



ANALYTICAL SURVEY OF SOURCES ON FORTIFICATION IN INDIA: A SPECIAL REFERENCE TO SOUTH INDIA**Dr.Meesala Ramakrishna**

ABSTRACT:

Forts has played very important role in the history of India, in terms of polity and economy and war fare and technological aspects of the Indian history. The sources for the study of the present paper can be grouped into three categories which are based on typologies. Primary Sources comprise the main or the first category and here we have archaeological records that are mainly excavation and exploration reports in addition to certain reports on regular repairs and surveys which were carried out by the Archaeological Survey of India, A.P.State Archaeology Department and other academic bodies like Universities. Inscriptions and literature form another class of primary sources, revealing different facets of the medieval period.

**Paper:**

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¹ See for example Indian Archeology a Review,1980,p.3 for a discussion on Golconda

small pamphlets which dealt with the different aspects of the monuments, some directly while others take up questions related to specific issues, warfare, military and the polity.

The archaeological studies can be traced to the emergence of the British rule in India beginning with the foundation of the Asiatic Society of Bengal followed by the foundation of the archaeological Survey of India in 1861 by Alexander Cunningham who is discussed in detail by later scholars as a reference point². This is a landmark event in the history of Indian historical research. They inaugurated a method of detailed survey, exploration, excavation and documentation of the architectural styles and more broadly the systematic study of the material remains of the past. While the archaeological reports date from 1862, which include tours of Alexander Cunningham and contain detailed descriptions of major fortified sites of the Indian sub continent, a new phase was started with the focus on structures. The Annual Reports of the Archaeological Survey of India from 1901 to 1902 onwards give us a detailed description of forts, fortification styles and patterns that broadly help us to understand the physical characteristics of each structure. After the independence of India the Archaeological Survey of India continued the practice of bringing out Annual Reports. This forms a major source for the study of fortification. The advantages with the Archaeological Reports are that, they are based on standard scientific and systematic surveys. Secondly archaeological material can be dated scientifically using techniques like carbon dating, thermoluminescence dating and other methods like X-ray diffraction. Further they also help us to re-construct missing and damaged aspects of structures like broken domes etc³. In addition to the reports of the Archaeological Survey of India, systematic surveys were undertaken in the dominions of the erstwhile Nizam of Hyderabad. A notable name that keeps coming up is that of Dr G. Yazdani (who has undertaken valuable surveys under the aegis of the Government of the Nizam which is discussed in the other chapters). These reports are available in the form of monographs and published volumes. The learned societies like the Asiatic Society of India, and other bodies started publishing journals. These became the standard or primary source for a large number of historians in the later part of the 19th-century. A characteristic that underlines the work of all these historians is their focus on fact and therefore they gave very few interpretations. This is characteristic of general works on Indian architecture of the particular period from 1870s to 1920s. From the 1920s the histories show a series of writings that are reflective of the nationalistic spirit in Indian history writing. We also see here the emergent typology of employing certain categories like Hindu and Muslim more frequently resulting in the Vijayanagar Kingdom being labelled as a Hindu empire.

James Ferguson laid the foundation by publishing a two-volume work in 1876 entitled *History of Indian Architecture and Eastern Architecture*, where he outlined the basic features of Indian architecture and how this became a pervasive idea and struck strong roots and which is a hotly debated topic even today in the history of architecture⁴. This work was a landmark in the sense that it gave us an anchoring point where the main structures were detailed by explaining the meaning and significance of each of individual components. This trend was followed in the general works on Indian architecture by scholars like Havell who also belonged to James Ferguson's period and his book *Indian Architecture through the Ages* is one of the earliest works on

² G.H.R. Tillotson, *Paradigms of Indian architecture: Space and Time in Representation and Design* (ed), Curzon Press, London, 1998, pp.27-32

³ *Indian Archeology a Review* (1955-1956), p.41, *Indian Archeology a Review* (1981-1982), pp.25-26

⁴ Thomas R Metcalf, *Ideologies of the Raj*, CUP Cambridge, 1995, pp.237-242

Indian architecture following the line of James Ferguson⁵. The author gives a concise survey of Indian architecture trying to cover large periods and regions. The major lacunae or shortcoming of the writers of this period is reflected very much in Havell's work. Though the author tries to explain how the stupa, temple, palace, mosques and dome co-related with the part and life of the period to which they belong, he offers only certain generalisations. He says that the architecture of India appears as a bewildering museum of marvellous, belonging to a bygone age but this is still a living tradition of constantly practical craftsmanship constantly re-adapting itself to the spiritual and material needs of the age, and bearing witness to the wonderful technology of Indians. Two problems are noticeable in these kinds of works, the first being the dry as dust type of history where they give very few interpretations and the works had mainly concerned with the technicalities and measurements. Secondly the idea of using certain labels as marvellous give space to the rise of nationalist historiography which created the idea of linking all creative production with rather sacred and religious motif. This work continues throughout the 1920s to the 1950s only to be dismantled by historians of art like Percy Brown⁶. Other historians of art and architecture like Percy Brown, Monica Juneja⁷, George Michell⁸ and Catherine Asher⁹ have followed in the same line. The major break was made by scholars like Percy Brown whose monumental two-volume work titled *Indian Architecture Buddhist Jain and Hindu Periods* and the subsequent volume *Indian Architecture Islamic Period* provides the reader with an account of development of stylistic patterns in each region under the patronage of various regional dynasties. The second book on Islamic architecture deals with the arrival of Islam on the Indian subcontinent and then proceeds to examine the efflorescence of architecture that can be labelled as Indo Islamic. The characterisation as Indo Islamic was also interchangeably used as Indo Saracenic. The main departure that Percy Brown made in comparison to the earlier scholars was that he gave explanations of the historical origin of the styles and their influences coupled with the functional requirements. Studies on the Delhi Sultanate and the Mughal Empire led to general works on Indian architecture like K.V Soundara Rajan's work titled *Islam Builds in India*¹⁰.

The author examines the influence of the Islamic ideas on institutions and its relationship with the landscape. The arrival of the arch and the Dome which is characteristic of Islamic architecture and hence are called arcuate, differentiating from the earlier method of using beams called as trabeate are dealt with. Subsequent works like Catherine Asher's work on Mughal architecture and Barbara Stoler Miller's work on broader periods have produced important findings linking the production of art with the royal ideology¹¹. An important collection of articles in the book aptly titled *The Powers of Art* by Barbara Stoler Miller expands on this further. These works have shown that Indo Islamic architecture in different regions was mainly due to patronage patterns and not merely for purely functional requirements. Contacts with Central Asia and the requirements of the state led to newer plans and use of creative architectural devices like the Jharoka of Jahangir. With regard to forts, they linked the advances in fortification to the

⁵ Havell E.B. *History of India from the Earliest Times to Present Days*, New Delhi, Ess Pub, 1979, pp.7-12

⁶ Percy Brown, *Indian Architecture :Islamic Period*, Taraporevala Publications, Bombay, 1956, pp. 22-47

⁷ Monica Juneja, *Indian Architecture in Medieval India: Forms, Context, Histories*, Orient Longman, New Delhi, 2001, pp.1-9

⁸ George Michell, *Architecture Art of South India*, CUP, New Delhi, 1995, pp.1-4

⁹ Catherine B. Asher, *Architecture of Mughal India*, Cambridge University press, Delhi, 1992, p.41,48,58

¹⁰ K.V.Soundararajan, *Islam Builds in India :Cultural Study of Islamic Architecture*, Delhi, 1983, pp.1-7

¹¹ Barbara Stoler Miller, *The Power of Art Patronage in Indian Culture*, OUP, New Delhi, 1992, pp.1-9

development in military technology and consequently state formation. The focus of the three authors is mainly on the Mughal period. Such exercises are being replicated in the case of Deccan only recently by scholars like George Michell, Anila Verghese¹² Crispan Bates, Marc Zebrowski¹³, etc.

In the historiography of architecture in medieval India a landmark work is that of Monica Juneja, who, in her introductory essay has given a survey of the 'historiography of architecture in ancient and medieval India. She points out the major shifts in the study of architecture and art history. Her main focus is on the advances in scholarship that are characterised by the use of new analytical tools and methodologies like the concept of space and the shifting agendas in Indian architecture where the study of architecture in the classical periods like the Mughal period has given way to specific studies on regional political centres. In this vein George Michell makes a significant departure in his much publicised work titled "Architecture and Art of Southern India"¹⁴. He begins by questioning the whole shift of scholarship away from the Vijayanagara and the Nayaka periods of South India. George Michell begins by asking why the late medieval' period in South India is not an area worthy of historical inquiry. The author outlines two major reasons for the same, the first being that the appellation of the word 'late' with a certain period identifies or characterises that particular period as degenerate or a period where creativity was at its lowest ebb. The second reason the author outlines is that the use of regional vernacular literature like Telugu, Tamil and Kannada has not been undertaken seriously in comparison to Sanskrit and Persian sources thereby relegating the medieval period of South Indian history to an under researched area. His other work titled the Vijayanagara Courtly Style brings out the unique character of the Vijayanagara style. Here the emphasis is on the grandeur and the link between ideology and production of art. Use of devices like lotus, arches and domes point to significant influences from the Muslim traditions. These can be seen in the palaces and structures like elephant stables the prime example being the Lotus Mahal. Temple architecture instead continued the earlier tradition of the Chola style that emerged as the most articulate of the Dravidian architecture in the medieval period. George Michell also has dealt in detail about temples, forts, palaces, watch towers, tanks, pavilions etc¹⁵. Following the same lines his work is concerned with an explanation of the architectural structures in their totality. He says that the concept of universality in architecture is related to notions about southern Indian society and culture during the Vijayanagar period. Architecture can be seen here as an active component in the formation of a specific royal ideology since it contributed to the iconography of the king and the royalty.

It would be out of place if we do not discuss general works on the history of Vijayanagara. Robert Sewell's monumental work on Vijayanagar titled *The Forgotten Empire* initiated a thirst for the study of this medieval South Indian kingdom. His work had a great impact on future generations and led to many generalisations that became the focus of subjective interpretation and went a long way in contributing to the construction of the Vijayanagar as a Hindu empire. Quoting profusely from the writings of medieval travellers like Domingo Paes and Fernao

¹² Anila Verghese, *Archeology, Art and Religion: New Perspectives on Vijayanagara*, Delhi, OUP, 2004, p.24

¹³ George Michell and Mark Zebrowski, *Architecture and Art of the Deccan Sultanates*, Cambridge University Press, 1999, pp.1-14

¹⁴ George Michell, op.cit., 1995, pp.2-3

¹⁵ George Michell, Bidar, *MARG* vol-37, No.3, June 1984, pp.42-46

Nuniz who were Portuguese travellers to the kingdom of the Vijayanagar, the author gives us a description of Vijayanagar as a prosperous empire with flourishing trade describing in detail the opulence and prosperity of the markets and ceremonies of the Emperor. This orientalist reading of the Vijayanagar Empire was continued by R N Saletore¹⁶, whose work argues that it was a great period in medieval South Indian history where there was a revival of art, culture and prosperity under the able rule of Hindu monarchs. This characterisation of the Vijayanagar Empire as Hindu in opposition to the five Muslim Sultanates of the Deccan was a major debate in medieval South Indian historiography which has its pervasive hold on many generations. This is only now being dismantled with the works of George Michell, Anila Verghese and Davison Jenkins. Following George Michell, Anila Verghese argues that the Vijayanagar architecture was poly ethnic as the society and multicultural¹⁷. She particularly points out to the tombs of the Muslim soldiers in the capital city and links this with the large-scale participation of Muslim archers and soldiers in the Vijayanagar army, thereby disproving the whole notion that the Vijayanagar Empire was Hindu. Examples of the use of stucco, floral motifs were part of borrowings and there is particular mention of a sculpture which is part of the series of analysis. Here one notices the Dwarapalas wearing a hat like the Portuguese soldier¹⁸. Davison Jenkins' work on the water supply system of the Vijayanagar points to the great advances in water supply and the relation of water for everyday and ritual use and appropriate rationing. An interesting article by Philip Wagoner titled "Sultan among Hindu Kings: Dress, Titles, and the Islamization of Hindu Culture at Vijayanagara", investigates the use of Islamic motifs in a very large scale by the Vijayanagar rulers¹⁹, particularly the use of stitched clothes of green colour so typical of the Muslim kings. These articles correlate with findings from the political history and art history and also the contemporary texts like the higher what to come. We come across a problem when we try to correlate accounts of the contemporary indigenous literature with forts since we see that the contemporary literature is to an extent very normative and therefore their descriptions of forts and architecture are only prescriptive in nature whereas on the field we see large-scale diversions. This problem is taken head on by writers like Velcheru Narayana Rao, David Shulman and Sanjay Subrahmanyam in their impact making work titled "Textures of Time" where they make use of folk literature and folk narratives that portray elements from Muslim, Tamil and other regional influences²⁰. This book also posits that there was a historical tradition in India prior to the arrival of the British and therefore challenges the notion that history writing in India began only with the advent of the British. This is of very great importance to us since it outlines the contemporary concepts and categories used in history writing which can be related to the architectural structures. General works on forts and fortification in India normally begin with a brief description of the major forts and patterns of fortification stressing the changes from the ancient to the medieval period where there is a displacement of the elephant and infantry by cavalry. In the forts this is seen in more in the emergence of secure structures which are again strengthened with the advent

¹⁶ R N Saletore, *Vijayanagara Art*, Sudeep Prakashan, Delhi, 1982, pp.xi-xii

¹⁷ Anila Varghese, op.cit., 2004, pp.22-29

¹⁸ Ibid

¹⁹ Philip Wagoner, Sultan among Hindu Kings: Dress, Titles, and the Islamization of Hindu Culture at Vijayanagara, *Journal of Asian Studies*, vol-54, No-4, pp.851-88

²⁰ Velcheru Narayana Rao, David Dean Shulman and Sanjay Subrahmanyam, *Textures of Time: Writing History in South India 1600-1800*(eds), Other Press, NY, 2001, pp.1-11

of the gunpowder. Virginia Pass²¹ work titled Forts of India is a lengthy book containing large number of illustrations with descriptions about the major characteristics of each fort. There is a selection of forts from various regions and historically periods like Red Fort, Jaipur, Chittor, Gwalior, Vellore, Nabha etc. The only drawback of the book is that it does not offer too many interpretations and does not also going to a detailed discussion. A small and compact volume by Amrit Verma titled Forts of India is aimed at the general reader and is a good introduction to the understanding of forts and fortification in medieval India. The book is divided into more than 10 chapters each dealing with one particular fort, for example it begins with the ancient period and goes on to trace the process of fortification in India. There are case studies of each major for but this book also does not offer of any fresh interpretations but is rather descriptive. M.S.Narvane's book titled Forts of Maharashtra has plenty of information on all the major forts of Maharashtra and begins with an etymological description of each fort proceeding to outline the major powers who occupied the fort²². The author concludes that large-scale fortification was evident during the role of the Maratha period. There is ample description of the physical features of each fort and its stylistic parameters.

S.K.Joshi's book titled *Defence Architecture in early Karnataka*, attempts a bird's eye view of all the major forts of Karnataka and here the author takes up a detailed treatment each of the major forts²³. He has taken great care to see the additions in each fort, particularly the architectural devices that emerge as a result of patronage and military requirements. The author's treatment of Gulbarga and Bidar forts is noteworthy. In a similar vein is N.S. Ramachandra Murthi's work for Andhra Pradesh what the other two authors' have done for Maharashtra and Karnataka. His Forts of Andhra Pradesh from Earliest times up to 16th C A D begins with a description of the major forts by detailing their features with references from various original sources and then devotes considerable space to other minor forts²⁴. The author supplements his book with many drawings and plates that serve to supplement his arguments like the evolution of more bastions which, he correlates with the unsettled political conditions. He points to the hybrid nature of fortification wherein decorative elements were borrowed from the Hindu and Muslim architectural traditions freely. Another work on fortification is by A.P. Singh titled Forts of India where the author deals at considerable length with the evolution of forts from the earliest period in Indian history and stresses the change from small localised structures made of mud and serving primarily local defence needs to large structures made of stone serving administrative and imperial needs. This book concerns itself mainly with the forts of northern India specifically Rajasthan and Madhya Pradesh²⁵.

Siva Nagi Reddy's doctoral thesis on The Evolution of Building Technology in Andhradesa up to the 14th century AD gives a clear idea of the material culture and techniques and how social and ideological mediation occurred to create particular architectural traditions. Special reference to fortification in the Deccan region is done by John Burton Page whose articles on history of fortification in medieval India and another well received article titled Daulatabad points to the

²¹ Virginia Fass, op.cit., 1986

²² M.S.Narvane, *Forts of Maharashtra*, APH Pub. Corp, New Delhi, 1995, pp.42-49.

²³ S.K.Joshi, *Defence Architecture in Early Karnataka*, Sundeep Prakasashan, Delhi, 1985, pp.v-vii

²⁴ N.S.Ramachandra Murthi, *Forts of Andhra Pradesh from Earliest times up to 16th C A D*, Bharatiya Kala Prakashan, Delhi, 1996, pp.1-14

²⁵ A.P. Singh, *Forts and Fortification in India*, Agamkala Prakashan, delhi-1987, pp.11-18

continuity of the great traditions from the ancient Yadava kingdom down to the subsequent Muslim rule²⁶. The author points out that the imprint of each of these ruling houses is seen in the decorative motifs, religious structures within the fort premises and advances in technology with a particular flavour namely Indo-Islamic. Another masterpiece in the study of fortification is an article by Stewart Gordon titled Forts and Social Control in Maharashtra²⁷. The author links the practice of giving watan Jagirs to the formation of the military Maratha State under Shivaji and how the forts and the new system of guerrilla warfare led the Maratha monarchs asked to control a large area. It is also significant to point out that since the Marathas controlled large parts of the Deccan and a large number of the forts in India date to the Maratha period, their contribution are reflected in the study of building technology with special reference to fortification. Another brilliant work is a doctoral dissertation on by S K Aruni titled *Mud Forts of Karnataka* wherein the author brings out significant findings and posits that the practice of constructing mud forts did not decline with the onset of modernity. He has proved this by using archaeological methods namely excavation and exploration²⁸. A set of articles in the Journal of Art MARG by authors like Catherine Asher²⁹, George Michell³⁰, John Burton Page deal with exclusively with the Deccan.³¹ John Burton Page has given extensive and focused studies on forts of South India like Bidar, Gulbarga, Vellore, covering the major forts of present-day Andhra and Karnataka. The authors have brought about a set of original findings and broadly related the advances in fort construction to changing methods of warfare, and administrative needs. They also devote considerable space in explaining the use of particular symbols and motifs. Thus we have variety of literature that addresses problems of studying fortification from various methodological perspectives.

²⁶ J Burton Page, A Study of Fortification in the Indian subcontinent from the 13th to 18th century A.D, *Bulletin of The School of Oriental and African Studies*, University of London, vol- 23, No-3, 1960, p.509.

²⁷ Stewart Gorgon, Forts and Social Control in the Maratha State: *Journal of Modern Asian Studies*, (1979),vol-13, No-1

²⁸ Aruni,S.K, *Mud Forts of Karnataka*, Unpublished PhD thesis Deccan College,Pune,1998

²⁹ Catherine B Asher, The Islamic Legacy, *MARG*, vol-35, December 1983, No-1, p.76

³⁰ George Michell, Bidar, *MARG*, vol-37,No-3 june,1984

³¹ John Burton Page, op.cit.,1960,pp.104-15