear that wherever there is a dearth of water, in the absence of tube wells etc. villagers use every drop of rain water and prudently maintain the local ponds and reservoirs. Most of the ponds in such regions have been dug by people's participation, as in the case of the large pond in Khara village of Phalodi Tehsil in Jodhpur (**Fig. 6**).



Figure 6: A Large Community-maintained Pond at Khara, Phalodi, Jodhpur District.

Tanka - The tanka is yet another structural mechanism for indigenous water conservation that utilises rainwater stored on rooftops. The size of tanka is determined in accordance with the number of members in the respective household and their requirement of water.

The stored water is used for drinking as well as for cooking. While the roof of the *tanka* is cleaned before the rainy season, someone has to physically enter the *tanka* to clean it from inside. Excess water is allowed to flow into the farms. The villagers have also devised innovative methods to extract water from the *tanka*. Water was being extracted from a *tanka* in Gera village of Baytoo tehsil in Barmer district by the use of pipelines. Similarly, in Khara village of Phalodi tehsil, villagers were even found using electric motors to extract water from the *tanka*. Water is a precious resource in this region. Not infrequently, one can spot the steel door of a *tanka* under lock and key. (**Fig. 7**) shows the *tanka* of Gera Primary Agricultural Cooperative Credit Society (PACS) of Baytoo tehsil in Barmer district being thus safeguarded.

Bera - A large sized well is called Bera. Many such beras can be found in the villages of Phalodi tehsil in Jodhpur, again attributed to the Paliwal Brahmins. Water is pulled out of the bera and poured into a large, rectangular pot made of stone called pakhali. In case a large quantity of water is required, water from the pakhali is collected in a larger reservoir called kotha. Water from the pakhali or kotha is poured into khelis, rectangular stone containers, on either side of the bera. The remaining water is made available for the consumption of animals (Fig. 8).



Figure 7: A Locked Tanka Door at Gera Primary Agricultural Cooperative Credit Society (PACS), Baytoo.

Figure 8: *Bera* at Sanvarij Village, Phalodi Tehsil.

Kuan - There are a large number of *kuan or* wells, new and old, in the drought-affected regions of Jaisalmer, Barmer and Jodhpur districts covered under the study. A very old well in Gera village of Baytoo tehsil in Barmer district was found with a large wooden pulley to extract water resting on the v-shaped branch of a tree (**Fig. 9**).

Beri - Beri is a small well, not very deep, in which water is stored over a period of time through seepage from the surrounding region. Gera village in Baytoo tehsil of Barmer district has a beri that is believed to have been made 300 years ago (**Fig. 10**).

Khadin - This is a special farm created by Paliwal Brahmins of Jaisalmer and Jodhpur regions by constructing walls on two or three sides of a piece of land in order to trap the inflowing water to use it for the purpose of growing food grains. Komal Kothari, renowned folklorist from Rajsthan, recounts that 100 years ago, Jaisalmer was producing a surplus yield of wheat.

And this was possible because of the *khadin* system which reveals a very deep understanding of topography, gravitational movement of water, water harvesting, moisture conservation, drainage, desalination—all of which combine towards the most productive form of agriculture available in Rajasthan. (Bharucha 2003: 71)



Figure 9: *Kuan* with a Wooden Pulley.

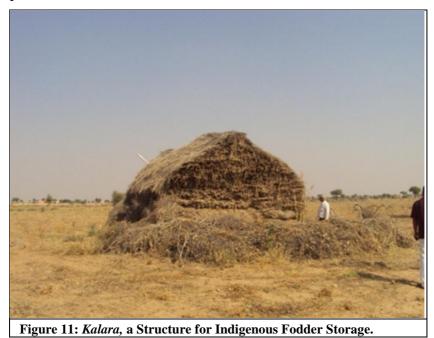
Figure 10: A 300 year old *Beri* at Baytoo, Barmer.

Daily Life Practices

Water harvesting is not limited to structural devices but extends into the daily lives of the inhabitants. The local residents use various indigenous techniques to store food grains and fodder so as to enable their use in periods of drought. *Kalara* is an indigenous technique used by farmers to store fodder for their cattle for use during the drought season. Fodder thus stored can be used up to a period of ten years. This structure also uses locally available grass for its construction (**Fig. 11**).

In view of the scarcity of water, it is not surprising that the villagers in these regions use very few utensils for cooking in order to save water required to clean the utensils after use.

Family members are often seen eating together from the same plate to save water used to wash the utensils.



It is also not uncommon for the villagers in the region to take a bath once in 4-5 days. Even the water used for bathing or washing of clothes and hands after eating is recycled and used for various purposes, including as drinking water for cattle.

Conclusion

The present investigation indicates that there has been a decline in the culture that supported traditional structures. The areas where tube wells were erected have witnessed a gross neglect of *nadis* and *beras*. The *tankas* have fallen in disuse. But the villagers have consciously maintained the ponds in other areas.

Due to a low level of groundwater, tube wells in these areas have now dried up and there is a pertinent need to revive traditional water harvesting. The community participation, which is being sparingly used to clean catchment areas, needs to be rekindled. Social hierarchies of caste are gradually fading leading to a more equitable access to water resources. A fresh assessment of local needs, tapping indigenous wisdom and keeping alive the locally adapted coping mechanisms tested through the ages while simultaneously making a judicious use of modern technology are the basic requirements for the region. An integrated approach and conscious development for the upkeep of traditional water harvesting structures shall go a long way in ensuring sustainable livelihood and maintaining ecological balance in drought-affected western Rajasthan.

Illustrations

All Photo Images by: Kartikeya Misra

References

- Agarwal, Anil and Sunita Narayan, (eds.), *Boondon ki Sanskriti* (in Hindi) [Culture of Drops], (New Delhi: 2003).
- Bharucha, Rustom, *Rajasthan An Oral History*, (New Delhi, 2003).
- Bokil, Milind, 'Drought in Rajasthan: In Search of a Perspective', *Economic and Political Weekly*, vol. 35 (48), 2000, pp. 4171-5.
- Hegewald, J.A.B, 'Water Architecture in Rajasthan', in *Stones in the Sand*, G. Tillotson ed., (Bombay, 2001), pp.78-89.
- Kangle, R.P., *The Kautilya Arthashastra*, 2 vols. (Mumbai, 1963).

- Khan, M.A., 'Revival and Modernisation of Traditional water Management Systems in Western Rajasthan,' Extended Abstract of a Paper presented at the Second Congress on Traditional Sciences and Technologies in India, Madras, 27-31 December 1995, pp. 8-9.
- Kielhorn, F., 'The Junagarh Inscription of Rudradaman', *Epigraphia Indica*, vol. 8, 1981, pp. 36-49.
- Kolarkar, A.S., 'Khadin: A Sound Traditional Method of Runoff Farming in Indian desert,' Paper presented at the First Congress on Traditional Sciences and Technologies in India, Bombay, 28 November 3 December 1993, pp. 2-6.
- Mehta, R.N., 'Sudarshan Lake', *Journal of the Oriental Institute*, vol. 18, 1963, pp. 20-8.
- Mishra, Anupam, *Aaj Bhi Khare Hain Talab* (in Hindi) [The Tanks Survive Even Today], (New Delhi, 2004).
- Raychaudhary, S., *Agriculture in Ancient India*, (New Delhi, 1964).
- Sen, Amartya, Poverty and Famines, (Oxford, 1982).
- Singh, N. and A.S. Kolarkar, 'Some Physiochemical Properties and Soils of Khadins in Western Rajasthan', *Journal of Soil Conservation*, vol. 11, 1983, pp. 5-11.
- Turning the Tide, Report on a National Conference on Good Practices in Community Based Disaster Management, (New Delhi, 2010), Online: http://www.sphereindia.org.in/Download/Turning%20the% 20Tide%20%28Good%20Practices%20in%20CBDRR%29. pdf (last accessed 14 November 2014).

- Vani, M.S., 'Traditional Irrigation systems: Law and Policy,' Paper presented at the First Congress on Traditional Sciences and Technologies in India, Bombay, 28 November 3 December 1993, pp. 44-9.
- Wangani, N.S., K.D. Sharma and P.C. Chatterji, *Tanka A Reliable System of Rainwater Harvesting in the Indian Desert*, (Jodhpur, 1988).

Sufi Ideas in South Asian Poetry: Rethinking the Spiritual and Sociological Nexus

Keshab Sigdel

Abstract

Sufism is considered as a path of renunciation. So, people have believed that it has nothing to do with the largely materialistic society in which we live in. In this article, I discuss the sociological dimension of Sufism to show how it influences the social ethics and value system through various levels of interactions. For, this purpose, this article employs Max Weber's theory of the sociology of religion to discuss a few selected poems of the South Asian region that includes Laxmi Prasad Devkota (1909-1959), Rabindranath Tagore (1861-1941), Kazi Nazrul Islam (1899-1976) and Rumi (1207-1273).

Sufism is considered the inner and mystical dimension of Islamic teaching (Halepoto 2012: 86). In the West, the term 'mysticism' refers to individual subjectivism and therefore Sufism has been attacked for its advocacy of inaction due to its mystical dimension. But Rene Guenon views Sufism from a more sociological perspective and states, the Sufi "actively undertakes 'labours' in order to reach spiritual realization" (as cited in White 2008: 24).

In this article, I attempt to discuss the spiritual and sociological nexus as manifested in selected poems by Laxmi Prasad Devkota (1909-1959), Rabindranath Tagore (1861-1941), Kazi Nazrul Islam (1899-1976) and Rumi (1207-1273). I will also draw insights from German sociologist Max Weber to discuss the sociology of religion in order to facilitate my readings of the selected poems. I argue that spiritual ideas of

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Sufism as imbued in the selected poems of Devkota, Tagore, Islam and Rumi at large influence the social ethics, value system and structures which subsequently help promote Sufi ideals of love, compassion and tolerance.

Max Weber's Sociology of Religion

Max Weber (1864-1920) in his book *The Sociology of Religion* (1963, reprint 1993) discusses various elements like charisma, prophecy, religious ethics, community, and hierarchy which influence the development of social ethics, morality, structures and thus the life style. Weber writes:

The external courses of religious behaviour are so diverse that an understanding of this behaviour can only be achieved from the viewpoint of the subjective experiences, notions, and purposes of the individuals concerned--in short, from the viewpoint of the religious behavior's 'meaning.' (Weber 1993: 1)

Weber remains best known for his theory of the Protestant ethic to explain why modern capitalism arose in northern Europe and nowhere else. This proposition stated that Protestant theology induced widespread unconscious anxieties among northern Europeans that set in motion lifestyle patterns that allowed modern capitalism to emerge. Because they considered themselves as the 'chosen people,' they were anxious to demonstrate to themselves and their peers that they were among the elect, i.e. people selected before birth by God for salvation, whose spiritual distinction, it was assumed, would be reflected in righteous, sober living and, critically, the visible worldly success. People in northern Europe embraced the kind of frugality, asceticism, planning and attention to this worldly affairs that permitted for the first time in human history the

accumulation of capital surpluses large enough to finance the emergence of modern corporations and markets (White 2008: 25). Weber's sociology of religion model emphasises the fact that religious practices have a direct impact on the mindset of people and shape their lifestyles i.e. their patterns and actions.

Though Islamic civilisation never made the transition to modernity as defined by Weber (White 2008: 28), Weber's theologically-determined explanation for the emergence of the Protestant ethic presents a conundrum that this Abrahamic faith exhibits, in Turner's words, "very strong sociological continuities" (as cited in White 2008: 28).

Sufi Ideas in Poetry

Starting in the twelfth century CE, Iranian mysticism took shape in the poetry of the Persian language. Poetic expression shares a similarly ineffable essence with mysticism. Though prose is considered as the natural vehicle for discursive reason, Rumi believed that it "cannot capture one's inner life, whereas poetry makes it possible to suggest spiritual truths that one cannot or does not want to make explicit" (Geoffroy 2010: 88). Persian literature, whose central figures include people such as Rumi, would never have reached so high a degree of refinement if it had not been imbued with Sufism. In his poem titled "Harvest," Rumi uses very materialistic imageries to hint the individual's union with the Almighty. The title "Harvest" itself suggests the final attainment of the Sufi's quest. He compares the Sufi's struggle with the thief's attempt to steal the gold:

Late at night we meet like thieves who have stolen gold, our candlelit faces.

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But Rumi is all aware of the need to separate the 'chaff' from the 'grain.'

Then the transformation time comes, and we see how it is: half chaff, half grain.

The poet is very down-to-earth in his understanding of mundane reality that we live in. The hardships and struggles caused by the physical and material desires are taken into account by the poet when he writes:

A pawn has become king.

We sit secretly inside the presence
like a Turk in a tent among the Hindus,
and yet we are traveling past a hundred watchmen,
night-faring, drowned in an ocean of longing.
(Harvest (trans.) 2009: 29).

Sufi ideals become explicit also in the poems of Nepali poet Laxmi Prasad Devkota. In one of his frequently quoted lines from *Sunyama sunya sari*, Devkota (2009: 215) writes:

Akhir shreekrishna rahechha eka Na bhakti bho, gyana, nabho bibek! (Lord Shreekrishna is the only one at last Neither devotion nor knowledge was there, nor the conscience!)

These lines hint at the idea of non-duality and reinforce the need of unison with the God from where all life and power ushers. Similarly, in his poem *That One, You*, Devkota (2009) brings a seemingly contradictory statement which at the core represents a clear Sufi stance. The poet has very concisely summed up the idea of renunciation of the self and unison with the Almighty when he writes, "You, the creator's image, mirrorless" (71).

In *Gitanjali*, Rabindranath Tagore describes how he is captivated by the music of the "master." The speaker "vainly struggles for a voice" because nothing is possible without the grace of the Almighty. The speaker with his hands folded prays to the supreme power:

I know not how thou singest, my master! I ever listen in silent amazement.

The light of thy music illumines the world. The life breath of thy music runs from sky to sky.

The holy stream of thy music breaks through all stony obstacles and rushes on.

My heart longs to join in thy song, but vainly struggles for a voice.

I would speak, but speech breaks not into song, and I cry out baffled.

Ah, thou hast made my heart captive in the endless meshes of thy music, my master! (Tagore 2009: 105).

In the same vein, Bengali poet Kazi Nazrul Islam in his poem *All Praise to Allah*, *All Glory to Him*, praises the power of the supreme Lord. The speaker wishes that all "...falsehood/perish for good...." His spiritual consciousness is loud and clear in the poem when he writes:

All praise to Allah, all glory to Him... let truth reign supreme. (Islam: Online)

It becomes very evident in all the poems discussed above that they subsequently express the desire to surrender to the will of God from which all power and life flow. In all the poetic endeavours, there is a conscious attempt for a spiritual quest through renunciation of selfhood by embracing Almighty.

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But those poems also exhibit a very clear sociological interplay where the mental/spiritual insights have practical ramifications. The spiritual Sufi ideals are translated into everyday activity and behaviour, thus, influencing the patterns of individuals' life style. The Sufi ideals of love, kindness, renunciation, tolerance, patience, non-violence, purity, basic living, etc. will help to mould the social tastes and structures. Devkota's poem *That One, You* stresses on the action: "Tuck up your sleeves, /Snatch up your spade and go-a-digging please" (2009: 71). For the poet, nothing is impossible. The poet questions, "Why can't there be? Why not?/In this very earth,/ The grapes, the apples—things of dearth?" (Devkota 2009: 71). Only our actions will bear the fruit at the end. For Devkota, even renunciation demands activity.

Tagore (2009: 43) in *Gitanjali* very beautifully elucidates how the Sufi values internalised by the speaker will be put into practice thus helping to form a more tolerant and peaceful society around:

If thou speakest not I will fill my heart with thy silence and endure it. I will keep still and wait like the night with starry vigil and its head bent low with patience.

The morning will surely come, the darkness will vanish, and thy voice pours down in golden streams breaking through the sky. Then thy words will take wing in songs from every one of my birds' nests, and thy melodies will break forth in flowers in all my forest groves.

The silence of the God is responded with strong endurance, patience and hope. These practical characteristics of individuals will ultimately reinforce their desire for peace and tolerance.

The poem of Kazi Nazrul Islam too becomes a very clear sociological enterprise as the poet explicitly mentions that fighting social evils like inequality, misery, poverty, oppression, tyranny and deceit is a way towards the truth. When one can overcome these social evils, the path to the supreme truth, i.e. the Almighty opens. Islam writes:

Let peace prevail and equality win, let truth reign supreme, let all unhappiness and misery, all oppression and tyranny, all cowardice and falsehood perish for good, for good! (Islam: Online)

To conclude, the study of the selected poems not only exhibits the spiritual/philosophical insights as preached by Sufism, it also reveals the sociological dimensions that Max Weber (1963) postulates in The Sociology of Religion. Those who believe in Sufi teachings have a moral/ethical obligation to demonstrate it in their conduct as reflected in righteous and sober living, which in turn will help them embrace a life of simplicity and renunciation. Various religious elements like charisma, prophecy, religious ethics, religious community and hierarchy, influence the development of social ethics, morality, social structures and thus the life style. In Weber's view, the external courses of religious behaviour are determined by the "viewpoint of the subjective experiences, notions, and purposes of the individuals concerned" (1993:1).Sufism as both a religious practice and a way of life will have to pass through these various sociological experiences which finally contribute in the formation of social and moral ethics, social hierarchies and structures. The ideology and structure thus constructed and/or 118 Keshab Sigdel

internalised ultimately help to enhance peace, kindness, and tolerance, the core ideals and values of Sufism.

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References

- Devkota, Laxmi Prasad, 'That One, You', *The Lunatic and Other Poems*, (Kathmandu, 2009).
- Geoffroy, Eric, *Introduction to Sufism: Inner Path of Islam*, Roger Gaetani trans., (Bloomington, 2010).
- Halepoto, Zulfiqar, 'Influence of Sufism in Sindh's Social and Political Struggle', *Sufism: A Celebration of Love*, Ajeet Cour, Noor Zaheer and Refaqat Ali Khan eds., (New Delhi, 2012), pp. 86-96.
- Islam, Kazi Nazrul. "All Praise To Allah, All Glory To Him", Online: http://www.poemhunter.com/poem/all-praise-to-allah-all-glory-to-him/ (last accessed 27 September 2014).
- Rumi, "Harvest" in *Bridge to the Soul*, Coleman Barks trans., Harper Collins e-books, (2009).
- Tagore, Rabindranath, Gitanjali: Facsimile of the Original Manuscript, (Calcutta, 2009).
- Weber, Max, The Sociology of Religion, (Boston, 1993) rpt.

White, Svend A., 'Sociologists and Sufis: A Reassessment of Sainthood in Early Sufism in Light of New Developments in Sociology', unpublished MA thesis, The University of Georgia, 2008.

Digital Preservation of Archival and Library Material*

Tahmina Akter

Abstract

Digital Preservation has been recognised as one of the urgent challenges in our digital information society. It is the current trend in all modern archives and libraries and is recognised as a vital part of managing information. A number of archives and libraries have thus started to invest in intensive research and development to provide solutions that allow us to maintain digital objects in accessible ways. Most of these solutions, however, are aimed at larger institutions that have a dedicated mandate and can build up expertise, resources and systems. Yet, we increasingly find that many archives and libraries are faced with the challenge of preserving their material. This paper presents the goal of automated digital preservation activities in handling a process of full digital preservation and also discusses why digital preservation is required.

Introduction

Digital preservation is not a new concern. It began with the introduction of the very first computer. A number of National Archives, National Libraries, Data Archives and other cultural institutions all over the world established digital preservation programmes as early as the late 1980s. Those programmes reflected the prevailing technology and digital content of the

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time. Each generation of technology brings with itself, changes in potential capabilities to both create and preserve digital content.

Technology is both a key element and an inhibitor in digital preservation. However, it is not the greatest inhibitor. The lack of organisational will and capacity in upgrading to changing digital realities continues to be the greatest obstacle in preserving fragile content, archival and library repositories hold. Cultural repositories have especially been slow in responding to the digital revolution.

Archives, Libraries and Preservation

Traditionally libraries and archives have played an important role in the preservation of human intellectual endeavour. Archives and libraries have collected, organised and managed information resources for both current use and for posterity (Kataria and Anbu 2010: 141). In doing so they have served as the focal points of preservation of human knowledge, records, creative art and works in all formats. Kataria and Anbu (2010: 141-2) capturing well the herculean task of digital preservation states:

Preservation, especially in libraries, is the action taken to prevent, stop, or retard deterioration of all information resources in all format. A comprehensive preservation approach meant, choosing the most appropriate method of preservation for every item. This is accomplished through storage of materials in proper conditions, careful handling and housing, use of security systems designed to eliminate mutilation and theft, repair or replacement of damaged materials, and through refreshment and migration of electronic files. There are many other materials whose value lies primarily, or only, in the information they contain.

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When repair of such materials becomes impossible or prohibitively expensive, their content may be preserved through reformatting or conversion into other media. Materials of unique aesthetic or historical value should be preserved in their original form. Until the advent of electronic information resources some of the most significant and successful preservation methods employed by both libraries and archives for their print materials include the following: provision for fire protection and adequate environmental controls; re-housing of acid-based print materials; microfilming of unique and endangered information resources; desktop publishing (DTP); use of acid-based paper instead of alkaline-based paper which is more susceptible to discoloration and quick decay. But the deluge of digital publications compounded with the complexity of digital publication has made preservation a nightmare for the present preservation community especially the libraries and information centres.

Importance of Digital Preservation

The importance of digital preservation stems from a number of factors associated with the nature of archival and library material. The growth of digital resources in archives and libraries, summons a new era in their development. Historically, archives and libraries have always been concerned with the management and preservation of 'atoms.' Today, they must be increasingly concerned with the preservation of 'bits.' The conservation of records, newspapers, books and journal issues has its own problems. But national archives and national libraries face these issues to a greater extent with more intensity since those have centuries-old copies of records, files, maps, books and other material which are preserved in their pristine

conditions. The big question of archives and libraries is thus, how to preserve archival and library material effectively?

The Nature of Digital Preservation

Digital preservation is more than maintaining data. Digital preservation encompasses:

- Preservation of data as a stream of bits.
- Preservation of information about the data (usually called metadata),
- Ensuring that data can be found,
- Ensuring that there are workable ways of retrieving and accessing the data, and
- Providing means to re-create or re-present the experience of using the data.

Preservation managers must define the whole experience of reproducing material from one format to another and this is far beyond what is expected of the conservator of books or paper records. On the other hand, the best preservation programmes have probably taken a similarly holistic approach in dealing with non-digital material.

Selection of Archival and Library Material for Preservation

It is fundamental to the understanding of preservation that not everything can be preserved and that nothing can be preserved forever. This is true throughout the heritage sector but has a particular resonance for libraries and archives. The sheer scale of the production of books, records and documents in literate societies makes it impossible to contemplate indiscriminate preservation which in turn forces librarians and archivists to make hard decisions.

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In libraries, librarians select material for acquisition. Most items in most libraries are assumed to have a comparatively short life span. Material which are selected for special collections or which are transferred from general to special collections at some subsequent time, are intended for permanent preservation for long-term use and will be treated differently. In other words, selectivity may be exercised at several stages in the existence of a book, from before it is acquired until the point at which it is discarded or designated for permanent retention.

Legal deposit libraries are very different. In most countries, the right to receive publications is linked to the obligation to preserve them and make them available to users. Although in some countries libraries can exercise some choice and include the most ephemeral material, in practice they seek to obtain all but a handful of the published output. The long-term preservation problems that this presents are enormous in terms of storage space alone apart from technological issues about the physical preservation of the material and the arrangements for access and use.

Long-established professional procedures have been challenged by the development of digital objects. Many documents which were formerly kept as paper are now created in electronic formats. Digital documents may never be finalised in the way paper records are. Digital documents are dynamic and must be regularly amended and updated. This poses severe issues to the creating organisation. To address this, librarians and archivists have developed new concepts of identifying a book/document and designating it for preservation. However, technological problems such as the irretrievability of digital data and dependence on the continued availability of both hardware and software versions should be addressed. The scale of the

creation of papers/documents is outweighed substantially by the sheer bulk of digital data that can easily be created and stored, at least in the short term. Digitisation is essential if the national archives and research libraries of the future are to contain the late twentieth-century and later equivalents of the printed documents, books and manuscripts which now fill their shelves.

Digital Preservation: Microforms to Computer

Digital revolution has introduced easy to use, time saving, high performance machines such as computers, scanners and high resolution printers. Such technology not only enable us to view information we have stored on fiche, microfilm, micro opaque and ultra fiche right on our PC monitor but also helps complete high resolution scans in seconds with just a 'single click.' Latest touch screen technology (**Fig. 1**) easily displays information stored on microforms.

In order to preserve digital content, one has to be mindful of the technology one uses. It helps weigh pros and cons of such technology in preserving digital content. The technological cycle from idea to development, implementation, mainstream use and obsolescence should be both understood and appreciated. Knowing where a technology comes from is crucial in deciding on the most suitable preservation approach that might work best in a particular organisational setting or for particular digital material.

Digital Preservation and Technology Timeline

• Identify significant precedents and milestonesprofessional, organisational and technological, 126 Tahmina Akter

 Illustrate the combination of developments, events and decisions that got us to where we are today with regard to technology that pertains to digital preservation, and

• Help place new and emerging technology in context for digital preservation programmes.



Figure 1: Touch Screen Technology of Microfilm

Technological Issues/Benefits

Earlier, much of the international focus with regard to digital preservation was on technological strategies and standards. However, in time to come, focus shifted from technology to resourcing and organisational issues as well (Brown 2010: 131).

Now efforts are being made to link technological strategies for digital preservation with the wider preservation web. A specific example is the option of intertwining the technological stands of digitisation with microfilm. This provides the best of both worlds. While the digital media provides flexible multidimensional access, microfilm provides a long-term, low risk preservation platform (Brown 2010: 132). This is a prudent and economic alternative to the prospects of endless migration, emulation and other strategies.

Challenges

Preservation and particularly digital preservation is challenging and complex. No medium for recording expressions of human creativity is immune to damage and decay. In this regard, the long-term maintenance of digital data is no different from the challenge faced by cultural repositories for generations in the past.

Yet digital preservation presents its own unique challenges arising from the basic nature of digital data such as its machine-readable quality. Unlike the fairly straightforward process of decoding other machine-dependent media such as micro films, maintaining digital data in a form that is intelligible to humans involves the use of a complex set of tightly interwoven technologies. Digital Preservation poses numerous challenges to both archivists and librarians including but not limited to technological obsolescence of hardware and software, vulnerability, competing stake holder interests, organisational and legal issues and resource requirements. Therefore, it is correct to say that digital preservation involves great levels of uncertainty and thus requires a process of experimentation and

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discovery in order to arrive at the best possible preservation method.

Use of the OAIS Reference Model for Digital Preservation

Concerns over lack of technical standards are organisation specific in that organisations look for models that clarify their issues and meet their requirements in such a way that the use of such technology minimises their responsibilities.

By far the most highly developed conceptual model to emerge is the Open Archival Information System (OAIS) Reference Model. After being developed over a period of years, this model was issued internationally in early 2002 as a formal standard that prescribes preservation responsibilities for digital repositories.

The Reference Model grew out of the needs of the international space data community. Since then it has been taken up by a wider group of information managers, most particularly the research library and archives communities. It is still too early to say whether the OAIS will be able to solve digital preservation problems. However, it has brought myriad of conversations about how digital library/archives should be managed into a common dialogue. The coming years will demonstrate its effectiveness as a model on which practical programmes can be built.

The OAIS Reference Model has high-level principles and gives organisations the freedom to work out detailed implementation programmes that satisfy their requirements. The model also spells out responsibilities that should be carried out by organisations in order to be trusted in acting as caretakers of

non-digital collections. The model minimises errors in managing digital collections.

Conclusion

As in most rapidly changing fields, the terminology of digital preservation too is fluid, at times having multiple meanings and at others evolving overtime. Today, digital preservations is considered as an extremely serious undertaking (Kataria and Anbu 2010: 145) especially in the developing countries. Many countries in the developed world have recognised the need for digital preservation and have implemented specific programmes. These programmes can be used as models by developing countries and set standards for institutions to design their own national digital preservation strategies. Libraries, archives and other information centers should be equipped with necessary skills to handle digital resource management and preservation. It is crucial that they adopt digital preservation policies and practices using available technology and expertise spearhead national digital preservation initiatives in order to avoid a possible digital black out of their national digital information resources (Kataria and Anbu 2010: 145).

References

- Brown, Heather, "The interconnected web: A paradigm for managing digital preservation", Paper presented at the Third International Conference on Digital Libraries, New Delhi, India, 23-26 November 2010.
- Clifton, G., 'Risk and Preservation Management of Digital Collections', *International Preservation News*, vol. 36, 2005, pp. 21-3.

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Hedstrom, M., 'Digital Preservation: A Time Bomb for Digital Libraries', *Computers and the Humanities*, vol. 31 (3), 1998, pp. 189-202.

- Kataria, Sanjay and John Paul Anbu K., "How safe is our Digital Tomorrow? Role of Libraries and Information Centers in Digital Preservation", Paper presented at the Third International Conference on Digital Libraries, New Delhi, India, 23-26 November 2010.
- Scarle, M., 'Selection for Digital Preservation', *Library Hi Tech.*, vol. 22 (2), 2004, pp. 119-21.
- Sridevi, J. and Vijay Laxshmi, *Model of Digital Library*, (New Delhi, 2004).
- 'WARC, Web Archive file format', *Library of Congress Collections*, Online: http://www.digitalpreservation.gov/formats/fdd/fdd000236. shtml (last accessed 13 November 2013).

Creative Commons and the Future of Archives*

Daya Dissanayake

Abstract

The future of archives would depend almost entirely on the development of digital and electronic technology, and the cost of such technology. The cost of digital archives looks exceedingly high, for us today, but in the long term it would be very much less than the cost of maintaining archives with fragile, decaying material made available for reference, and the cost of travel and time consumed by the users to access these documents.

When archives go digital the users will increase and the archivist's role changes. A major worry with creators is unauthorised use of their material when available on-line. But reusing data or information is not stealing, if copyright laws are followed, and due credit is given when borrowed.

Creative Commons (CC) is probably what we need for all archived material. By selecting one of the six CC licenses, copyright holders choose which rights they would like to keep and what types of reuse to allow. National Archives of several countries have made their content available for reuse under CC. Digital is the immediate future, until man develops something more advanced. Digital curation and offering digital archives in the public domain is the need today, while honouring the rights of the creators and the users.

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Going digital with all our writings will be our greatest service to our children, by making all information readily and freely available and also to Mother Earth, because we would not be using so much paper, which in turn means we do not have to murder million of trees everyday to manufacture paper.

Archive material should be accessible by all, from anywhere, anytime, and for free. No one should have the right to monopolise, control, deny access or make a profit from archived material.

One example of the future of archives is the digitisation of the Dead Sea Scrolls by the Leon Levy Foundation developing images in a user-friendly platform intended for the public, students and scholars alike.

There is an increased interest in developing digital records of ancient documents such as Sri Lankan *ola* leaf writings on indigenous medicine, Buddhism and literature. Several organisations have started on such ventures and there is the possibility of duplication, where time and effort and resources would be used in digitising the same material. If we are to avoid this, there should be coordination and cooperation among these organisations and they should also make available to the public, the documents they have already digitised and plan to digitise.

There is a general phobia about electronic publications and archives, that there would be no protection for authors and publishers from unauthorised copying, using and plagiarising of their material. But it is not a new crime. Even with all the copyright laws around the world, it is happening with printed material. Copyright laws were enacted because of this problem, and anyway copyright benefits mostly the publishers and not the writers.

According to Ostrom and Hess (2001: 1) "Information that used to be 'free' is now increasingly being privatized, monitored, encrypted and restricted." This is called the 'Intellectual land-grab.' But this Intellectual land-grab probably began with the emergence of the rich and the powerful, as man became what he considers as more civilised.

When St. Columba in sixth century Ireland made a copy of the bible which belonged to St. Finlan, he was accused of theft. Columba argued that those who owned the knowledge through books were obligated to spread the knowledge by copying and sharing them. He felt that not sharing knowledge was a far greater offense than copying a book that lost nothing by being copied. But king Diamalt ruled that "To every cow belongs its calf; to every book its copy" (Suehle 2011: Online). King Daimalt's ruling is perhaps the first recorded copyright issue. It also shows how wrong the copyright concept is. Finlan or Diamalt had no right to decide that the copy belonged to the original (be it a Vulgate or a Psalter), because it was not a created work by Finlan.

But it is time now for Copyleft and Opensource. Creative Commons (CC) is probably what is needed for all writing and archived material. Founded in 2001, CC vision is "universal access to research, education, and full participation in culture for driving a new era of development, growth and productivity" (See http://creativecommons.org/about).

This is different from the Copyleft concept, but is a free, easy-to-use copyright license where 'only some rights are reserved.' Copyleft began among computer software developers who wanted to share their software freely with others. It uses copyright law but flips it over to serve the opposite of its usual

purpose. Instead of a means for restricting a programme, it becomes a means for keeping the programme free.

Probably the first copyleft software was the GNU operating system and the GNU Project (GNU's Not Unix), announced on 27 September 1983 by Richard Stallman with the goal to develop "a sufficient body of free software and to get along without any software that is not free" (See http://www.gnu.org/copyleft/fdl.html). This goal is made possible with open source software now available free.

On 01 July 2012, the World Bank announced their new open access policy under a Creative Commons Attribution License and a new open knowledge repository with over 2000 books, articles and reports. Robert B. Zoellick, President World Bank Group said "Knowledge is power. Making our knowledge widely and readily available will empower others to come up with solutions to the world's toughest problems" (World Bank Announces Open Access Policy for Research and Knowledge, Launches Open Knowledge Repository 2012: Online).

Copyleft and Creative Commons spilled over into all creative works and were eagerly embraced by those who believed in sharing and sharing alike, all what they create. The photos available at some Archives are now available on the photo-sharing website Flicker. They may be downloaded and reused without permission in any format for the purpose of research, private study or education (non-commercial use) only, but giving due credit. Vimeo, the video-sharing website has added CC browse and search capabilities. Flicker has over 200 million photographs, 1.5 million groups and over 70 million photographers who share their photos on Facebook, Twitter and blogs. There are four million videos on Youtube under Creative

Commons. According to Cathy Casserly, CEO, Creative Commons:

The creators who thrive today are the ones who use Internet distribution most intelligently. In fact, the ones who are most generous with their work often reap the most reward. People used to think of reuse as stealing; today, not letting others use your work can mean irrelevance. (The Future of Creative Commons 2013: Online)

Whatever we write or create, we should be able to share and share alike with everyone because there are no new ideas and there is nothing new we can write about, because someone somewhere had already said it or written about it. And we have today the means of sharing our writing, at minimum cost with our e-books. Making an extra copy does not cost us much and does not reduce the value of the original.

An example of sharing one finds in Sri Lanka is Sigiriya. The frescos on the rock face and the graffiti on the mirror-like wall could be considered the first national Archive in Sri Lanka, with over one thousand poems written between 6-11 centuries CE. They are not just poems, but a document telling us of our history, culture, people and our thoughts. This archive was open to the public, to be read and to add their contributions, and that is why one could also consider the mirror-like wall as the first social media page in the world, 1600 years before facebook. But now one has to pay to visit this archive.

It was believed that the earliest writings were done on clay tablets, but now it has been established that long before that records were kept on bones. The 14000 year old antler bone found in Western France at La Marche cave, has engraved markings which are considered as records of an artificial

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memory system from the Upper Palaeolithic (Rudgley 2000: 82). This cave could have been the archive, then.

The vast knowledge about this period in Sri Lankan history which we could gather from these poems (Sigiriya graffiti) is not available today. Paranavitana's publication is out of print and very few people outside this country have any opportunity to study them. The mirror-like wall has been vandalised in recent times, by the more civilised visitors and it is fast deteriorating due to the polluted environment. It is time to save this in digital format, to capture digital images of each verse on the wall, identifying the location and then adding Paranavitana estampage, transcription and translation to be made available to anyone, like with the Dead Sea Scrolls. Let us take the Sigiriya graffiti to the people around the world, instead of their having to travel to Sigiriya. And all this should be free under Creative Commons.

challenge for the Sri Lankan archivists, Another archaeologists and epigraphists would be to collect the digital images of the interlinear inscriptions, claimed by Paranavitana, and make a detailed scientific study to confirm if there had been any interlinear writing and if we could decipher them today or tomorrow with available technology. All ancient inscriptions in Sri Lanka should also be digitised, and published in the public domain, so that epigraphists and linguists in other countries could also have easy access, and use modern technology to compare them with other scripts, other languages, and trace the development and origins and links. Some inscriptions on exposed rocks have already faded beyond recognition. Other rock inscriptions have been covered with earth for protection on the advice of the Sri Lanka Department of Archeology. Some of the metal plate inscriptions are locked up in cupboards.

Coming back to protection, the six Creative Commons licenses provide a simple vocabulary for what would otherwise be a complicated agreement between creator and licensee. By selecting a license, copyright holders choose which rights they'd like to keep and what types of reuse to allow. In November 2013, Creative Commons released their CC 4.0, which is more user-friendly and convenient both for the licensor and the licensee.

The Creative Commons Affiliate Network includes more than 70 affiliate groups around the world, as well as many informal community groups and individual volunteers. The network donates expertise and time to promote the mission in many ways, from sharing legal expertise and educating the public about open licensing to holding local events. Among the half a million CC licenses issued during the past few years, are the National Archives of the UK and Australia, who have made their content available for reuse under CC BY.

About digital archives, one has to think not outside the box, but outside the shelves and racks and storage compartments, and has to think of the wide open cyberspace. 15 years ago, when I published my first e-novel, I could not submit it as a soft copy and register it with our National Archives. Even today, there are no provisions for the acceptance of an e-book. An e-book is a virtual object, which does not need any space in the national archives, not even in their digital storage space in their hard discs or servers, or in the clouds. All they need is to provide a link to wherever the book is stored, in a server or in the clouds, and list it in their catalogue. One challenge for digital archivists would be that most correspondence today is digital, by e-mail, short text messages and as e-documents, most of which would never be saved, not even in the clouds.

During Iranian protests in 2009, when Twitter was so vital for the protestors, the US State Department had requested Twitter to delay a network up-date (Grossman 2009: Online). A 160 character tweet could someday be of great historical importance, but it would not be saved for long. International archives could collect these text messages or Twitter posts. Global ECCO had analysed over one million tweets about Egypt from 28 January- 4 February 2011, from Twitter API. They used algorithms to filter out all the noise (Schroeder et al. n.d.: Online). Twitter has its own universe, the Twitterverse, with 230 million active users sending out 500 million tweets a day. At least one can access one's own archives at Twitter and facebook, at any time.

Today most of the newspapers are available online with online archives. One does not need to go to a newspaper office to search through their past issues to get information. But would the newspapers store all their publications forever in their online archives, the way they keep the printed material?

Many writers today publish their writings on their own websites or as blogs. Some of these documents are of importance today, and sometimes in the future too. But these websites and blogs would shut down someday and all the data would be lost forever. This is a challenge for the Archive administrators i.e. how to select, collect and preserve all this data?

With digital archives the archivist has to depend on the webmaster to provide increased visibility of the data available, and to make it easier for the user to locate what he needs, in the shortest time using search engines. The search engine is the gateway, but access could be free or protected by firewalls, pay walls, subscription walls, which is unfortunate. The firewall is a

necessity but payment, subscriptions and limiting them to a privileged few is a violation of a basic human right i.e. the right to free access of universal knowledge.

Serewicz (2012: Online) reminding us of going back inside Plato's cave states:

We may be further removed from the document and in that gap we may see other issues emerging about whether the digital record is the "true record." In that sense, we are pushed back into the cave. Instead of trying to escape the cave, make the records and archives more accessible, by digitizing them, people want to come to the archives because they have the "permanent" records, the paper records. The wider digital sphere becomes the ephemeral or meta-universe while the papers are considered the physical.

Darnton (1999: Online) states:

Given a powerful enough search engine, we imagine that we can have access to knowledge about anything on earth—and anything from the past. It is all out there on the Internet, waiting to be downloaded ... Such a notion of cyberspace has a strange resemblance to Saint Augustine's conception of the mind of God—omniscient and infinite, because his knowledge extends everywhere, even beyond time and space. Knowledge could also be infinite in a communication system where hyperlinks extended to everything—except, of course, that no such system could possibly exist. We produce far more information than we can digitize, and information isn't knowledge, anyhow.

He further fantasises a future e-book:

An "e-book," unlike a printed codex, can contain many layers, arranged in the shape of a pyramid. Readers can download the text and skim through the topmost layer, which would be written like an ordinary monograph. If they come upon something that especially interests them, they can click down a layer to a supplementary essay or appendix. They can continue deeper through the book, through bodies of bibliography, documents. historiography, iconography, background music ... In the end, readers will make the subject theirs, because they will find their own paths through it, reading horizontally, vertically, or diagonally, wherever the electronic links may lead. (Darnton 1999: Online)

This could very well describe the future digital archive which Darnton saw 15 years ago; an archive in our pocket.

In 1971, Michael S. Hart, Professor of Electronic Texts at Benedictine University, Illinois and the father of e-books, founded the Gutenberg Project, probably the largest e-archive today. They began with classics, which were no longer under copyright. Among the first books thus made available for reading via the internet were the Complete works of Shakespeare, and the Oedipus Trilogy. Now they have over 42,000 free e-books and over 100,000 through their partners. In 1991 he had been adding only one ebook a month, but by 2002 he was adding 200 e-texts a month, and they are giving away around one million ebooks a month.

Even copyrighted material are available for free reading from e-libraries, like the British Council offering over 70,000 e-

books for members only, and there are many e-libraries which lend books for limited periods for free.

Prof. Hart had been fighting this issue for nearly 30 years. According to him "This protectionism hinders the spread of literacy, deprives the masses of much needed knowledge, discriminates against the poor, and, ultimately, undermines democracy" (Vaknin n.d.: Online). He had said as far back as 1971 that by the end of his life time a person would be able to carry every word in the Library of Congress in one hand, but that they will also pass a law against it. It appears today that both predictions are coming true. The period of copyright in the US for work published after 1978 extends to authors lifetime and 70 years after. The Berne Convention gives copyright protection up to 50 years after the death of the author, but each member country can decide.

Exploitation of ancient classics by publishers is a commonplace occurrence in the sub-continent. They make enormous profits on publication of books like Ramayana, Mahabharata, Mahavamsa and even religious books. These books should be in the public domain, available free on-line, or in the case of printed books, should be available at cost plus a reasonable profit, like Mahatma Gandhi's autobiography which is sold in India for just Rs.50. Instead, there is opposition for this, which happened in Sri Lanka when the Mahavamsa and other ancient chronicles were made available for free reading by Dr. Kavan Ratnatunga. An Indian publisher was claiming copyright for these books written over one thousand years ago, and translated one hundred years ago.

Access to archived data is vital. The Arts Council under the Ministry of Cultural Affairs holds the annual State Literary Awards in Sri Lanka. They have to depend on the National Archives, now under the Ministry of National Heritage, for the list of books published during the previous year. The Arts Council needs the books in January to hand over the books to the judges for evaluation. In 2013, three books which won State Awards had not been in the list of books available from the Archives. Fortunately the Cultural Ministry published online the list they had received from the Archives, which alerted the publishers and authors and they were able to submit copies of the books to the Arts Council. If not, these authors would not have won the awards for the Best Research publication, the Best Sinhala novel and the Best English novel.

It is an urgent need to keep updated information of published books, not just for literary awards, but for study and research as well.

The world is moving on a one-way street. It cannot turn back. Life in a digital world has to be accepted. It began with the World Wide Web, which developed into Web 2.0 about 15 years ago. Today, user generated content is everywhere especially through social media and Youtube and Vimeo. Even Web 3.0 was been discussed as far back as 2007. But perhaps one needs to think beyond Web 3.0 because the world would still be dependent on machines, though they would be connecting data, applications and people through other electronic equipment like phones and vehicles and generating their own data for public consumption.

In 2013, Chris Hahn introduced the term Web Me.0. He says that with Web 2.0, 65 percent of the world's internet users are connected to each other via social media. Web 3.0 is going to be more living, breathing and organic than the web as we know it today. He adds, "We are now living in a world where technology must be integrated with data to deliver personalized

experiences. I like to think about this new Web as Web Me.0 as opposed to Web 3.0" (Hahn 2013: Online).

The world is already there. Amazon.com is already aware of what users need. For instance when they search for a book or an electronic item, they are guided to what they are looking for based on their past searches and purchases. That is the technology needed even for the Archives, to save time spent on searching for what one needs. Instead, the Archive guides one or provides one exactly what one needs.

Let us make the best of it, till someday digital too would be replaced by other technology.

References

- Creative Commons, Online: http://creativecommons.org/about (last accessed 15 November 2013).
- Darnton, Robert, 'A Historian of Books, Lost and Found in Cyberspace', 12 March 1999, Online: http://web.stanford.edu/dept/SUL/library/prod//siliconbase/darnton.html (last accessed 19 November 2013).
- 'GNU Operating System', gnu.org, Online: http://www.gnu.org/copyleft/fdl.html (last accessed 15 November 2013).
- Grossman, Lev, "Iran Protests: Twitter, the Medium of the Movement." *Time*, 17 June 2009, Online edn.: http://content.time.com/time/world/article/0,8599,1905125, 00.html (last accessed 15 November 2013).
- Hahn, Chris, 'Web 3.0 to Web Me.0, A Revolutionary Fork in the Road', *washingtontechnology.org*, 26 March 2013, Online: http://washingtontechnology.org/web-3-0-to-web-

- me-0-a-revolutionary-fork-in-the-road/ (last accessed 20 November 2013).
- Hess, Charlotte and Elinor Ostrom, 'Artifacts, Facilities, and Content: Information as a Common-Pool Resource', Paper presented at the Conference on the Public Domain, Duke Law School, Durham, North Carolina, USA, 9-11 November 2001, Online: http://dlc.dlib.indiana.edu/dlc/bitstream/handle/10535/1762/W01-25FINAL.pdf?sequence=1 (last accessed 15 November 2013).
- Rudgley, Richard, *The lost Civilizations of the Stone Age*, (New York, 2000).
- Schroeder, Rob, Sean Everton, and Russell Shepherd, 'Mining Twitter Data from the Arab Spring', *Global ECCO*, Online: https://globalecco.org/mining-twitter-data-from-the-arab-spring (last accessed 18 November 2013).
- Serewicz, Lawrence, "Is Augmented Reality the Future for Archives in a Digital Age?", *Thoughts on Management Blog*, 11 November 2012, Online: http://thoughtmanagement.org/2012/11/11/is-augmented-reality-the-future-for-archives-in-a-digital-age/ (last accessed 18 November 2013).
- Suehle, Ruth, 'The Story of St. Columba: A Modern Copyright Battle in Sixth Century Ireland', *opensource.org*, Online: http://opensource.com/law/11/6/story-st-columba-modern-copyright-battle-sixth-century-ireland (last accessed 15 November 2013).
- 'The Future of Creative Commons', *scribd.com*, Online: http://www.scribd.com/doc/147294193/The-Future-of-Creative-Commons (last accessed 17 November 2013).

- 'The Leon Levy Dead Sea Scrolls Digital Library', deadseascrolls.org, Online: http://www.deadseascrolls.org.il/ (last accessed 15 November 2013).
- 'The U.S. National Archives', *flickr.com*, Online: https://www.flickr.com/photos/usnationalarchives/ (last accessed 17 November 2013).
- Vaknin, Sam, 'The Second Gutenberg: Interview with Michael Hart', samvak.tripod.com, Online: http://samvak.tripod.com/busiweb29.html (last accessed 20 November 2013).
- 'World Bank Announces Open Access Policy for Research and Knowledge, Launches Open Knowledge Repository', *World Bank*, Online: http://web.worldbank.org/WBSITE/EXTERNAL/NEWS/0, ,contentMDK:23164491~pagePK:64257043~piPK:437376~theSitePK:4607,00.html (last accessed 17 November 2013).

Digital Archives of Newspapers and Books of Sri Lanka*

Kavan Ratnatunga

Abstract

The role of archives is changing. It is no longer sufficient to just preserve documents so that a researcher can visit a National Archive, access a book or newspaper, to look through it, and find facts of interest. In the modern age, one expects to be able to find these same facts, instantly via few keywords, with an online search engine, at any time, from any place from which one can connect to the internet. This is the first era, when being able to do that was even considered possible, but we now almost take it for granted. To satisfy this need we must put all available archives online.

This paper discusses how the Sunday Times, which has been on web since 1996, has been able to maintain online, the oldest complete newspaper web archive in Sri Lanka. It also discusses how many government documents in the public domain are now hidden from full online view, by a strict interpretation of the copyright law. In conclusion, it stresses on the importance of an association like SAARC in help resolving the copyright issues, so that public domain

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archival documents are freely available on the internet.

Evolution of Archives

The oldest available records of human thought are cave paintings, some from over thirty millennia ago. These paintings recorded, the methods used for hunting, and those skills were transmitted visually to future generations. With the development of language about ten millennia ago, words were memorised and verbally passed down to generations. Written language, which appeared over three millennia ago, gave humans the ability to record and transmit knowledge without significant loss, and was a key reason for subsequent human progress. When text is written down, rather than just dictated, content accuracy was maintained and distortions minimised. The oldest records exist mainly as stone inscriptions.

Paper records are more fragile and unless recopied, are lost after a few hundred years. For example the Papyrus Scrolls in the Library of Alexandria in Egypt, which was once the archive of most western thought at that time, was unfortunately lost to fire in 48 BCE. Document survival was solved with the invention of the Gutenberg press in 1450. That enabled mass production of books and led to more rapid development over the last half millennium. Multiple copies allowed the low cost distribution of copies to many libraries, to ensure that loss of any copy, did not lead to a loss of information. Free public libraries, made books available to anyone interested in reading in many countries.

Printed books do still have archival importance, as they are directly readable without equipment. I have an Italian book published in MDXXIX (1529 CE) which is readable after nearly

500 years. They have a long lifetime-if saved from termites and fire.

Recent micro-etching archival preservation technology provides analog line illustrations or photos on six-inch Nickel plates. Density can be as high as 81,000 A4 pages per plate. The stable, forgery-proof storage medium is waterproof and flame-resistant offers a lifetime of more than 10,000 years (Archival Data on a Dime 2014: Online). This new technology is currently expensive. However given the demand micro-etching may become cost effective and replace MicroFilm with much shorter shelf-life on the long term.

The primary disadvantage of printed text is that it is not easily searchable or referenced. Books involve extensive reading, and remembering the information content when needed. Publication and global access is also costly. The researcher has to visit a library, which has a copy of the book, or get it via an inter-library loan, just even to ascertain that it has the information being sort.

Digital Archives

The next evolutionary stage is the advent of networked computers about half a century ago, with the ability to record electronically and search digitally, books and newspapers published on electronic databases.

The rapidly decreasing cost of data storage and access has made digital archives inexpensive. For instance in 1992, a GB of Data Storage cost US\$2500, in 2012, a TB of Data Storage cost US\$100, a decrease in price of 25,000 in 20 years. This Moore's Law should continue for some years into the future.

However, many of us have digital records written maybe few decades ago, which are impossible to read with currently available electronic computers. Back in 1983, the author wanted to digitally publish on a floppy disk, an astronomical catalog, as part of his PhD thesis. His request was wisely declined, much to his annoyance at that time. Digital storage has to be transferred to newer media to ensure it can continue to be accessed. With the rapid change of computer technology, this is much more frequent than the lifetime of the media on which it is recorded.

The primary advantage of digital archives is that digital text can be indexed, and searched electronically. When books are converted to digital text, older information hidden from view, and forgotten, as well as the latest information published anywhere in the world, become available for fast reference.

Public domain books are another important archive to digitise. Project Gutenberg (PG) (See http://gutenberg.org) started in 1971. At first, books were retyped into computers. Development of Optical Character Recognition (OCR) software permitted automated recognition of printed text. However, there was an error rate of about 1-2 per cent, and correcting these a labour intensive process. Distributed involved Proofreaders (PGDP) (See http://www.pgdp.net/) is an official part of PG. That software trains volunteers online and coordinates the same book to be proofread by many persons till it is finished. PG now has over 40,000 proof read books online. It is an open access archive of digital eBooks and no different to a Free Public Library. Since 20 years ago, the internet World Wide Web has enabled this information to be accessible globally with no geographical limitations.

Andrew Carnegie had been in the forefront of creating Free Public Libraries in USA. While the author was doing research at 150 Kavan Ratnatunga

the Carnegie Mellon University in Pittsburgh, Prof. Raj Reddy who was Dean of the School of Computer Science, started the Universal Library Project planning to scan a million books outsourced to India (See Universal Library: Online). The university obtained a very expensive custom-made scanner to digitise the Posner Memorial Collection of History of Science books, which included for example first editions of books by Galileo and Newton (See Posner Memorial Collection: Online). The author was able to get a few of his father's rare books on Ceylon scanned them and contributed those scans in 2004 to the Gutenberg Project. They have yet to be proof-read and put online.

In 2004, the Google Book project (See Google Books: Online) started with the ultimate goal of digitising every available book and making it available on the internet. The 2 per cent error rate is ignored as tolerable for indexing. This results in a book which is almost properly indexed, and one reads images of the pages of the book online. Within ten years the number of books scanned is over 20 million. Google estimates there are about 130 million books in print and hopes to have them all scanned by the end of this decade. The quality of the OCR has improved significantly and some of the digitised books, put online as text with an automated process, look almost as good as those with manual proof reading.

The conversion of printed text flawlessly to digital text is clearly time consuming. However, all publications are now printed with digital text. That digital copy must be archived in whatever format, since it is simpler to transform that to a standard format, rather than OCR printed text and proof-read.

Digital Newspaper Archives

Today, there are many choices to obtain news about Sri Lanka, than one can possibly visit online. Most TV stations also have video archives. One may access more news on Sri Lanka overseas, than from Sri Lanka, because of government restrictions. Many of these get reposted on blogs and distributed via e-mail. Many give different views of the news and opinions. Being back in Sri Lanka, the author seeks Sri Lankan news, less than when he was living abroad.

It was a lot different thirty years ago. There was very little choice to obtain news about Sri Lanka via the foreign print or TV media. Although there was a war going on in the country, and exploding bombs were grabbing the headlines in Sri Lanka, the foreign media hardly paid any attention to the country. Those of who living abroad had to depend on the BBC World Service on a shortwave radio or relatively expensive phone calls home to get any news. The need for digital news was felt by those Sri Lankans studying or working abroad.

The internet started in 1983 and soon after most academics in the scientific fields started using email to communicate. In 1986 a few graduate students led by Gihan Dias started SLNet, an email list through which those on the list could post and share any news they had obtained with other members on the list.

Sometime in 1988 the author joined the SLNet list after it had become more popular by Nimal Ratnayake posting news on Sri Lanka from the BBC World Service. He used to record and painstakingly transcribe any report on Lanka, type it up and post it to SLNet. CompuServe was the only online news service at the time. One could dial into it at 1200 bps and read wire stories from many sources. Based on keywords set up, it selected

stories from Newswire, and made them available. The author started editing and posting the interesting wire stories on Sri Lanka to SLNet.

In 1993 the browser and with it the World Wide Web came into existence and the commercial world started to discover the use of the dot-com internet. Academic community from all fields started using mail and the web. The Internet finally arrived in Sri Lanka in 1995. Many local newspapers went online. In September 1995, the state-run Ceylon *Daily News* and *Sunday Observer* started online editions of their newspaper. The Lanka Academic Network (LAcNet) sponsored *Sunday Times* to start an online edition in March 1996. The web edition was created by Infolabs, a company started by Gihan Dias. The *Island* started an online edition, and some of the Sinhala and Tamil newspapers also got in on the act.

Archives are one of the greatest assets of a newspaper. Searchable archives online makes them far more useful, than archives of the printed paper. However, most news from the early internet era, which was at that time available digitally, has not been properly archived. This is an unfortunate loss of digital records, which should not have happened. If the CompuServe Newswire had been archived and now put online, it would have increased the availability of digital news reports back to the early 1980s rather than the mid-1990s.

Most newspapers also do not have complete digital archives online. Locally, only the *Sunday Times* has an unbroken archive from the start of its online edition in 1996. Most other local Newspapers have digital archives available only from 2002 August, as older archives have been lost mainly due to the sudden termination of ISP Lanka internet on which they were hosted

Daily News and Sunday Observer have lost 7 years of archive from 1995 to 2002. The Island which was overwriting the files online each week, has also lost archives till 2002. Are online newspapers being properly archived even now, to ensure that they are not lost or deleted? Although printed copies must be sent to the National Archives, there is no such requirement for e-papers posted online by newspapers, some only on paid subscription.

The formatting of newspaper websites is also an important consideration. As a result of rapidly changing technology and software, the older editions are being lost without any appreciation of the importance of keeping them online. For practical reasons most websites are developed via Content Management Systems (CMS) like WordPress, Drupal and Joomla. However, as newer CMS software are developed and adopted after they become popular, older editions in archive from previous CMS become incompatible. It is often not possible to maintain the older archives when the former CMS is no longer supported on newer webservers. For example, after such a change, the *Daily Mirror* removed archives older than 2007.

When a news story is read online it may get, bookmarked for future reference, linked from a website, posted to a social network, discussion board or shared by email. Web developers often find the reference links put to these stories get suddenly broken. The web address known as the Uniform Resource Locator (URL), must not change after a news story is posted online. So for long term archiving, the URL needs to be independent of the CMS and database being used by any website. The numerous broken links one finds when researching older news on the web, is often caused by small changes of the

URL, not necessarily caused by the removal of the digital records.

Content management of a website to ensure pages will remain online over the long term, needs to be carefully planned and designed. Standard HTML format should be adopted, to ensure that the archives in any news website are independent of the CMS from which they were generated. Static HTML is also more efficient, and uses fewer resources and improves server performance, an important consideration as the news archive grows. This is also important to ensure that news websites will get properly indexed by automated software robots.

Around 2004, the government of Sri Lanka was blaming the western media of bias, but not doing much to have their storyline indexed, to be seen by foreign media. None of the .lk domain newspapers were being indexed by Google News. Many of the local newspapers had adopted a subscription service which prevented them being indexed. The state-run Lake House newspapers was freely available online, but had used Frames which hid the news stories from being easily indexed.

In 2006, the author was able to persuade *Sunday Times* to remove subscriptions which had significantly reduced their online readership. The *Daily Mirror* of the same group followed. A visit to Lake House and advising them of simple modifications needed, got them indexed. A year later both the *Island* and the *Leader* removed subscriptions. Now all of the .lk online newspapers are properly indexed and freely available, supported by online advertisement revenue.

Citizen Journalism

The print media is constrained advertisers and influenced by views of the majority readership. Publishing directly and only on the internet is growing rapidly as a powerful force of citizen journalism. Blogs, Social networking sites, specialised websites reflect the pulse of the people. A proper unbiased internet archive, which is useful for historical and sociological research, needs to be independently saved and preserved for the long-term.

This could be primarily done with the .lk domain and later expanded to cover other websites with Sri Lankan content. It should be independent of racial, political, religious, or any other community biases. Archiving algorithms should be optimised to be useful for actual research. Every minor update needs to be preserved, but final versions of webpages must be preserved particularly if they are replaced or removed.

Sri Lankan Chronicles

Recorded history is an essential part of the heritage of a nation. The *Mahavamsa* was written in Pali by Ven. Mahanama Maha Thera of the *Dighasanda Senapathi Pirivena* in Anuradhapura in the fifth century CE. The *Culavamsa* continued the history to the present day. Prof. Wilhelm Geiger's German translation of the *Mahavamsa* and *Culavamsa*, was translated into English and first published by the Ceylon Government Press in 1912 and 1931. They are a vital part of our recorded heritage which needs to be online.

In 1998, the author started a website, lakdiva.org, since at the time there was hardly any information about the recorded history of Sri Lanka on the web. Some groups were exploiting the situation and putting distorted versions of history online. The Sri Lankan government had yet to realise the importance of the internet.

In 2000, the author encouraged his son who was fourteen years old at the time, to create a digital OCR version of H.W. Codrington's *Short History of Ceylon*, published in 1926 and put online (Codrington: Online). Its publishers, Macmillan, told the author they had no record of the book on their computer. It had gone to the public domain in 1992, 50 years after the death of Codrington. Geiger died in 1943 and his books came into the public domain in 1993. In 2002, the author's son put the *Mahavamsa* online at lakdiva.org.

The lakdiva.org online version of *Mahavamsa* has been copied and put on other online web sites. One of those sites, http://mahavamsa.org, has however, recently improved on the author's son's effort and added the footnotes in Geiger's translation and a few chapters of the *Culavamsa*.

The Royal Asiatic Society of Sri Lanka has archived stone inscriptions online. Hopefully someday the many palm leaf manuscripts available in Sri Lanka, will also be archived online. They probably contain a wealth of information which has been long forgotten by researches.

Copyright

Copyright is an issue which needs to be considered when books are reprinted or archived online. According to new copyright laws adopted in Sri Lanka in 1998, a book will normally go to the public domain 70 years after the death of the author. It was 50 years before 1998. In USA, all books published before 1923 are considered free of copyright. The special significance of this

year is easy to recognise. In 1923 the Walt Disney Studio was started in Los Angeles, and they have the lobbying influence to prevent Micky Mouse and Donald Duck ever going to the public domain.

Many rare public domain books have been reprinted by Indian publishers who give a set of these reprints to a reputed book project that scans and puts books online. Rather than a labour intensive scanning process of manually turning pages of an original, it is simpler to cut up a reprint and feed it to an automated scanner and OCR. However, the book project has now granted an online copyright to an Indian Publisher since they provided the books reprinted by them for scanning. This copyright granted to the publisher who reprinted the public domain book keeps it outside full view on the internet. An Indian publisher told the author that he did not ask for copyright, and would not object if the limited view is removed by some government order. For example, in USA anything published by NASA is free of copyright, since NASA is funded by the American taxpayer.

The author has looked hard to find an authority in Sri Lanka who would write to the book project about removing the online copyright granted to the Indian publisher for these reprints of public domain books published by the Government of Ceylon. Each government department pointed the author to another, with none willing to take the responsibility to write the letter since they said they did not have the authority. It does show that if the author waited for some authority in the government to decide to put the history of Lanka online it would not have happened, for a long time. Can there be a SAARC governmental agreement on this issue and officially write to the book project to withdraw the copyright they have granted without any authority?

In 2001, the Lanka Academic Network (LAcNet) started a Sinhala e-book project called *Panhinda* which was unfortunately short lived due to the lack of volunteer time to keep it going. It is nice to see that a new site http://www.pothpath.com/ has been recently started to serve the same need.

There is a mistaken notion that when a book is made available freely online, sales of the book will decrease. Market surveys have consistently shown that the opposite is true. The greater the publicity for the book, the more people buy the book for their personal libraries.

National Archives

The National Archives of Sri Lanka, still preserves mainly the records on paper, while increasingly more records are now digital. Comprehensive legislation is needed for the National Archives to take on the responsibility, to ensure as soon as possible, that digital records are not lost in the future.

They need to help and educate, particularly the newspapers to put back online all of their older archives that may be available from internal digital backups.

OCR software is improving and the cost of online disk storage and internet access is rapidly going down. A long-term goal should be to put all available archives online. They need to convert the older archives on MicroFilms into digital images and put them online after OCR to make them searchable. This is urgent as higher the humidity of our tropical climate, lower the expected lifetime of MicroFilms is.

Most government websites preserve no archives. They are notorious of deleting all material of older regimes and starting a

fresh. Just a change in minister, webmaster or the ISP is all it takes. Newer websites are sometimes lot smaller than the older. A change of government causes a removal of many webpages. They must be independently archived to be preserved in the long-term.

Video Archives are also important. The author was told that the National TV channel Rupavahini does not keep archives of their broadcasts for more than 3 months. Some TV channels in Sri Lanka have recent transmissions online, but none have proper searchable archives. That would require transcription of the audio dialog. Video of the Parliament live debates since 2010 September are currently online. But they are not being archived properly with the digital record of the Hansard, to ensure they are properly searchable.

Many host their websites or Videos for free, at many ISPs such as YouTube for Video, sites.google.com for webpages etc. These sites are not however archival, since the commercial company might choose to discontinue the free service anytime. For example Geocities purchased by Yahoo was closed and millions of webpages went offline.

Conclusion

Speaking not as an archivist but as an individual seeking online information for personal knowledge and academic research, the author has observed that information available for research on South Asia on the internet, is far less than that available on the western world. Many large digital archives are a reality in the West, and it is important that South Asia is not left behind.

Many government documents in the public domain are now hidden from full online view, by a strict interpretation of the copyright Law. An association like SAARC can help resolve the copyright issues, so that public domain archival documents are freely available on the internet.

The digital archive of books on the internet is growing very rapidly. We may soon have all available published work of human civilisation put online and instantly searchable. We will truly then have instant access to information-with days of painstaking reference in a library, reduced to a fast comprehensive search. Hopefully Sri Lanka will keep up with the new trend, in this age of instant access to all archived information.

References

- 'Archival Data on a Dime', *nanorosetta*, Online: http://www.nanorosetta.com/ (last accessed 14 September 2014).
- Codrington, H.W., *A Short History of Lanka*, Online: http://books.lakdiva.org/codrington/ (last accessed 14 September 2014).
- 'Distributed Proofreaders', *pgdp.net*, Online: http://www.pgdp.net/ (last accessed 14 September 2014).
- 'Free ebooks Project Gutenberg', *gutenberg*, Online: http://gutenberg.org (last accessed 14 September 2014).
- Geiger, Wilhelm, *Mahavamsa- The Great Chronicle of Lanka*, Online: http://books.lakdiva.org/mahavamsa/ (last accessed 14 September 2014).
- 'Google Books', *Google*, Online: http://books.google.com/ (last accessed 14 September 2014).

- 'Lakdiva', *lakdiva.org*, Online: lakdiva.org (last accessed 14 September 2014).
- 'Posner Memorial Collection', *Carnegie Mellon University*, Online: http://posner.library.cmu.edu/Posner/ (last accessed 14 September 2014).
- 'Royal Asiatic Society Inscriptions', *Royal Asiatic Society of Sri Lanka*, Online: http://www.royalasiaticsociety.lk/inscriptions/ (last accessed 14 September 2014).
- 'The Mahavamsa', *mahavamsa.org*, Online: http://mahavamsa.org (last accessed 14 September 2014).
- 'Universal Library', *archive.org*, Online: http://www.archive.org/details/universallibrary accessed 14 September 2014).

Archives: Road to the Future*

C. Saroja Wettasinghe

Abstract

This paper is primarily concerned about the present situation of archives with special emphasis on the SAARC region. The future and way forward for archives is discussed accordingly giving special attention to the management systems, legal frameworks and preservation and conservation methods. In drawing a conclusion, the paper discusses a mechanism to tackle the challenges of the new digital era where access to archival material will be through the World Wide Web, immaterial of the formats and the location of the archives.

Introduction

Archives denotes two meanings, namely the place where archives is kept (Archives), and valuable records that should be preserved for the future (archives). Road to the future could be defined as steps that should be undertaken in the future for the development of Archives and/or archives.

In the SAARC region, there are Archives holding valuable archival material which needs to be preserved for the future generations and should be facilitated with easy retrieval. At present, archivists are in a transition period due to the creation

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of digital archives (both born and scanned digital), in addition to traditional archives.

This paper focuses attention on the present situation of Archives/ archives and discusses development measures needed to be taken for the future.

Situation at Present

Legal Framework

There are National Archives Laws/ Acts or Public Records Acts enacted by National Archives of the SAARC region and clauses specifically focusing on accruing, accession, retrieval and management of archival records. In the case of traditional archives, 25 year rule for accrual and 30 year rule for accession apply in most of the countries at present. There is legislation on Freedom of Information (FOI) or Right to Information (RTI) in some of the SAARC Countries.

Records Management

In the SAARC region, archivists also function as Records Managers. Available legislation stipulate (although it is not specifically in black and white) that archivists should perform record surveys for all government entities as they are responsible for preserving the archives for the future. In the process, it is necessary to appoint a coordination officer of a higher level i.e. of a senior position, from each government organisation to liaise with the work, to inspect and appraise the records and to request for the transfer of records.

Archives Administration

After 25 years of creation, the biggest responsibility with regard to accrual of records is to make available facilities, for the retrieval of information by the public and government, semi-government and private institutions as they have the right to access these records as almost all the constitutions in the world have a clause on the protection of human rights including right to information. In the process, it is required to make accessions after checking each record for its authenticity, integrity, continuity and physical condition (in case of conventional archives) by allocating accession numbers. Then proper cleaning using vacuum cleaners, and fumigation for elimination of insects and lave are being done.

After performing all these activities, records accessed are sent to repositories where the climatic conditions and environmental conditions are controlled for safe keeping. In many countries, archivists are privileged to prepare indices, summaries and other finding aid after studying the records well over a lengthy period of time, since it is the 30 year rule that applies in these countries for accessing information.

Preservation and Conservation

All National Archives consist of conventional archives and there are facilities for the preservation of the collections. The level of preserving facilities could vary from collection to collection. There are separate divisions in all National Archives that are responsible for preservation and conservation. Some of these divisions are equipped with all necessary machinery and items along with trained conservators while some divisions have only partly fulfilled the above conditions. Traditional restoration methods which consume a comparable amount of time are still

in shape for conventional archives. One of the frequently used preservation measures is to save the information in another medium. Microfilming is one of the popular techniques in the SAARC region that has been used for a long period of time in order to achieve this end. In addition, in some SAARC countries, digitisation is also in practice for some time. There are born digital records. They could be audio-visual and electronic records. It is necessary to upgrade the systems and formats at frequent intervals in order to preserve these records.

Developments for the Future

Strengthening the Legal Framework

All the SAARC countries have a National Archives either as a separate organisation or as a joint organisation with the National Library, except in the Maldives. These organisations are mainly governed by National Archives Law or Public Records Act. The activities of National Archives have been modified with the introduction of legislation pertaining to RTI or FOI. In Brazil, right to information and records management is spelled in the constitution itself. Hence, all the government institutions are compelled to adhere to the procedures in records management as stipulated in the constitution without any hindrance.

Introduction of legislation pertaining to RTI or FOI have made many National Archives and archivists stronger in their sphere of authority on records management. In addition, the public has the right to demand access to and preservation of information. Following are two instances were public interest litigation was filed against the destruction of archival material in USA:

- 1. One famous lawsuit was brought to prevent the destruction of records of the Federal Bureau of Investigation (FBI), and it was brought by both the children of persons whose case files were involved and by academics. Basically, the plaintiffs said that the records schedules issued by the National Archives were too old and did not reflect current FBI records. They sued both FBI and the National Archives in order to reappraise the records and develop a modern records schedule, in other words, to do what the law required. As a result, FBI and National Archives did the biggest appraisal job in the history of National Archives. This resulted in many records that would have been destroyed being retained (Bradsher 1988: 51-66).
- 2. A historical researcher interested in the US occupation of Okinawa filed a Freedom of Information request for films of the occupation. The films were provided to her. She then learned that the National Archives had decided that the films depict local life and not government activities and thus they could be given to the Okinawa Prefectural Archives. The researcher used the Archives, saying that the appraisal was not properly done. The judge decided that the Archives' decision to dispose of the Okinawa films "was based on erroneous factual premise" and ordered that the Archives reappraise the records. The Archives did and decided to keep the film and make a copy for Okinawa (Miller 1997).

It is understood that the regulations made under respective legislation should be upgraded and revised according to changing times. Archives legislation requires timely and systematic transfer of records. While there may be a general transfer period, for instance twenty, twenty five or thirty years,

legislation should authorise the Archives to set a shorter time period if the fragility of the records warrants it.

It is also necessary to emphasise the accrual of audio-visual records and electronic records in legislation, if they are applicable. In Sri Lanka amendments to the existing legislation are in progress. In the case of electronic records, the 25 year rule for accession cannot be adhered to since the software and hardware become obsolete. Therefore, accrual of electronic records must be done within three months of creation.

Furthermore, penalties should be introduced and/or upgraded as per the situation. Legislation of SAARC countries spell penalties for willfully damaging, removing, destroying or erasing any public or non-public record in the control of a governmental body. Unauthorised export of any material of archival value is also identified as an offence and can carry a penalty and/or an imprisonment.

Development of Human Resources

Human resources are extremely important for Archives. Following are a few measures that need to be taken in order to enhance the capacity of human resources in Archives:

 Structural Development - In the SAARC region, normally a National Archives is headed by a Director General while some are headed by a Director. Under the head of the institution, there is a hierarchy of offices and this hierarchy varies from one Archives to another. It would be a strength, if the SAARC region could adopt a common structure with minor differences that suit the situation of each respective country.

- Recruitment of Suitable Personnel Staff working in National Archives or in any other Archives is doing a service rather than a job. There should be love and passion for the service. It is good to have a competitive examination and an interview to check the qualifications in recruiting personnel in order to have the most suitable, trustworthy, honest and dedicated officers.
- Capacity Building All archivists are information managers. They should be up to date. To work efficiently, officers need to be exposed to new technicalities. Capacity building is therefore very essential for archivists. This could be done by conducting training courses, seminars, workshops, discussions and exchange of ideas and by exchanging experts/officers among the National Archives in the region.
- Promotional Prospects When one joins the Archives, s/he should not be stagnated and there should be goals for him/her to succeed. Hence, it is necessary to have promotional prospects for the officers who join the Archives.
- Attractive Salaries It is true that Archivists are truly heritage lovers, and they are dedicated to their job. Even then, they expect to have better living conditions in society. To keep the archivist in the profession, it is a necessity to give attractive salaries i.e. a suitable salary according to the position, qualifications and experience.
- Development of Proper Attitudes Society today is leaning more towards moneymaking rather than cultivating basic human goodness such as being genuine,

courteous and helpful. Hence, development of proper attitudes by enlightening them (in this case the archivists) about advantages of public service, is essential.

Accrual of Archives

The accrual of archives depends on appraisal. Appraisal is the evaluation of records for determining retention, review and destruction of records. The process of appraisal depends on evidential value and/or informational value of the record.

Normally, records which have evidential value also have informational value. Appraisal standards might be common in the SAARC region, even though these vary depending on the types of records i.e. paper, audio-visual and electronic. Especially in the appraisal of electronic records, it is necessary to be sure of their authenticity, integrity, continuity and security. In the case of metadata, after appraising metadata also should be accrued along with the records, unlike in the accrual of conventional archives. Common appraisal guidelines for the SAARC region would be an asset.

Administration of Archives

When preparing finding aid, it is always welcome to use databases in the future. Finding aid should be available for any type of records i.e. either conventional or digital. These should be available as indices, summaries and databases. It would be helpful if the SAARC region could use common software for storing data. It should be an open software which could be used by any one. ICA AtoM software which is an open source and a good search engine is a potential software that could be used in preparing databases.

Preservation and conservation of conventional archives and digital archives will be in place in future, although the trend is to get away with the conventional archives. In the case of preservation, saving the information in another medium by microfilming may discontinue as there are difficulties in obtaining new machinery and microfilms with specific standards. Digitisation, a process of saving information in digital media irrespective of formats is quickly catching up. So, archivists in the region need to focus on preparing manuals/guidelines for digitisation.

Maintaining Digital Records

For the survival of electronic records of the government, they need to be under constant care, in controlled environments, and regularly inspected and migrated to new software systems. Furthermore, electronic systems must have documentation with them to enable future preservation work.

The longer one waits for the transfer, it is more likely that the tapes will be unreadable and the documentation will be incomplete or lost.

Archiving websites is also in practice in the West and is important as these are information sources. As websites change frequently, the information they contain will be lost forever if they are not archived. Sri Lanka may commence archiving websites but it will not be in near future. The archivists in the region need to have a dialogue on archiving websites.

Access to Archives

A major concern among archivists and the public is regarding principles of access. It is very well understood that there are classified records which have limitations in access. In future all records will be digitally born and will not have limitations in access technically, although there could be limitations due to classification. It is to be noted that privacy and data protection regulations will give limited access to information. There could be online information which could be accessed freely but with certain limitations.

Infrastructure Facilities

It is necessary to develop infrastructure facilities with careful planning. Housing facilities and security facilities should be developed in all the Archives in the region. Proper space as well as facilities for storage and access is crucial in developing Archives in the region. The buildings need to be controlled to suit different climatic conditions. Security features such as fire prevention facilities, smoke detection and thunder protection systems need to be properly installed for the protection of Archives. Digital archives should be maintained diligently and access to the storage system has to be very limited in order to protect the system from viruses and unauthorised access.

Conclusion

Archivists in the SAARC region are facing many challenges at present and these challenges will continue in the future. There will be less conventional archives while the trend will be in favour of more digital archives. In order to tackle the challenges access to and disposal of archives need to be managed and monitored, a model legal framework governing Archives/archives should be developed and archivists should be trained and placed in the right position to face the challenges. Capturing well the importance of archivists, Transparency International in its Global Corruption Report 2003 wrote:

Given that the systems the chief archivist manages and the records he or she holds provide the paper trails crucial for exposing mismanagement and corruption, we must question why these posts are so junior and so under-resourced. Let us ask why the post of chief archivist is not accorded constitutional protection, and why it is not placed on par with a Supreme Court judge or a supreme audit institution, so vital is its role in guaranteeing both accountability and public access. (Pope 2003: 21)

The role of an archivist in preserving a country's history is therefore of utmost importance. Much has been done in uplifting the standards of Archives and archivists and much more needs to be done.

References

Bradsher, James Gregory, 'The FBI Records Appraisal', *Midwestern Archivist*, vol. 13 (2), 1988, pp. 51-66.

Miller, Page Putnam, 'Court Hears Case on National Archives' Plans to Dispose of Films from U.S. Occupation of Okinawa', *NCC Washington Update*, vol. 3 (37), 1997, Online: http://h-net.msu.edu/cgi bin/logbrowse.pl?trx=vx&list=halbion&month=9709&wee k=a&msg=/AaeJkxPFZQSyjbkllmNRA&user=&pw= (last accessed 15 March 2014).

Pope, Jeremy, 'Access to Information: Whose Right and Whose Information?' *Transparency International Global Corruption Report 2003*, pp. 8-23, Online: http://archive.transparency.org/misc/migrate/publications/gcr/gcr_2003#download (last accessed 24 March 2014).

Challenges Faced by Archivists and Record Managers in the Management of Electronic Records of Public Institutions*

K.D.G. Wimalaratne

Abstract

The increasing use of electronic records in public institutions has created many problems for both creators and users. Various types of hardware and software have made matters worse. Even though the use of digitisation methods for access, space saving and preservation is considered as a panacea, the management of on-line, near—line and off—line current electronic records have posed more challenges than solving their management problems. In this context, Archivists are called upon to play a dual role as record managers and Archivists in the management of current electronic records. Are they ready for this?

This paper discusses issues faced by archivists and record managers in managing electronic records of public institutions in an increasingly digitising world and evaluates their preparedness in playing the dual role. In conclusion it argues that archival theories should not be revised but reformulated in order to effectively take up the challenge of digitisation.

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Introduction

Use of electronically generated records with complex software and hardware devices is increasing all over the world. From mainframe to personal computers, laptops to eye pads, networks such as LAN, WAN, GAN (internet) to websites, increased use of technology has revolutionised information management systems in order to serve citizens in a more efficient way. This has made archivists and record managers to remodel their record and archival concepts and theories for the benefit of the community. The current stage of electronic records and their longer user service by way of preservation of electronic records archivists, support public administration in its by the accountability, transparency, and responsibility towards good governance. In addition to the electronic records created in the above described networks using various types of hardware, many software packages viz. system and application software, deliver the outcome in the forms of CDs, magnetic tapes, optical discs and the like where information is stored electronically and used in computers.

Current transactions in the public service take place daily, either on-line or near-line, and are transferred to a hard disk, magnetic or optical disc i.e. off-line at the end of the day. In some public offices, digitisation is carried out extensively by converting analog paper records in bulk to binary digits for easy storage, access and preservation. Accordingly, present day public administration is flooded with electronic records which could be easily manipulated, transmitted and processed by a computer. Records managers, archivists and system managers are the main stakeholders saddled with the task of handling electronic records in public offices.

Challenges for Records Managers in Managing Current Electronic Records

Countires where records managers are in charge of electronic records need to work with archivists and system managers in order to face the complex and sensitive situation of managing electronic records in such a way so as to make public services more efficient and low cost. The system managers along with records managers and archivists will have to ensure the creation of authentic, reliable and quickly retrievable current electronic records for administrators in public offices. The selection and use of standardised, compatible and non-proprietary software packages in the management of electronic records is essential.

Before the application of technology, information structure of the relevant public office should be examined by the main stakeholders mentioned above. Computarising a disarrayed information base of a public office is like putting the cart before the horse. Many e-governance projects have failed due to this factor.

Where records managers are not in operation, archivists will have to play the dual role of the record manager cum archivist. In this case, the archivist has to be trained in records management principles which are applied in managing current electronic records. Along with such training, laws governing archives too should be strengthened to cover the sphere of electronic records management.

Do Electronic Media Pose a Challenge?

New electronic media has warned archivists of the danger of losing the memory of a nation. Creators and custodians of the new media are erasing tomorrow's records of informational 176 K.D.G. Wimalaratne

value today. Following are some key factors that should be taken into consideration when managing electronic media:

- The ephemeral nature of the medium,
- The separation of information from its medium,
- The ability to make an infinite number of identical copies,
- The high cost of equipment, and
- The obsolescence of technology employed.

Life span of hardware and software has been estimated at less than ten years which signals the changing nature of the technological environment. This requires more time by the user to understand and master these developments.

The re-use of media such as disks, magnetic tapes and other forms, runs the risk of willful or accidental destruction or erasure of information, when it is considered to be no longer useful to the administrator in daily use. Some systems are programmed to automatically erase the data on expiry of a certain time. Electronic media could be easily updated, renewed, merged or destroyed, without any trace kept of previous versions. A challenge for all those who are concerned with preserving the integrity of information with a lasting value, particularly the archivists, is the manipulation and modification of information at the time it is introduced to an IT system.

Computer viruses can destroy information despite having devices to counter them. Information therefore has become volatile especially with the exponential growth of email over the last decade. Email is rarely mirrored in administration as storage of email correspondence is not understood by many. If the email is received by an individual computer alone, it may be preserved. If the organisation operates a network for emails, the

guarantee of the email being saved is susceptible. The absence of a standard policy of preserving email information results in a loss of memory within organisations, which has a damaging effect on decision making in the short term and spells disaster for history in the long term.

Electronic media has contributed to the wakening of notions 'original' and 'copy' in the paper based environment and also to its authenticity and evidential value. In 1986, it showed that traditional documents and electronic records, as far as evidential value was concerned were far from the norm.

In some countries, courts accept an electronic image as evidence in the absence of the original or a paper copy. This uncertainty over the evidential value of electronic records makes it difficult to adopt a concerted policy for their long term protection and preservation.

Is the 'Life Cycle of Records' Concept Challenged?

The role of the archivist in the processing of electronic records demands more and more intervention for effective intellectual control. Such intervention requires answers to some fundamental questions such as what is the moment? and what stage should the archivist involve himself in the life cycle of electronic records? They have to rethink the life cycle itself, with evaluation no longer taking place at the end of the current use of the record but as soon as the electronic record is created.

Accordingly, the archivist will have to play an active role in the drawing up of standards for appraisal, disposal, arrangement and preservation of electronic records. The electronic records will bring the archives and those who create the records closer. Some believe that archivists should involve

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themselves even before the computer system is created in order to guarantee the durability of the information and knowledge about the content of its creation.

How are Archival Principles and Methods Affected?

Appraisal

For electronic records, appraisal for space saving is negligible. However, the high maintenance costs render appraisal vital. What are the criteria for appraisal? There are two schools, American and European Schools of Thought that set forth such criteria.

American School of Thought

This School sets forth two main criteria for appraisal as follows:

- 1. Secondary or informational value, and
- 2. Technical criteria such as legibility of data to identity master files. Threat of technological obsolescence urges the archivist to intervene as soon as possible i.e. after the creation of electronic files. Appraisal should be initiated in the early stage of the life cycle viz. conception.

European Tradition

This School considers evidential value to be the key appraisal criterion than the information value. This honours the principle of provenance i.e. contextual information is important. This also questions whether data can be transferred because of hardware and software getting outdated. This therefore stresses that the proper maintenance of data is important. This is a dramatic break from the traditional practice of appraisal.

The appraisal techniques of electronic records are not drastically different from the conventional ones applicable for paper. Therefore, there is no need to redefine archival theory on appraisal in order to handle electronic records. Appraisal practice only should be remodeled. In appraisal, technical considerations are given equal importance along with evidential and informational values.

When Do We Appraise Electronic Records?

Traditionally, records management practices have designated records as being 'active' or 'current', 'semi-active' or 'semi-current' and 'inactive.' The electronic records cannot be classified so neatly into the three stages of the life cycle of paper records. Electronic records are clearly 'active' if they reside on a computer system which is used daily. They are 'inactive' when the information is removed from the system. But it is the definition of 'semi-current' records. This causes real problems. If the paper records are defined according to the frequency of use per annum, how can electronic records in the same situation be classified?

Life Cycle of Electronic Records

Active – Records which are stored on the system disc drives viz. on-line.

Semi-active - Records which are not on the system or on-line, but on storage tape or discs viz. off-line.

Inactive - Records removed or off loaded, copied from the backup tapes.

The archivists cannot wait until inactive electronic records are offered to them for appraisal as with paper records. The scheduling process should begin with the system design stage or the perception stage. This is no revision of theory or principle but merely one of timing and strategy before it becomes impossible to determine the provenance or origin of the electronic records.

There is a suggestion that 'house keeping records' (records relating to those general administrative activities common to more or less all organisations) in electronic form could be kept in their entirety where paper records become bulky to be used and preserved.

Arrangement of Electronic Records

The accepted archival principle of 'respect for original order' looks somewhat more difficult to apply to the archival arrangement of electronic records. It is almost impossible to determine the exact 'original order' of a data file.

Using computer programmes such as 'nord perfect' or 'perfect' or new versions such as 'Microsoft Office', 'Open Office', 'k word', 'zyx' and the like, differs from the physical arrangement of paper files. Future users should have the original programmes available, to see how the original creators used information in a rapidly changing world of computers where software packages come and go quickly. This situation makes the arrangement of electronic records difficult.

Description of Electronic Records

The five levels of arrangement viz. record group, sub-group, series, sub-series and item, seem not to be applicable to electronic records in their description. Standardised and accurate

descriptions are important since a certain level of description is necessary for a user to access a computer file. Could it be possible for archivists to improve the descriptive standards for electronic records by following the basic elements of the library system and by implementation of standards?

Standardised and accurate descriptions are equally important for all forms of archival material, whether they are paper or in electronic form. The fact that the electronic medium is so physically different from paper makes accurate archival description a vital need for electronic records. Improper or sloppy description will hinder the electronic records and their ability to be used easily to find information therein than paper records, as the computer records are created and held in a form invisible by human eyes and cannot be read without the assistance of a computer.

There is a level of technical description necessary before a user can begin to access a computer file. The user of electronic records would need to know not only the title and physical location of the disc, tape or CD-ROM, but also the kind of hardware which supports the file, and possibly the name of the software package well before. This leads archivists to think that there is a minimum level of description necessary for electronic records that are more detailed than minimum requirements for paper records. The user should also be quite familiar with the computer system which runs the file. If the user is not familiar with either computers in general or the system in particular, he or she may require user manuals outlining all the software commands in order to begin extracting any information from the data file.

Accordingly, with electronic records, the archivists must devote much time and effort to improve their techniques of

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description. The limitations of the physical medium must be overcome through the use of a more organised, better integrated and standardised system for finding aid.

Could we benefit from AACR-2 (Anglo-American Cataloguing Rules), the descriptive system practiced in the library world? Libraries receive data files according to bibliographic descriptions while archives receive data in groups or series of administrative records applicable to the context of the administration which created them. Therefore, librarians' card or computer catalogue entry system is not proper to be used in archival descriptions.

The International Standards for Archival Description (ISAD) was published by the International Council of Archives (ICA) in 1994, based on the description standards of the 'fond' or 'reload group' as the main unit of description. Are we to use the MARC (Machine Readable Catalogue) developed by libraries for bibliography data exchange or MARC-AMC (Machine Readable Cataloguing format for Archival and Manuscripts Control) developed by the USA is thus an important question to contemplate on.

Digitisation as a Means of Access and Preservation: Is it a Problem or a Panacea for Archivists?

In many countries, digitisation viz. the conversion of characters or images into binary digits or analogue digits for space saving, easy access and preservation, is used in public administration. Others are still experimenting with it. An interesting development with regard to digitisation is emulation. Emulation is a means for data recorded on one system to be read by another system by embedding devices called emulators in to the system. The emulator contains all the information necessary for future

hardware, operating systems and applications that can read the older data and use it in its original format. It is important for archivists to familiarise themselves with such developments in order to overcome the challenge of digitisation and make digitisation a panacea rather than a problem.

Conclusion

In conclusion the paper argues that there is no necessity to revise extensively the archival theory and practice with regard to electronic records. The theoretical principles merely need to be reformulated not refined to reflect a more conceptual and less physical orientation. The traditional archival theories on appraisal and description will have to be improved and not completely set aside in the context of electronic records. Therefore, it is correct to conclude that the new changes brought about by the new medium are in archival practice, strategy and planning, and not in main archival theory practiced for a long time.

As a concluding remark, the following words of Lucien Febvure, the famous French historian will be reiterated as a caution: "All history is choice." It is because of chance which destroyed here and preserved there. It is so because of man. In our role as collectors and preservers of raw material of history, let us try to ensure that man is one up on chance. Let us not let the historians and researchers using archives and libraries in the future, say that the most thoroughly recorded years in the history of mankind, ended up among the least well preserved.

Do not allow digits to become dust!

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SAARC Cultural Centre Guidelines for Contributors

SAARC Culture invites contributions in the form of research papers or book reviews on any aspect of Culture of South Asia. Manuscripts and all correspondence should be addressed to: The Editor, SAARC Culture, SAARC Cultural Centre, 224, Bauddhaloka Mawatha, Colombo 7, Sri Lanka. (sccpublications@gmail.com)

1. Submissions should contain:

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- c. Abstract/ Summary (for articles only), in c. 100-150 words:
- d. Keywords (articles only), up to five keywords, for indexing and abstracting;
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- f. Acknowledgements (if applicable);
- g. Endnotes (if any);
- h. References (Bibliography, film, videography, etc).
- 2. Manuscript would be accepted for publication on the understanding that these are original unpublished contributions. For this purpose, a declaration (in the format given below) should accompany each contribution.
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submitted/	accepted	for	publication	in	any	other
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- 3. Articles should be typed on one side of the paper (preferably A4) and double-spaced throughout (not only the text but also displayed quotations, notes, references and all other matter). Please provide one hard copy and an exact electronic copy in MS Word, preferably as an e-mail attachment or on a CD/ DVD.
- 4. Please use English spellings throughout; universal 's'in '-ise' and '-isation' words.
- 5. Normally all abbreviations should be expanded in the text, e.g. 'Department' and not 'Deptt.'. For specific nomenclatures to be used frequently in the text full version may be given at the first appearance with an indication of the abbreviation used subsequently, e.g. 'South Asian Association for Regional Cooperation (henceforth SAARC).'
- 6. All non-English terms may be italicised. Please use standard fonts only. For ascertaining the non-English words please refer to The Oxford English Dictionary. All italicised words can have diacritics as required. For Arabo-Persian vocabulary, please follow F. Steingass, A Comprehensive Persian-English Dictionary. For Dravidian languages, the Madras University Tamil Lexicon, or some standard equivalent, may be used. For other languages, the system used should be clearly specified early in the paper. Where diacritical marks are not used, the word should be spelt phonetically, e.g., Badshah and not Baadshah or Baadshaah

- (unless in a quotation, where the original spelling should be used).
- 7. English translation of all non-English terms used in the text must be given in brackets immediately after the word, e.g. 'Faujdari Adalat (Court of Criminal Justice).' If the number of non-English terms exceeds 20 a Glossary may be appended with the article.
- 8. Full details of work cited in the text should appear in 'References.' (Please see number 9 below). Only the author's name, year of publication and page number should appear in the main body text, viz.:
 - a. If the author's name is part of the sentence: As Ranabir Samaddar (2010) points out ...
 - b. If the author's name is mentioned at the end of the sentence: (Samaddar 2010: 110-12).
 - c. If a study is referred to in the text:
 A recent study (Samaddar 2010: 95-100) in South Asia demonstratesthat ...
 - d. If more than two authors: (Perera, et al 2007: 34).
- 9. A consolidated alphabetical list of all books, articles, essays and theses referred to (including any referred to in the tables and figures) should be provided. It should be typed in double-spacing and printed at the end of the article. All articles, books and theses should be listed in alphabetical order of author, giving the author's surname first followed by the first name or initials. If more than one publication by the same author is listed, the items should be given in

chronological order. Newspapers and unpublished manuscripts (including working papers and research papers) should not be listed. Detailed style of referencing is as follows:

a. Published Works

i. Books:

Das, Veena, Routledge Handbook of South Asian Culture and Society, (London, 2010).

(Note: Publishers' names are not to be cited. If a book is published simultaneously at different places, one or at most two of them may be cited.)

ii. Edited Volumes:

Bhattacharjee, J.B., (ed.), Studies in the History of North East India (Shillong, 1986). OrBlusse, L and F. Gaastra, (eds.), Companies and Trade: Essays on Overseas Trading Companies during the Ancient Regime, (Leiden, 1981).

iii. Articles in Journals:

Gopal, Surendra. 'A Note on Archival Material in Russia on Russo-Indian Relations', The Indian Archives, vol. 35 (2), 1986, pp. 29-36.

iv. Articles in Edited Volumes:

Bayly, C.A., 'Pre-Colonial Indian Merchant and Rationality', in India's Colonial Encounter: Essays in Memory of Eric Stokes, Mushirul Hasan and Narayani Gupta eds., 2nd revised and enlarged edn., (New Delhi, 2004), pp. 39-60.

v. Material from Websites:

Complete reference of the material used along with full URL of the website together with the date it was last accessed must be given, viz.,

The Clemency of Canning', Punch, No. 33 (24 October 1857), p. 171 from

http://www.victorianweb.org/periodicals/punch/57.html (last accessed 8 March 2011).

b. Unpublished Works

i. Theses and dissertations:

Ghosh, Utpal, 'The Communist Party of India and India's freedom struggle, 1937-1947', unpublished Ph.D. thesis, Department of Political Science, University of Burdwan, West Bengal, 1991.

Vijoo Krishnan, 'Transition from Feudalism to Capitalism in Pakistani Punjab, 1947-1977', unpublished M.Phil. Dissertation, Jawaharlal Nehru University, New Delhi, 1997.

ii. Manuscripts and Archival Material:

Please mention the name of the library or the archival repository, its location, including the town and, if necessary, the country. Please retain the original names of library/ archives but also translate them into English, for example, Rigsarkivet (National Archives). This may be followed by the major series used. Names of

repository and major series should be accompanied by the abbreviations used to refer to them in subsequent citations, viz.

National Archives of India, New Delhi (hereafter NAI), Foreign Department, Political Branch, Original Consultation (hereafter OC), 11 February 1831, Nos. 72-73.

Bodleian Library, Oxford, UK (hereafter BL), Tabakat-i Nasiri by Minhaj ud-Din Siraj, (Persian Ms), Acc. No. 16, folio(s) 17a (18a and 18b).

In case of materials in a private collection, the name and location of the collection should be mentioned. Where recorded oral materials stored in audio archives are used, the location of the recordings should be specified.

- 10. All Notes and References should be consecutively numbered and presented at the end of the article. Please do NOT use 'insert footnote/ endnote' option available in MS Word or similar softwares. Complete references with the precise page reference if applicable should be given.
- 11. An acknowledgement or statement about the background of the article, if any, may be given immediately after the main text of the article under a separate heading, viz. 'Acknowledgement(s).'
- 12. All Figures and Tables should be presented on separate sheets at the end of the article and should NOT be inserted in the text. Only a mention of each figure or table in the text is to be given, viz. 'as shown in Figure 2'. Please

distinguish between Figures (diagrams) and Tables (statistical material) and number them in separate sequences, i.e., 'Figure 8', and 'Table 8'. Please use short and crisp titles and headings for each Figure or Table, citing source where applicable. The units used and the sources should be stated at the foot of the table. Notes relating to the table should be placed after the source.

- 13. Illustrations should be of sufficient quality to be reproduced in the journal. If they are larger than the print area of the journal, please ensure that all details and text in the artworks are sufficiently large so that they remain legible when reduced to the actual size of the journal. Photographs should be black and white prints on matt paper. Digital pictures should be in .tiff format of not less than 300 dpi resolution. Please use short and crisp titles and headings for each Illustration, citing source where applicable. Please obtain permission to reproduce any figures or photographs that are not your own copyright. Similarly, permission may be required for quotations beyond the limits of 'fair dealing'.
- 14. Book reviews must contain name of author and book reviewed, place of publication and publisher, year of publication, number of pages and price (if available).
- 15. All contributors (authors and book reviewers) shall receive complementary copies of the *SAARC Culture* after its publication.

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SAARC Cultural Centre

The SAARC Cultural Centre is a regional centre established on 25 March 2009 in Colombo, Sri Lanka, to recognise and promote the profound cultural continuum of South Asia in order to sustain harmonious relations among South Asian people and to contribute towards holistic development in the region.

The Centre, successfully completed programmes that promoted cultural exchange of ideas and knowledge-sharing. Various programmes and publications of the Centre also showcased the cultural experiences of the SAARC Member States.

SAARC Cultural Centre Programmes for 2015

Programmes to be implemented in 2015 will focus on:

- Establishing Linkages between Culture and Other Sectors- As part of promoting cultural cooperation, the SAARC Cultural Centre will celebrate SAARC Non-Violence Day and SAARC Charter Day. The Centre also proposes to designate a city amongst the SAARC Member Countries as the 'SAARC Cultural Capital' for a year during which it will organise a series of year-long cultural events with a national but with an overall South Asian dimension. Bamiyan, Afghanistan was chosen as the Cultural Capital for 2015. A city of Bangladesh will be declared as the 'SAARC Cultural Capital' for 2016.
- Promoting SAARC Culture Online- The SAARC Cultural Centre has an active website, a SAARC Cultural Portal and an active facebook social media page. Through such online connections, the SAARC

Cultural Centre will connect with the rest of the world, as well as link with other organisations to promote their programmes on virtual media. Furthermore, the Centre is in the process of developing a Resource Network on SAARC Culture (RNSC) and an online Resource Centre to reflect and promote the essence of cultural heritage of the SAARC Member States.

- **Promoting Cultural Festivals in the Region** For 2015, the SAARC Cultural Centre proposes to have a Cultural Festival on Folk Music featuring folk musicians from the entire region.
- **Developing Archaeology, Architecture and Archives**The SAARC Cultural Centre will organise a capacitybuilding workshop on World Heritage Sites in South
 Asia in Bangladesh for six days.
- Developing Cultrural Industries- In 2012, the SAARC Cultural Centre focused on Traditional Handloom, with an Exhibition and Design Workshop, titled 'The Wheel of Life' in Delhi. In 2013, the Centre organised a similar programme modeled on the earlier one, but with a focus on Handicrafts in Dhaka. In 2014, the Centre held a handicraft exhibition and workshop in Nepal. In 2015, it will have a Handicraft Village in Pakistan, once again promoting handicrafts in the region, but with more emphasis on handicrafts made out of wood, metal, clay, glass and stone.
- Developing Literature in South Asia- The SAARC Cultural Centre will continue its Translation Programme i.e. a programme for the translation of classical literature of South Asia into English as well as other national

languages of the Member States. Furthermore, two anthologies on Poems and Contemporary Short Stories in the Region for 2014 will be launched in 2015. The Centre will also organise a Literary Festival in New Delhi, India.

- Promoting Visual and Performing Arts in the SAARC Region- The SAARC Film Festival, Workshop on Issues related to the Film Industry, SAARC Film Day, Artist Camp and Exhibition of Paintings and Photographic Competition and Exhibition will be held in 2015.
- **Research Programme** Research Project on Cultural Dynamics for National Harmony and Reconciliation in South Asia will be implemented in 2015.
- **SAARC Publication Programme-** At the conclusion of all workshops, seminars, symposiums and conferences conducted by the SAARC Cultural Centre, monographs will be published using deliberations for reference for scholars and others, in addition to publishing online. Newsletters, brochures and other promotional material will be published/ printed on a regular basis. In addition, *SAARC Art*, a magazine to promote artistic expression in the region too will be published.

SAARC Culture (vol. 6), the annual research journal of the SAARC Cultural Centre will be published in 2015. Contributions from scholars are invited for this issue. For details please contact sccpublications@gmail.com