

Kriti Rakshana

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राष्ट्रीय पाण्डुलिपि मिशन

॥ विज्ञानमुपास्य ॥

National Mission for Manuscripts



"One of our major misfortunes is that we have lost so much of the world's ancient literature – in Greece, in India and elsewhere.... Probably an organised search for old manuscripts in the libraries of religious institutions, monasteries and private persons would yield rich results. That, and the critical examination of these manuscripts and, where considered desirable, their publication and translation, are among the many things we have to do in India when we succeed in breaking through our shackles and can function for ourselves. Such a study is bound to throw light on many phases of Indian history and especially on the social background behind historic events and changing ideas."

Pandit Jawaharlal Nehru, *The Discovery of India*

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Editorial

Project Document of the National Mission for Manuscripts sums up the objectives of the Mission thus: "The objectiveis to enhance their (manuscripts') access, improve awareness about cultural inheritance and encourage their use for educational and research purposes and lifelong learning." The bi-monthly publication 'by the scholars for the commoners', *Kriti Rakshana*, was launched to serve these ends and despite being irregular in recent past, it is committed to the objectives of the Mission and the same are reflected prominently in this issue also.

The issue in your hand is characterised by a unique blend of diversity of tradition and concern for heritage conservation. Prof. G. C. Tripathi opens up a manuscript in his custody through his brief feature. Dr. Imtiaz Ahmed describes a momentous journey of an Ashokan Pillar to Delhi and Pt. Satkari Mukhopadhyaya went from pillar to post to pick up the details of transactions between two great classical languages of the world – Sanskrit and Latin. Nighty gritty of the evolution of Kharoṣṭī script is depicted with dexterity by the young scholar, Anirban Das. Heather Brown gives the art of manuscript conservation a philosophical height and strikes the cord to herald a new dimension in heritage conservation. Including all, this issue has been designed to explore the literary heritage of India and contribute indelible academic inputs to reckon with.

We apologise for the discontinuity in publishing and hope that the issue brought out after a long interval will be to your taste. Write to us, if you have any comment or suggestion to make.

Editor

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NMM: Summary of Events



यमककाव्य 'नलोदय' की एक अप्रकाशित टीका

गयाचरण त्रिपाठी

संस्कृत भाषा की अत्यन्त समृद्ध शब्द संपदा, अभिव्यंजन क्षमता तथा लालित्य सुधिजनों को सुविज्ञात हैं। इसमें इतनी नम्यता या लोच है कि इस भाषा के अधिकारी विद्वान् द्वारा इसको कोई भी आकार-प्रकार दिया जा सकता है। जहाँ इसमें सरस, भावप्रवण, प्रसादगुणयुक्त, ध्वनिकाव्यों का प्राचुर्य है वहीं ऐसे भी चमत्कारजनक श्लेष-काव्य हैं जिनके श्लोकों का विभिन्न प्रकार से विखण्डन करने पर रामायण-महाभारत ("राघवपाण्डवीयम्") अथवा रामायण-लदमयन्ती ("राघवनैषधीयम्") की कथा निकलती है। चिदम्बर सुमति के "राघव-यादव-पाण्डवीयम्" काव्य में तो प्रत्येक श्लोक के तीन अर्थ निकलते हैं। जिनमें क्रमशः रामायण, महाभारत तथा भागवत की कथाएँ स्फुटित होती हैं। "रामकृष्ण-विलोम-काव्य" तो और अधिक चमत्कारकारी है जिसमें श्लोक को यदि बाएँ से दाहिनी ओर पढ़ा जाए तो और यदि दाएँ से बाएँ ओर पढ़ा जाए तो कृष्ण की कथा निकलती है और आश्चर्य यह कि छन्द अविकृत ओर अक्षुण्ण रहता है।

इसी परम्परा में यमककाव्यों का भी स्थान है। एक ही शब्द या अक्षर-समूह की पुनः या कई बार होने वाली सार्थक आवृत्ति को यमक अलंकार की संज्ञा दी जाती है। (१) संस्कृत में ऐसे अनेक काव्य हैं जिनके श्लोकों के प्रत्येक चरण में यमक अलंकार का बड़ा विचित्र और चमत्कारोत्पादक प्रयोग है। ऐसे काव्यों को यमककाव्य की संज्ञा दी गई है जिसका प्राचीनतम उपलब्ध उदाहरण घटखर्पर के यमककाव्य छठी शताब्दी में प्राप्त होता है। ग्यारहवीं शताब्दी में नीतिवर्मा द्वारा रचित "कीचकबध काव्य" यमक काव्यों में अद्वितीय है। इसके पश्चात् केरल के सुविख्यात सूधीकवि वासुदेव का नाम उल्लेखनीय है जिन्होंने "युधिष्ठिर-विजय" नामक सुप्रसिद्ध यमक काव्य के अतिरिक्त "त्रिपुरदहन" तथा "शौरिकथोदय" जैसे दो अन्य महत्त्वपूर्ण काव्यों का भी प्रणयन किया है।

यमककाव्यों की इस परम्परा में "नलोदय" नामक काव्य का भी महनीय स्थान है। जैसा की नाम से ही स्पष्ट है, इस काव्य में नल-दमयन्ती के सुप्रसिद्ध आख्यान को उपजीव्य बनाया गया है। इसके चार उच्छ्वासों (या आशवासों) में 210 से 220 तक श्लोक पाए जाते हैं। कथा प्रायः महाभारत का अनुसरण करते हुए भी मुख्यतः कान्यकुब्ज के सभाकवि श्रीहर्ष के नैषधीयचरित से प्रभावित है।

नलोदय के रचयिता के नाम के सम्बन्ध में मतभेद है। एक प्राचीन परम्परा इसे कालिदास की कृति मानती है किन्तु इसके संस्कृत टीकाकार इसे रविदेव नामक कवि की रचना मानते हैं। इस ग्रन्थ की 'कविहृदयदर्पण' नामक टीका के केरलवासी कर्ता श्रीकण्ठ तथा अनेक आधुनिक विद्वानों का यह भी मत है की यह केरलीय कवि वासुदेव की ही चौथी कृति है क्योंकि इसमें ऐसे अनेक शब्द "रहण=वियोग" तथा अभिव्यक्तियाँ (नुन्न=संक्षिप्तम्) पाई जाती हैं जो अन्यत्र केवल "युधिष्ठिर-विजय" में ही उपलब्ध होती हैं। ऐसा प्रतीत होता है कि यमक काव्य के मूर्धन्य कवि होने के कारण दक्षिण भारतीय परम्परा में नलोदय के कर्ता के रूप में वासुदेव की प्रसिद्धि हो गई है जबकी समस्त उत्तर भारतीय टीकाकार इसे रविदेव की कृति मानते हैं।

नलोदय का सर्वप्रथम प्रकाशन सन् 1830 में एफ० हेनरी द्वारा प्रज्ञाकर मिश्र की 'सुबोधिनी' टीका के साथ बर्लिन (जर्मनी) से किया गया था। उस समय इसका कर्ता कालिदास को माना जाता था।

सत्यर्थे पृथगर्थायाः स्वरव्यञ्जनसंहतेः।

क्रमेण तेनैवावृत्तिर्यमकं तु निगद्यते।

वहै शब्द फिर-फिर अर्थ और को और।

यमक ताहिं कौ कहत हैं, विद्वज्जन सिरमौर॥

.....०२/-

Kriti Rakshana



1884 में पीटर्सन ने रामर्षि दाधीच की “यमकबोधिनी” टीका सहित (निर्माण काल जहाँगीर के राज्यकाल में सं० 1664 या 1607 ई०) भी इसका प्रकाशन बम्बई से किया। इसी टीका में सर्वप्रथम नलोदय के रचयिता का नाम रविदेव दिया गया था।

इन पंक्तियों के लेखक के निजी पाण्डुलिपि संग्रह में नलोदय काव्य की एक अपूर्ण टीका है जो अद्यावधि अप्रकाशित है। यद्यपि यह टीका केवल तृतीय “आश्वास” के अन्त तक ही उपलब्ध है किन्तु पंचाल (उत्तर प्रदेश) क्षेत्र के सांस्कृतिक एवं साहित्यिक इतिहास की दृष्टि से महत्वपूर्ण है, क्योंकि इसका लेखक टीका के आदि और अन्त में अपने को स्वाभिमान पंचाल क्षेत्र का वासी बताता है।

हमारी इस पाण्डुलिपि में 39 (या 76 पृष्ठ) हैं और यह ३० प्र० के मिरज़ापुर जनपद से प्राप्त हुई है। लगभग 09 से 11 तक पंक्तियाँ प्रत्येक पृष्ठ पर हैं। हस्तलेख सामान्य है। अक्षर न तो बहुत सुन्दर हैं न ही सर्वत्र सुस्पष्ट। एकाधिक लेखनियों का प्रयोग किया गया है—कुछ पतली, कुछ मोटी। एक से अधिक लिपिकार भी जान पड़ते हैं। पाठ पूर्णतया शुद्ध नहीं है। बीच बीच में वर्तनी की तथा अन्य प्रकार की कई प्रमादजन्य त्रुटियाँ हैं। कहीं कहीं पाठ अपूर्ण भी है जिसे पंक्ति के बीच में बिन्दुमयी रेखा से द्योतित किया गया है। लगता है लिपिकार की आदर्श प्रति कहीं कहीं खण्डित या कीटभक्षित थी। तृतीय आश्वास के अन्त में स्थित पुष्पिका से स्पष्ट होता है कि इस पाण्डुलिपि का लेखन आषाढ़ बदी प्रदिपदा, सं० 1698 (अथवा जून-जुलाई, 1641 ई०) में संपन्न हुआ। लिपिकार रुद्र को प्रणाम करता हुआ ग्रन्थ समाप्त करता है। इससे लगता है की यह टीका प्राचीन काल से ही केवल तीन आश्वासों तक ही उपलब्ध थी और संभवतः चतुर्थ आश्वास पर लिखी ही नहीं गई। प्रथम, द्वितीय तथा तृतीय तीनों आश्वासों के अन्त में टीकाकार अपने माता-पिता का उल्लेख करता हुआ कहता है कि—

**“इति श्रीपंचालदेशजन्मना धर्मागदसूनुना
कमलाहृदयानन्देन**

**दिनकरेण विरचितायां नलोदयटीकायां सुबोधिन्यां
.....आश्वासः समाप्तः।”**

इस वाक्य से स्पष्ट है की टीका के कर्ता का नाम “दिनकर” है और टीका का नाम है सुबोधिनी। दिनकर के पिता का नाम धर्मागद था और माता का

नाम कमला, जिनके वे अतिशय स्नेहभाजन रहे होंगे क्योंकि वे अपने को “कमल के हृदय का उल्लास” बताता है। टीकाकार का यह वक्तव्य महत्वपूर्ण है कि उनका जन्म पंचाल देश में हुआ था।
(“श्रीपंचालदेशजन्मना”)

यद्यपि यह कहना कठिन है कि दिनकर के द्वारा उल्लिखित पंचाल देश की तत्कालीन सीमाएँ क्या थीं फिर भी ऐसा लगता है कि प्राचीन संस्कृत ग्रन्थों में वर्णित एवं उल्लिखित ऐतिहासिक परंपरा के अनुसार संभवतः दिनकर का पंचाल देश से तात्पर्य बरेली-अहिच्छत्रा-रामनगर-मुरादाबाद के आस पास का क्षेत्र रहा होगा क्योंकि प्राचीन भौगोलिक जनपदों के अभिधान बाद में उनकी राजधानियों के आसपास तक केन्द्रित और सीमित हो गए थे। इसका एक अच्छा उदाहरण “काशी” है। किसी समय में (महाभारत युग से बौद्धकाल तक) “काशी” एक विशाल भु-भाग पर फैले सम्पूर्ण जनपद का नाम था जो आज सिकुड़कर केवल वाराणसी के लिये ही प्रयुक्त होता है। पंचाल क्षेत्र के भु-भागों के पृथक्-पृथक् स्वतन्त्र नाम मध्य युग तक आते-आते प्रचलित होने लगे थे।

दिनकर के द्वारा रचित टीका का समय निर्धारण करना कुछ कठिन है क्योंकि हमारी पाण्डुलिपि का लिपिकाल 1641 ई० है और इसकी लिपिकाल अशुद्धियों तथा भ्रान्तियों को देखकर ऐसा लगता है कि यह प्रति टीकाकार की मूल प्रति से काफी दूर है अतः हम कम से कम 100 वर्ष पीछे तो जा ही सकते हैं और यह कहने की स्थिति में हैं कि यह टीका 1550 ई० के बाद में नहीं लिखि गई। इससे पहले की, और काफी पहले की भी हो सकती है।

दिनकरकृत सुबोधिनी नलोदय काव्य की सर्वप्रथम टीका नहीं हैं। टीका के उपोद्धत में दिनकर ने उल्लेख किया है कि उन्होंने इस काव्य को पहले अपने गुरु से पढ़ा और फिर एक अन्य टीका भी देखी। तत्पश्चात् यह टीका लिखने में प्रवृत्त हुए क्योंकि उनकी दृष्टि में प्राचीन टीका में (जिसका वे नाम नहीं देते) अर्थ को स्पष्ट करने की क्षमता नहीं थी। वे सौजन्ययुक्त सुधी पाठकों से टीका की कमियों के लिये क्षमा याचना भी की है और कहते हैं कि गुरु से ग्रन्थ समझने के पश्चात् एवं एक अन्य टीका देखने के बाद मैंने यह टीका लिखने का प्रयास किया है और यदि मेरे अपने अज्ञान से इसमें कोई कमी (रिक्तता) रह गई हो तो

Kriti Rakshana



सज्जन लोग क्षमा करें क्योंकि वह मेरा अपना दोष है,
गुरु आदि का नहीं-

गुरोः सकाशादवधाय चान्याम्
आलोक्य टीकां प्रयतेऽहमत्र।

स्वोपज्ञाता या क्वचिद्वक्तता (१) या
सेहन्यभाजः सुधियः क्षमध्वम्॥ (श्लोक सं० 3)

टीका के मंगलाचरण श्लोक के तुरन्त पश्चात् टीकाकार ने अपना संक्षिप्त परिचय दिया है जिसमें वह गर्व के साथ अपने को “पांचाल” (पांचाल नहीं) देश में उत्पन्न, विद्वान् पिता धर्मागद का पुत्र बताता है। वह आगे यह भी कहता है कि “यमक अलंकार का उत्कर्ष प्रतिपादित करने वाले नलोदय काव्य को समझ पाना आजकल कठिन हो गया है अतः इसको सरलता से समझाने के लिये मैं दिनकर इस पर सुबोधिनी नामक टीका की रचना कर रहा हूँ। टीकाकार ने इस श्लोक में अपनी माता का नाम गुंफित नहीं किया है-

दुर्बोधतामुपगतस्य सुबोधिनीयं
धर्मागदस्य विदुषस्तनयेन टीका।

पांचालदेशजनुषा यमकोदयस्य
व्यातन्यते दिनकरेण नलोदयस्या॥ (श्लोक सं० 2)

गुरु का भी नाम उपर्युक्त (श्लोक सं० 3) में उल्लिखित नहीं है। यद्यपि संस्कृत विद्वानों में गुरु के नाम का उल्लेख करने की गौरवमयी परम्परा रही है। गुरु का संदर्भ भी श्लोक में आया था अतः प्रसंग प्राप्त था कि गुरु के नाम का उल्लेख किया जाता किन्तु वह नहीं किया गया। उसके स्थान पर टीकाकार ने अपने जन्म-स्थान अर्थात् अभिजन को अधिक महत्त्व दिया और यह उल्लेख करता न भूला कि उसका जन्म पांचाल देश में हुआ है।

१. यदि यह पाठ अशुद्ध नहीं है और यही लेखक का मूल पाठ है तो लगता है कि “रिक्तता” की शब्द की वर्तनी “ऋक्तता” समझकर “क्वचिद्वक्तता” यह संधि संस्कृत की असीमित शब्दसंपदा और सामर्थ्य का परिचय प्राप्त करने में तथा विशेषतः शब्द चित्रों में रुचि रखने वाले विद्वानों के लिये नलोदय काव्य वस्तुतः पठनीय है।

दिनकर की इष्टदेवी माता पार्वती जान पड़ती हैं। मंगलाचरण श्लोक में उन्होंने उन्हीं की स्तुति की है। टीकाकार का यह मंगलश्लोक भी यमक एवं अनुप्रास का उत्तम उदाहरण है। इसको उद्धृत करके हम इस लेख को समाप्त करते हैं।

गिरिराजकुलप्रकाशभूतं
गिरिशप्रेमपदं गिरामधीशम्।
नवचन्द्रकलावतं समन्तः
स्फुरतु स्मेरमुखं महोमदादयम्॥

“माँ पार्वती रुपी दिव्य ज्योति जो पर्वतराज हिमालय के वंश का प्रकाश है, शिव के प्रेम का भाजन है, वाणी की अधीश्वरी है (स्वतः ज्योतिस्वरूप होते हुए भी) जो चन्द्रमा की कला को मस्तक पर आभूषण के रूप में धारण करती हैं, मुस्कुराते चेहरे वाली ऐसी ज्योति मेरे हृदय में स्फुटित होकर अज्ञानान्धकार को दूर करें।”

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Reinstallation of an Ashokan Pillar

Imtiaz Ahmad

Manuscripts are major sources of information about the past, especially the scientific, cultural and intellectual heritage. Some of them also provide useful information on architecture and urban planning. One such example is the *Sirat-e-Firoz Shahi* by an anonymous author, preserved at the Khuda Bakhsh Oriental Public Library at Patna, which is widely known for its collection of rare and valuable manuscripts. The manuscript appears to have been originally written in 1371 A.D.; but the preserved copy, which is the only copy of this text available now, is dated 1002 A.H./1593-94 A.D. It contains 179 large folios, each containing 17 lines. It

is written in Nastaliq on thick Indian paper and is plainly bound, besides having gold and coloured ruled borders. The chapter headings and some sectional pieces are in red ink. The head-piece was illuminated but it is now faded.

The *Sirat-e-Firoz Shahi* depicts historical accounts, but not in chronological order. It has a series of valuable, though disjointed pieces of information relating to the history of the reign of Firoz Shah, his political actions, military campaigns, hunting expeditions, religions and sects during his times, and his other interests such as medicines, therapeutics, pharmacology,

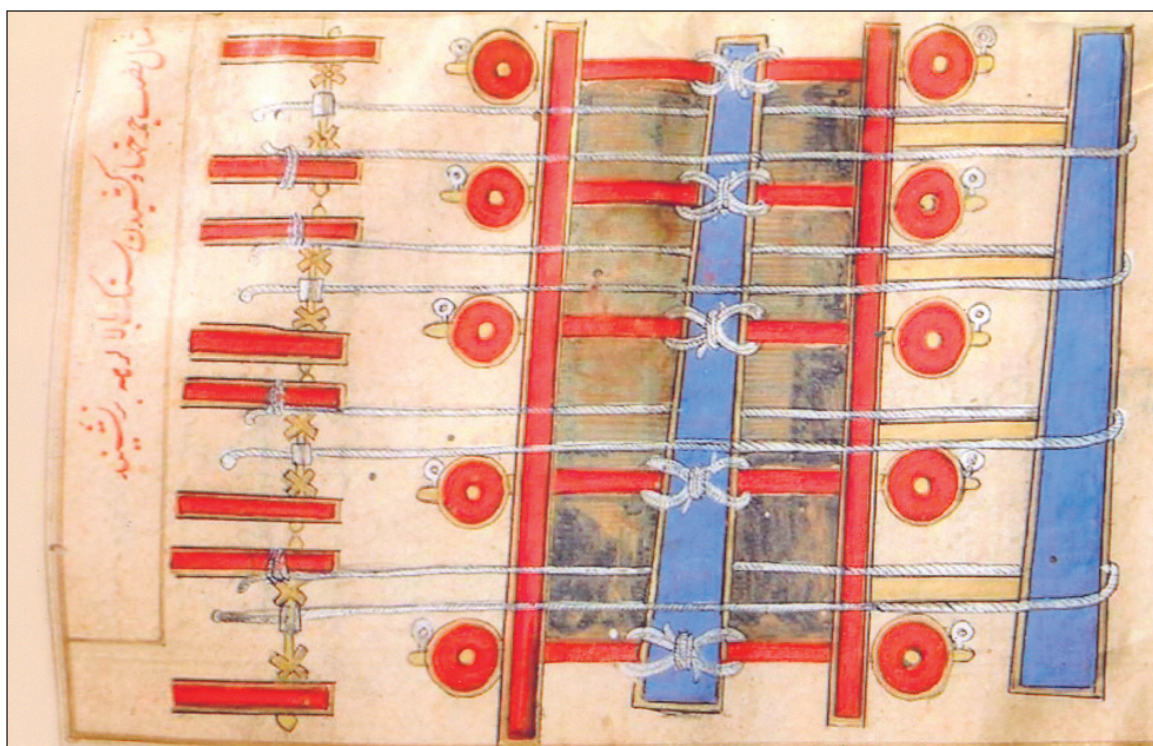


Illustration from *Sirat-e-Firoz Shahi*, preserved at Khuda Bakhsh Oriental Public Library at Patna

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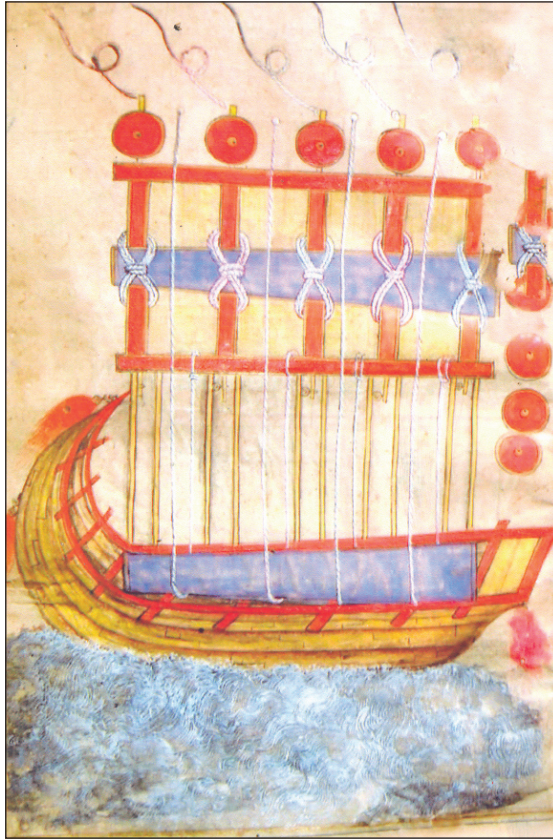


Illustration from *Sirat-e-Firoz Shahi*, preserved at Khuda Bakhsh Oriental Public Library at Patna.

anatomy, astronomy, archaeology, et al. It is a valuable compendium of the varied activities, accomplishments and achievements of Firoz Shah, including the works of public utility undertaken by him. Although it does not measure up to the works of Zia Barani or Shams-e Siraj Afif in terms of historical value, it is nevertheless an important contemporary source for the history of the 14th century. An attractive feature is the account of the transportation of the Ashokan pillar to Delhi from Topra, with 12 detailed sketches (misals).

This manuscript was shown to Pandit Jawaharlal Nehru when he visited the Khuda Bakhsh Library in November, 1953. He showed keen interest in the portions that describe the transportation of the Ashokan pillar to Delhi and the descriptive sketches. He suggested that these should be translated into English. Some early attempts were made in this connection by Agha Mahdi Husain but

a complete translation of the manuscript was attempted much later by Prof. Syed Hasan Askari. It is being published by Khuda Bakhsh Oriental Public Library in the current year (2010).

This article deals with only that particular portion of the manuscript which caught the attention of the first Prime Minister of the country. As is well-known, Sultan Firoz Shah had a keen interest in architecture and public works. He laid out several cities, constructed a number of buildings and also got two Ashokan pillars transported and reinstalled in Delhi, one each from Meruth and Topra. The *Sirat* provides a detailed account of the transportation of the Ashokan pillar from Topra to the site of the Firoz Shah Kotla, where it still stands, over six centuries later, in all its majesty.

The *Sirat-e Firoz Shahi* provides the full, blow-by-blow account of the uprooting of the pillar from its original site at Topra, its transportation to Delhi and its reinstallation at the Kotla in 24 pages, including the sketches and concludes with a laudatory poem on the *Manara-e Zarreen* or 'Golden Pillar' as it was called.

The project seems to have been taken up in 1367 A.D. It was entirely planned by Firoz Shah himself. Six huge wooden posts, each 10 yards in circumference and equal in height to the pillar, were built to provide support to the pillar as it was dug out and lowered to the ground. The posts were supported by slanting beams, provided with wheels and pulleys. The ground below was covered with cotton-wool so that the pillar may not suffer any damage while being lowered down. A large platform (*pasheb*) was built at the site where the pillar had to be lowered. After being lowered to the ground, it was encased in a cover of raw-hide filled with cotton and rice-husk to protect it from any damage. The pillar was then transferred on to a massive wooden cart having the same length as the pillar and supported by ten wheels, each with a circumference of 10 yards. Pulleys were

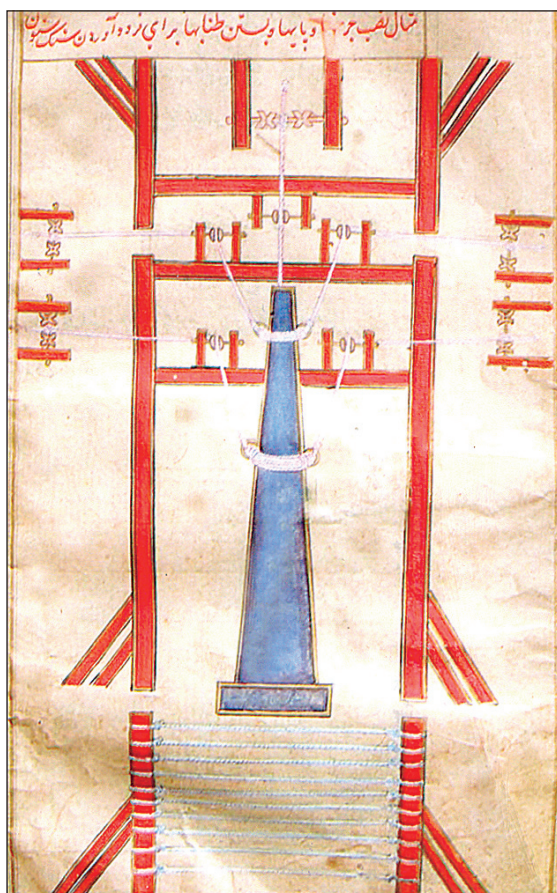


Illustration from *Sirat-e-Firoz Shahi*, preserved at Khuda Bakhsh Oriental Public Library at Patna.

again used for moving the pillar from its place on to the cart. The cart was then pulled by a large number of persons, "slaves and free-men, even high dignitaries". A rope was tied to each wheel which was pulled by about 200 persons. In this manner, it was brought to the banks of the river Jamuna.

The pillar was then transferred on to a huge boat "capable of carrying 7000 *maunds* (1 maund = 40 kgs) of grains, for onward journey". The pillar was transferred from the cart to the boat by using strong ropes and a number of pulleys. On either side of the boat, 10 strong beams or Torans were tied to prevent the boat from inclining on one side as the pillar was being loaded. The boat then sailed to the city of Firozabad (the new township at Delhi settled by Firoz Shah). The pillar was off-loaded from the boat in the

same manner as it had been loaded on it. The last major stage involved the reinstallation of the pillar at the site in front of the mosque at Firozabad. An impressive three-storied structure was raised for the purpose and the pillar was installed at a height of about 50 yards. To carry the pillar to the desired height, one side of the structure was first built; the pillar was then dragged up the slope on the other side. After that, the other side of the structure was completed. This was done in 3 phases. Finally, the pillar was raised straight in a perpendicular direction, by using 10 pulleys, and installed at its present site. The successful completion of the project was indeed a marvel of civil engineering. It has been compared by the contemporary historian, Afif, with the construction of the Qutub Minar by Iltutmish.

The very detailed and elaborate account, together with the sketches, given in *Sirat-e-Firoz Shahi* also shows that the project was a unique effort at mass mobilization of labour, involving not only ordinary masons and porters, but even the "grandees of the realm". It further shows Firoz's keen interest in and appreciation of antiquarian remains. Firoz even tried hard to decipher the text of the inscription on the pillar by inviting Brahmin and Jaina scholars. Unfortunately, the effort was not successful. Most significantly, the entire episode provides us an insight into the possible manner and technique by which these pillars were transported from the imperial quarry at Chunar in Bihar to the distant places of their installation during the days of Ashoka himself.

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Kriti Rakshana



Integrated Approach to the Preservation of Manuscripts

Heather Brown

India's ancient cultural heritage is extraordinary, and a key focus for the work of the National Mission for Manuscripts (NMM) is the preservation of the knowledge and 'memory' contained within the estimated five million manuscripts held within India and abroad.

Managing the preservation of these manuscripts is an enormous challenge. Yet nature has already provided us with a dynamic framework to help manage the preservation of manuscript heritage. This framework is a web:

WEB

*The passing eye of time misses nothing.
How still the stars have remained the same,
pathways explored, and many still to come.*

*The twining threads of a
suspended circle of life,
always as fresh as the morning dew
on them,
connect to all things.*

*They hold the measured collection of
all activity,
recalled, recounted and re-learned.*

*The distant times of other galaxies,
of vibrations to come
will visit the cradle of past activity
preserved by the management of
collective knowing,
and add another thread spun,
a wider web, a growing cosmos.*

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The interconnected web offers an approach to managing preservation that is both holistic and interconnected.

The preservation strategies are like interconnected threads with actions which send ripples across a web that spans space and time – past, present and future. As the strands become more closely linked, strengthened and intertwined, the preservation benefits are maximized – at once enhancing the active 'management of collective knowing' of the poem.

Furthermore, for India, the preservation web aligns with the same pattern of India's ancient philosophical traditions that acknowledge the interconnectedness of all things.

Risks

The web sits within an environment of risks and dangers to India's manuscript collections.

Important manuscripts have become brittle and are crumbling to dust. They are also affected by exposure to light, humidity, pollution, dirt and dampness. Their ability to survive for much longer is severely limited. Other high profile risks are disasters – fires, floods, earthquakes and tsunamis, and destruction by people (deliberate and through ignorance), while at the macro level, the tiniest insects, rodents and mould spores slowly and relentlessly wreak their own distinctive trails of destruction.

Weaving another layer of complexity, the digitized copies of these manuscripts present their own long term preservation challenges and risks. These include the complications presented by rapid changes in technologies and software.



The Preservation Web

Looking at the preservation web more closely one of the clearest descriptions of its characteristics is by IFLA – the International Federation of Library Associations:

Preservation ...*'includes all the managerial and financial considerations...including storage and accommodation provisions, staffing levels, policies, techniques and methods involved in preserving library and archival material and the information contained in them'* (IFLA 1998).

From these perspectives, we can see that the strands of the preservation web are numerous and far reaching. Most significantly there is no artificial limit to information formats – the preservation framework extends across all formats of knowledge from the traditional to the digital worlds.

A risk management perspective can provide further insight into the characteristics of the preservation web.

From this perspective, a single strand and the entire web can be tested for vulnerabilities using a risk management methodology designed to find and treat the weak points before they lead to unnecessary failure.

What should be Preserved?

Selecting the 'cradle of past activity', the priority to preserve for the future, is inevitably a balancing act.

Criteria such as physical condition, use, rarity and value (historical, aesthetic, evidential and/or monetary) will all help inform priorities and will be usually be set within a risk management context.

However, in India and across the whole world, despite the best intentions, the realities of under funding and lack of skilled staff, adequate buildings, equipment and other resources mean that organizations are often struggling to intervene and preserve even their highest priority manuscripts. The consequences of loss are significant.

The Strands of the Web

Like the twelve months of the year, it is possible to identify twelve strategies or strands that help mitigate many of the risks and help preserve manuscript heritage over time. The NMM features these strands in its preservation work, its training programs and publications, and they include:

- Environmental control
- IPM (integrated pest management)
- Storage and enclosures
- Collection maintenance and repair
- Disaster preparedness
- Copying or reformatting
- Exhibition support
- Conservation
- Education and training of users and staff
- Preservation polices
- Resourcing
- Collaboration.

All these strands are interconnected. The active 'management of collective knowing' involves an awareness of the dynamic interconnections so that the whole approach to preservation becomes integrated. This leads to a strategic approach, with whole manuscript collections being prioritised, conserved, copied and protected as an holistic program, thereby maximizing the preservation benefits.

A closer look at each strand provides further insight into the workings of the interconnected preservation web.

Environmental Control

This strand is the major strategy for preserving items. A short cut rule is 'low and slow'; aiming to keep the temperatures as low as possible and the fluctuations in relative humidity as slow as possible. A long term stable environment will effectively slow the rate of deterioration in collection items.

There are a number of simple steps that can be taken to improve the environment, without the need for expensive air-conditioning. These include:

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- Ensuring good circulation of air
- Making sure that gutters are cleaned out and cracks and holes are repaired in walls and ceilings
- Ensuring windows and doors fit securely
- Using screens, shutters and blinds.

The most stable room is often an internal room on the ground floor. Without attention to the environmental strand the whole web will unravel.

IPM (Integrated Pest Management)

The strand of Integrated Pest Management (IPM) is closely linked with environmental control. IPM aims to make the collection environment unattractive to insects and pests. The IPM program focuses on keeping pests away, good housekeeping and early detection through controlled and regular monitoring. Chemicals are only then used as a last resort. The five stages are:

- Avoid
- Block
- Detect
- Respond
- Recover

The NMM has previously showcased how traditional techniques can be effective pest repellents e.g. the use of neem leaves and the dye in traditional cloths that cover manuscripts (Sah 2006). In the context of the preservation web, intertwining traditional techniques with the more modern approach of IPM has the potential to increase the effectiveness of both approaches.

Storage/Enclosures

Appropriate storage is another important strand that helps preserve manuscripts over time. Again this strand is closely connected with environmental controls, as good storage helps reduce environmental fluctuations. Key features include 'off the ground' storage, and protective enclosures

such as destarched cotton cloth, or storage boxes made of acid free materials.

Collection Maintenance and Repair

This thread involves basic 'first aid' support that extends the life span of items and reduces the need for treatments later. Examples range from simple regular cleaning and brushing, to basic repairs of tears and loose pages.

Disaster Preparedness

The strand involving disaster preparedness is central part of the preservation web. A recent article by K. K. Gupta in *Kriti Rakshana* highlights the importance of disaster preparedness in reducing the likelihood and impact of a disaster affecting manuscript material. Disaster preparedness involves:

- Prevention – e.g. building maintenance
- Preparation – e.g. contacts, disaster teams, priority salvage items, equipments, training
- Response – e.g. contacting emergency services, redirecting water flows
- Salvage – e.g. assessing damage, setting up drying areas.

From a risk management perspective, all the best preservation strategies in the world will simply come undone without a disaster plan and trained staff. In other words, without the strand of disaster preparedness, the whole preservation web can be swiftly destroyed. Furthermore a disaster plan that is limited to a few specialized formats such the digitized copies is like a thread blowing in the wind if it does take into account the location of the originals as well as any other copies, such as microfilm masters.

Like the ripples in a spider's web, a closer connection between all these different formats and areas can result in a strategic and integrated disaster preparedness approach.



Copying or Reformatting

Reformatting - simply copying information from one form to another - is another important strand that is widely used for the preservation of manuscript heritage. Currently the key international reformatting strategies for documentary heritage materials are digitizing and preservation microfilming.

Digitizing is one of the major strategies pursued by the NMM as it provides enhanced access as well as saving wear and tear on the original manuscripts. However, while substantial progress has been made in field of digital preservation, the stands of this part of the web are still literally 'under construction'.

However within the risk management context, the NMM has already invested in the strategy of using preservation microfilm as a long term storage option. By intertwining the strands of digitisation and microfilming, it is possible to get the best of both worlds, with the digitizing providing the access and microfilming a long term preservation strategy. Recent developments with microfilm technologies have now made it possible to write digital files to microfilm, ensuring the flexibility of a 'digital to microfilm and back again' cycle. The role of microfilm as a strategy in digital preservation is increasingly attracting international recognition (Digital Curation Centre 2010).

Too often copying projects are managed in isolation from other preservation initiatives. However with an interconnected approach there is the opportunity to explore the synergies between copying and conserving an original manuscript that may have intrinsic value. As a further example of an interconnected approach in action, manuscripts can be fumigated, cleaned, copied, conserved and re-housed as a streamlined, integrated process.

As another dimension to interconnectedness, there are likely to be benefits in linking a copying program with the environment and storage - ensuring that, after copying, the

whole collection of original manuscripts is placed in a stable, low risk environment, and along with protective enclosures.

Exhibition Support

This strand supports all the preservation aspects of exhibitions, including areas such as:

- Determining whether the items are stable enough to exhibit
- Keeping the exhibition environment safe
- Loan agreements
- Condition reporting
- Safe handling and packing of items.

An interconnected approach would involve assessment of preservation risks from the early stages of planning, and consider the sequencing of digitizing for display and publicity prior to conservation treatments. Again there are clear interconnections with other threads such as environmental conditions, conservation, storage and disaster preparedness.

Conservation

The 'curative' strand of conservation is concerned with treatments - it can be the equivalent of 'intensive care'. Intensive conservation treatments require the skills of trained conservators and examples range from stain reduction to de-acidification, to major repairs.

From an interconnected perspective intensive conservation treatments are wasted without considering related strands such as storage, environment and copying.

Education and Training

This thread is vital to ensure that India's manuscript heritage is preserved for the future. We need people with a whole new awareness and skill sets to build, strengthen and adapt the strands of the interconnected web holistically and strategically. Again the NMM has taken an active role in this area with a range of seminars and conservation training programs for staff and users delivered across

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India through the network of Manuscript Conservation Centres. These programs are complemented by other outreach programs to a broad audience base that extends from scholars and university students to school students.

Preservation Policies

This strand interconnects all others. Policy direction aligns the strategies for preserving the manuscripts and applies resources where they are most needed. Preservation policies are plans of action for safekeeping. They explain what should be preserved and why, and why certain actions are taken. Without this high level commitment, the strands of the web will break and the preservation of manuscript heritage will flounder. India is currently developing policies in the area of digital preservation. To maximize their effectiveness, they should similarly be part of an integrated preservation policy framework.

Resourcing

The resourcing strand is essentially about ongoing commitment and funding for the staff, equipment and materials needed to sustain the preservation web, now and in future.

It similarly interconnects and nourishes all the other strands and is a vital component of 'the management of collective knowing.'

Long term resourcing is needed to turn preservation projects into ongoing programs for the NMM and other preservation organizations across India to preserve cultural memory for future generations.

Collaboration

Collaboration is the ultimate of interconnections – the higher level linking of preservation webs between organizations. As preservation risks and strategies are similar across collections, collaboration is a way of sharing expertise and strengthening the webs.

Formal collaborations are an important way of sharing development costs, harnessing and focusing effort, and attracting resourcing and support for programs. The NMM is involved in a range of such collaborations within India and increasingly with international organisations such as the UNESCO Memory of the World program.

However, while collaboration and alliances are beneficial, they also cost and need ongoing commitment and nurturing to avoid tangled webs.

Conclusion

In summary, with an awareness of the potential interconnections between all twelve strands of the web, preservation management becomes at once strategic and holistic, attuned to the dynamic interrelationships, and to the risks and opportunities in the surrounding environment.

For India with its extraordinary manuscript heritage, there is an opportunity to maximize its preservation initiatives with its manuscript collections being prioritized, conserved, copied and protected as an integrated program. For India especially there is the potential to lead internationally with this approach as the interconnected twining threads are embedded in its heritage, right from the beginning of its ancient traditions.

Effective preservation management for India and the whole world requires an holistic understanding of each and every strategy or thread. It requires the ability to maximize the ripples of interconnections, informed by a risk management perspective.

Ultimately it requires a profound understanding of the endlessly woven preservation web, so that 'the cradle of past activity' will be:

preserved by the management of collective knowing, and add another thread spun, a wider web, a growing cosmos.

that connects us all across time and space.



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राजस्थान राज्य अभिलेखागार, बीकानेर

महेन्द्र खडगावत

अभिलेखागार का मूल उद्देश्य चिरस्थायी महत्त्व के अभिलेखों की सार-सम्भाल एवं सम्यक व्यवस्था करवाना तथा आवश्यकता पड़ने पर उन्हें अविलम्ब देश विदेश के शोधार्थियों, राज्य सरकार, न्यायालयों तथा जनसाधारण को उपलब्ध करवाना है। इसके अतिरिक्त अभिलेखागार के मुख्य कार्यों में इन अभिलेखों में अंकित महत्त्वपूर्ण सूचनाओं को समय समय पर प्रकाशित, प्रसारित तथा प्रदर्शित करना सम्मिलित हैं। यहाँ जन साधारण में प्रदर्शनियों व सेमिनारों के माध्यम से जन चेतना जाग्रत करने का कार्य भी किया जाता है।

स्वतंत्रता पूर्व 22 रजवाड़ों के प्रत्येक के अपने सचिवालय एवं सुव्यवस्थित अभिलेखागार थे जिनमें राज्य प्रशासन के अभिलेख सुरक्षित रखे जाते थे। स्वतंत्रता प्राप्ति के पश्चात् इन्हीं पुराने अभिलेखागारों का नाम बदल कर “युनिट रिकॉर्ड ऑफिस” कर दिया गया। यह “युनिट रिकॉर्ड ऑफिस” राजस्थान के डिपोजिटेड रिकॉर्ड डिपार्टमेंट की एक शाखा के रूप में काम करते थे। इनका मुख्य अधिकारी राजस्थान सरकार का उपशासन सचिव था और विभिन्न जिलों के जिलाधीश अपने-अपने “युनिट रिकॉर्ड ऑफिस” के मुख्य अधिकारी थे। रियासतों के अन्य सभी प्रकार के अभिलेखागार धीरे-धीरे इन “युनिट रिकॉर्ड ऑफिस” में समाविष्ट कर लिये गये।

राजस्थान सरकार ने सन् 1955-56 ई. में राजस्थान राज्य अभिलेखागार की स्थापना की। युनिट रिकॉर्ड ऑफिसों के तथा 1900 ई. से पूर्व के अभिलेख इस विभाग में स्थानान्तरण कर दिये गये तथा कुछ समय पश्चात् जिलों में स्थापित युनिट रिकॉर्ड ऑफिस को राजस्थान राज्य अभिलेखागार विभाग के अधीन कर दिया गया।

राजस्थान राज्य अभिलेखागार का मुख्यालय 1963 ई. में बीकानेर स्थित ‘जनरल रिकॉर्ड ऑफिस’ के भवन में स्थापित किया गया, तथा 1900 ई. से

पूर्व के अभिलेख मुख्यालय बीकानेर में स्थानान्तरित कर दिये गये। 1900 ई. के बाद के अभिलेख विभाग की सात मध्यवर्ती शाखाएँ जयपुर, जोधपुर, उदयपुर, कोटा, अलवर, भरतपुर एवं अजमेर में स्थानान्तरित कर दिये गये।

राजस्थान राज्य अभिलेखागार देश का ऐसा विरल एवं अनूठा अभिलेखागार है, जिसमें संगृहीत मूल स्रोत-सामग्री के विविध स्वरूप हमारी ऐतिहासिक विरासत के ऐसे प्रतीक चिन्ह हैं, जो हमारी नई पीढ़ी के लिये एक सौगात से कम नहीं है। यहाँ मुगलकालीन फरमान, निशान, मन्सूर, अर्जदास्त, ताम्रपत्र, स्याहहुजूर, राजपत्र, अखबारात, तोजियों-बहियों, रुक्कों, परवानों, पट्टों, दरबारी पत्र-व्यवहार और रिकॉर्ड्स के विविध रूपों में मूल्यवान् जानकारियों से युक्त ऐतिहासिक दस्तावेजों की विविध शृंखलाएँ संगृहीत हैं। अपुरालेखीय सामग्री के अन्तर्गत इस विभाग में एक विशाल संख्या में पाण्डुलिपियाँ संगृहीत हैं, जो इतिहास, साहित्य एवं विविध विषयों से सम्बन्धित हैं। यहाँ संरक्षित सामग्री में अनेक दुर्लभ एवं विशिष्ट अभिलेख हैं। मुगलकालीन विषय पर शोध करने वाले शोधार्थी का शोध कार्य तभी पूर्ण होता है, जब वह विभाग में उपलब्ध अभिलेखों का उपयोग करता है। यहां संगृहीत विशिष्ट अभिलेखों में कुछ के नाम इस प्रकार हैं: बादशाहों के 327 फरमान, निशान एवं मन्सूर, शाहजहाँ का हस्तलिखित लेख, पुरन्दर की संधि का अभिलेख, औरंगजेब का पंजा, शाहजहाँ का हस्तलिखित फरमान, विभिन्न खत, 1857 की क्रान्ति में राजस्थान की भूमिका के अभिलेख, डांडी यात्रा के अभिलेख, स्वतंत्रता आन्दोलन में महिलाओं, छात्रों एवं पत्रकारों की भूमिका, स्वतंत्रता के गीत, विशिष्ट जन्म कुण्डली आदि। समृद्ध शोध सामग्री के कारण देश में ही नहीं, अपितु विश्व के शोध व पर्यटन मानचित्र पर भी इसका नाम मुखरित होकर उभरा है।

Kriti Rakshana



यह अभिलेखागार विभिन्न रूपों में अपने कार्य को स्वरूप देता है-

- अभिलेखों की व्यवस्था एवं सूचीकरण
- शोध एवं संदर्भ सेवा
- मरम्मत एवं पुनर्वास
- अभिलेखों का अणुचित्रण
- प्रकाशन
- मौखिक इतिहास
- निजी अभिलेखों का सर्वेक्षण एवं सरकारी अभिलेख कक्षों का निरीक्षण
- मूल्यांकन एवं निदर्शन
- पुस्तकालय
- अध्याचन
- कम्प्यूटर कक्ष

अभिलेखों की व्यवस्था एवं सूचीकरण के अन्तर्गत एक वृहत् संख्या में अभिलेखों की सूचियाँ तैयार करवाई गई हैं। शोध एवं संदर्भ सेवा के अन्तर्गत देश एवं विदेश के हजारों शोधार्थी निदेशालय एवं शाखाओं में स्थापित शोधकक्ष से लाभान्वित हुए हैं। विभाग द्वारा मरम्मत एवं पुनर्वास के अन्तर्गत हजारों अभिलेखों

के संरक्षण का कार्य होता है। सुरक्षा की दृष्टि से अणुचित्रण का विशेष कार्य किया जाता है।

मूल अभिलेखों पर आधारित विवरणात्मक सूचियाँ एवं ऐतिहासिक पुस्तकों के प्रकाशन का कार्य विभाग द्वारा समय-समय पर विभागीय अधिकारियों एवं इतिहासकारों द्वारा सम्पादित करवाया जाता है। विभाग द्वारा मौखिक इतिहास परियोजना के अन्तर्गत राजस्थान के 246 स्वतंत्रता सेनानियों के संस्मरणों की सी.डी. व हार्डडिस्क तैयार करवायी गयी है। सी.डी. की कीमत रु. 60 प्रति सी.डी. तथा स्वतंत्रता सेनानियों एवं उनके परिवार के सदस्य को सी.डी. निःशुल्क उपलब्ध करवायी जाती है। इन स्वतंत्रता सेनानियों की सचित्र दीर्घा के निर्माण का कार्य प्रगति पर है।

विभाग द्वारा निजी अभिलेख एवं ऐतिहासिक व प्रशासनिक दृष्टि से महत्वपूर्ण अभिलेखों के सर्वे, अवाप्ति इत्यादि के लिए निरन्तर प्रयास किये जाते हैं। इसके अतिरिक्त राज्य के सरकारी/ गैर-सरकारी कार्यालयों के अभिलेख कक्षों का निरीक्षण कर उनके उचित रख-रखाव के लिए सुझाव इत्यादि देना निरन्तर प्रक्रिया है। शोध की दृष्टि से महत्वपूर्ण दीर्घकालीन

विभाग के महत्वपूर्ण प्रकाशन

S. No.	Particulars
1.	Rajasthan Throughout the Ages, Vol-I, Edited by Dr. Dashrath Sharma, Period: from the earliest time to 1316 A.D. (English) 1960.
2.	Rajasthan Throughout the Ages, Vol.-II, from 1300 to 1761 A.D. (English) (Dr. G. N. Sharma)
3.	Rajasthan Throughout the Ages Vol.III, (M.S. Jain)
4.	Bijolia Kishan Andolan ka Itihas (Hindi) 1972.
5.	Swadhinata ke Geet (Hindi).
6.	Khayat Das Darpan, History of Bikaner State (Hindi).
7.	Manual of Rajasthan State Archives (Hindi).
8.	Rajasthan Swatantrata Sangram ka Itihas (Hindi)
9.	Koormavilas: History of the Khichhawa Rulers of Jaipur (Hindi)
10.	Guide to the Record in the Rajasthan State Archives (English).
11.	Rajasthan Swadhinata Sangram ke Sakshi, Kuchh Samsmaran, Udaipur, Dungarpur, Banswara,
12.	राजस्थान स्वाधीनता संग्राम के साक्षी कुछ संस्मरण, भरतपुर, अलवर, करौली, धोलपुर भाग-2, 2000
13.	जन-आन्दोलन ग्रंथमाला, राजस्थान स्वाधीनता संग्राम के साक्षी अजमेर।
14.	Ex. Director Late Sh. Nathuram Khadgawat's Rajasthan's Role in the Struggle of 1857
15.	राजस्थान स्वाधीनता संग्राम के साक्षी कुछ संस्मरण, हाड़ौती अंचल
16.	राजस्थान स्वाधीनता संग्राम के साक्षी कुछ संस्मरण, जोधपुर अंचल
17.	पाण्डुलिपि संरक्षण

Kriti Rakshana



Manuscript Storage at Rajasthan State Archives, Bikaner.

एवं स्थायी प्रकृति के अभिलेखों की अवाप्ति के लिए यह विभाग निरन्तर प्रयासरत है।

निदेशालय में 53 विषयों पर आधारित महत्वपूर्ण एवं दुर्लभ पुस्तकों का एक विभागीय पुस्तकालय है, जहां शोध अध्येताओं एवं गणमान्य व्यक्तियों द्वारा पुस्तकालय में उपलब्ध पुस्तकों का उपयोग किया जाता है। वर्तमान तक हजारों की संख्या में प्रोफेसर, रीडर, प्राध्यापक एवं शोधार्थियों ने यहाँ के पुस्तकालय से वृहत् शोध सामग्री प्राप्त की है।

डिजिटাইजेशन

भूतपूर्व रियासतों के ऐतिहासिक व राजस्व अभिलेखों की सुरक्षा, संरक्षण तथा शोधार्थियों एवं जनसाधारण के लिये आसानी से अभिलेखों की उपलब्धता को ध्यान में रखते हुए विभाग ने अभिलेखों के डिजिटাইजेशन करवाने का निश्चय किया है।

प्रथम चरण में एन.आई.सी के माध्यम से 1.47 लाख बीकानेर सम्भाग के पट्टा अभिलेखों को डिजिटাইज करवाया गया। तत्पश्चात् राजकॉम्प के माध्यम से 25 लाख ऐतिहासिक अभिलेखों के

डिजिटাইजेशन का कार्य प्रगति पर है, जब कि 22.50 लाख पृष्ठों का डिजिटাইजेशन पूर्ण हो चुका है।

तृतीय चरण में लगभग 1 करोड़ पृष्ठों के डिजिटাইजेशन व माइक्रोफिल्मिंग का कार्य शीघ्र ही प्रारम्भ होने वाला है। विभाग के समस्त ऐतिहासिक व राजस्व अभिलेखों को आन लाइन करने की योजना है, जिससे देश विदेश के शोधार्थी एवं जनसाधारण आसानी से अभिलेखों को देख सकें और उनका अध्ययन कर सकें। विभाग में राष्ट्रीय अभिलेखागार एम.एल.ए. कोटे व राज्य सरकार की सहायता से 12 कम्प्यूटरों से युक्त कम्प्यूटर कक्ष का निर्माण करवाया है। शीघ्र ही विभाग शोधार्थियों के लिये 15 कम्प्यूटर से युक्त वातानुकूलित कम्प्यूटर लैब का निर्माण करवा रहा है, जिससे शोधार्थी कम्प्यूटर पर अभिलेखों का अध्ययन करेंगे।

मुख्यालय बीकानेर के अभिलेख भवन में 80 वर्ष पुरानी बिजली फिटिंग बदलवाकर अभिलेखों की सुरक्षा के लिये कोल्ड लाइटें लगवायी गयी हैं। जनसाधारण में अभिलेखों के प्रति जनचेतना जाग्रत करने के लिये प्रदेश भर में प्रदर्शनियों व सेमिनारों का आयोजन किया जाता है।

राष्ट्रीय पाण्डुलिपि मिशन, नई दिल्ली द्वारा भारत के समस्त राज्यों में चलाये जा रहे पाण्डुलिपि/हस्तलिखित ग्रन्थ सर्वेक्षण कार्यक्रम में राजस्थान राज्य समन्वायक निदेशक, राजस्थान राज्य अभिलेखागार को बनाया गया है। राज्य समन्वायक ने 32 जिलों में जिला कलेक्टरों के माध्यम से जिला समन्वायकों व सर्वेयर्स की कुशल टीम द्वारा 26 जिलों में सर्वे पूर्ण कर 7.70 लाख का डाटा राष्ट्रीय पाण्डुलिपि मिशन को सौंप चुका है। राजस्थान पाण्डुलिपि/हस्तलिखित सर्वेक्षण में पूरे भारतवर्ष में अग्रणी स्थान पर रहा है। विभाग में स्वतंत्रता सेनानियों की सचित्र दीर्घा तथा आर्काइवल म्यूजियम बनाने की योजना प्रगति पर है।

राजस्थान राज्य अभिलेखागार अपनी ऐतिहासिक अभिलेख शृंखलाओं तथा वर्तमान में चल रहे कार्यों के कारण शीघ्र ही देश का ही नहीं वरन् विदेशों में भी अपना गौरवमय स्थान प्राप्त करेगा।

महेन्द्र खडगावत,
निदेशक, राजस्थान राज्य अभिलेखागार
बीकानेर



Text in Focus

Samarat al-falasifah

Gulfishan Khan

The *Samarat al-falasifah* (means the fruits of philosophers), a Persian manuscript preserved in the University Collection (*Zamima* 28) of the Manuscript Division of Maulana 'Azad Library, the Central Library of Aligarh Muslim University. It seeks to provide an overview of the origin, growth and development of European civilisation in its historical perspective. The work from the pen of Abd al-Sattar bin Qasim, the contemporary court historian, was the result of academic collaboration between Father Jerome Xavier (1549-1617), superior of the third Jesuit mission and the author, held under the aegis of the Mughal court. Xavier, the priest-scholar learnt Persian at the Mughal court and also gave lessons to Abd al-Sattar in Portuguese as well as Latin, enabling the latter to assist him in the difficult task of translation of the European works into Persian, the language of politics, administration, letters and also transmission of learning.

The work is concerned with the ancient and early medieval history of the two Mediterranean countries - Italy and Greece, as well as of the two Iberian nations, namely Spain and Portugal. Additionally, the major focus of the work is on the philosophical past of Europe specially the contribution of ancient Greek and Roman philosophers and men of letters to the advancement of learning and culture. The work is divided into two major parts with a number of sections and sub-sections apart from an introduction (*muqaddima*) and a conclusion (*Khatima*), on folio 55b-56. In the introduction, the author carefully describes the methodology, subject-matter, sources, and scope of the work.

In the preface of *Samarat al-falasifah*, Abd al-Sattar informed readers that the main reason of the compilation of this work was to satisfy the natural inquisitiveness and philosophical quest of the Emperor Akbar who desired preparation of a new code of conduct (*dastur al-amal*) acceptable to the subjects of his empire professing various beliefs and faiths. As an introductory remark Abd al-Sattar postulated that two major factors had maintained an iron curtain between the lands of Europe and India: first, the immense geographical distance, and, second, the linguistic barrier. There was no bi-lingual expert who knew the two languages (*mutarajjim*: literally, 'the translator'). (*folios 1-3*)

Abd al-Sattar thus explains in the prologue:

"The prime motive of compilation of this admirable work with an excellent introduction (*dibacha*) was that the *Khedive* of those who revere God, and the *Shahishah* of the God-knowing, the Darius of the age, king in appearance (*surat*) and reality (*mani*), on account of his knowledge and his excessive generosity, towards the people, expressed the desire to have the secrets of religions (*kishha*) and accounts of rulers of every land and the revelation of mysteries of all eminent philosophers continuously described in the royal courts; and besides, the Master of the Age with unlimited courage and ambition, thus peopling the world, wished that the true level of every group and community (*taifa*) be known, accepting from them some matters and rejecting others to create a fresh *dastur al-amal* (code of conduct) to

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be promulgated far and wide. To fulfill this royal desire, the slave Abdus Sattar bin Qasim on account of his own good fortune was also filled with the urge to render an important service to the emperor and his courtiers with the aid of heavens. But I was also baffled, and was perplexed due to lack of resources (*kam mayagi*, literary lack of capital) to fulfil such an august desire at the start. I possessed only a twisted and powerless tongue (*kajmuj zaban bi yawar*). But I was also conscious that lest I should not become an object of ridicule before my contemporaries. Instead I sincerely wished to serve the sublime court. A good time passed on this account. Suddenly, one day my star began to shine and the door of fortune opened to me. The omniscient Emperor, whose granting of requests and fulfilment of wishes are his outstanding traits, summoned this ignoble to the court and ordered to learn the language of the Europeans (*zabani firangi*) to gain a knowledge of the secrets of those people (*millat*), and to provide an account of their rulers, and the philosophers of Greece and Latin (*hukma i Yunan zamin wa Latin*) according to their own books, and render them into Persian; so that, what had remained hidden from sight on account of the foreignness of their language, the virtual absence of interpreters, and the geographical distance, should be brought forth in this period of efflorescence and intellectual re-awakening (*bidari*). And this group of Christians (*giroh-i-Nasara*) who are always there in an attitude of submission in the exalted court may also gain some solace in their hearts as a consequence. I took this order of the Shadow of God as a divine order. I raised the skirt of my courage and became totally dedicated and sought close association with Padre Jerome Xavier (*Padri Zeronemo Shivar*), one of the select amongst the knowledgeable European scholars (*danayan i farang*), who had recently arrived and kissed the threshold. I began to acquire the language and with firm determination which got strengthened day by day within six months of receiving the

royal assignment, I acquired the ability and strength to comprehend matters scholarly (*ilmi*) and practical wisdom (*amali*) in that language. Because I have spent most of time in producing translations, and did not have the opportunity to speak much, I am still not capable of conversing with confidence". (*folios 2*)

However, Abd al-Sattar did not specify which language he learnt. Presumably, he learnt Latin. The work was completed under the supervision of Father Xavier. The text was actually based upon the oral communication (*guftar* literally means speech/ conversation) of Father. According to the author-translator the following method of translation was used: Father Jerome Xavier provided oral dictation and translations, thereafter a number of experts (*kargran*, literally means workmen) who were engaged in the task sought to explain the meanings of the ideas, concepts and thoughts thus communicated orally. `Abd al-Sattar then wrote it down into Persian. For Abd al-Sattar his work was the fulfillment of the royal mission according to the desires of His Majesty. He explained that his work accordingly contains an exposition of the abstruse matters (*ghwamiz*), secrets of knowledge and practical wisdom (*asrar-i-ilmi wa amali*) of that group [i.e. the Europeans] and a brief account of Jesus Christ (Messiah), and an account of the Roman Emperors and rulers of Greece (*farmandahan- i-Rum-wa yunan*) and subtleties-knowing philosophers, all are properly described. The account is based upon the Bible (*Injil*) and the book of Saint Antonius (*Kitab Sant Asnin*) being the most reliable sources of information on the subject.

For the second part of the work which is devoted to the European philosophers and their ideas the author clarified thus: "I made chapters for each of the important philosophers and organized them on the basis of the rulers of the age." Regarding the place of birth and origins of these famous people, there are different views. Some of the philosophers described are called Roman and others are mentioned as



the Greek philosophers. The reason of this apparent confusion is that in the past the Greek rulers occupied Italy and its capital Rome and ordered that thenceforth it should also be called Greece. When the emperors of Rome conquered Greece, [in 146 B.C.] they too ordered that the country should also be called Rome. I have tried to clarify an account of these matters on which there is no clarity even today, so that every reader understands the differences of opinion and the doubts are clarified. Since His Majesty, Emperor Akbar was desirous of fresh ideas therefore the account of the foundation of the historic city of Rome which sounds like a strange and wonderful story (*ajajib wa gharaib*) is included as a source of amusement for the emperor. (*folio 3*).

The author further specified that the account of Roman kings and rulers of Greece and philosophers of these two lands is chiefly derived from the book of St. Antoninus whereas for the biographical account of philosophers, other sources are also utilized. (*folio 2*). The reference here is principally to the work of Antonio Pierozzi or St. Antoninus (1389-1459), the celebrated Florentine Dominican friar who had become Archbishop of Florence and his three-volume history of the world entitled *Summa Historialis or Chronicon partibus tribus distincta ab initio mundi ad 1360* which had appeared between 1474 and 1479, and had been reprinted several times thereafter in the late fifteenth and early sixteenth centuries. Thus clearly Abd al-Sattar's account of the Greek and Roman sages and their ideas was chiefly derived from *The Chronicles* (1454-9) Saint Antoninus Pierozzi but it is also supplemented from Maqsum Ali Tabrizi's *Tarikh-i-hukama* (*Aqwal-i-Hukama* HL3839, and 1777 Khuda Bakhsh Oriental Public Library, Patna), an abridgement of a thirteenth century work *Nuzhat al-arwah wa Raudaz al-afrah* of Shams al-Din Shahzaruni, a disciple and commentator of Shihab al-din Suhrawardi (d.1191) the illuminist philosopher as mentioned in his discussion of Alexander

the world conqueror and his tutelage under Aristotle (*folio 47*). Additionally, he had also access to Persian translation of the New and the Old Testament and frequently quoted from both the sacred texts. (*folio 12*)

The preface is followed with a detailed and fascinating account of the mythical story of the foundation of Rome and the seven legendary kings. The author provided a detailed narrative of what are known as the Regal period, Age of Republic and the beginning of Imperial period in the history of Rome. Under the theme the author narrated the story of its Seven legendary kings: the mythical king Procas and his two sons Amulius and Numitor and the story of the Vesta priestess known as Rhea Silvia, birth of Romulus (c.771 B.C.-717 B.C.) and Remus (771-753 B.C.). Romulus, whose ancestry is traced to Trojan (War) prince Aeneas, folios 3-4, Numa Pompilius, on folio 4-6, Tullus Hostilius, the third king, a Roman, who welcomed the Albans into Rome, Ancus Martius a grandson of Numa on folio 8b. Thereafter the 3 Etruscan kings, Tarquinius Priscus, on folio 8b-9, his son-in-law Servius Tullius, and Tarquinius Priscus's son, the last king of Rome, known as Tarquinius Superbus or Tarquinius the Proud is described in detail, on folio 9-10. In between the above narrative of the Regal period of Rome's history, the story of the late Babylonian Emperor Nebuchadnezzar (605-562 B.C.) (*Bukhti nasar*) his capture of Jerusalem, and interpretation of his dreams by his advisor, Daniel, is also included. (*folios 6-8*)

Other interesting themes covered in the work are Italy, etymology of the word and its geopolitics (*folio 3*), origins of the word Greece, etymology of the term 'Rum' and 'Andalus', Greek settlements in Spain, Arab-Berber Conquest of Andalus/ Spain by Tariq bin Ziyad under the Umayyad Caliph Walid bin Abd al-Malik, Portuguese Reconquest of Spain under Alfonso VI of Leon and Castile, capture of Toledo, and Expulsion of the Muslims. (*folios 10-12*)

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The author sought to provide basic information about the Continent and its nations to his intended readership such as about Italy in the traditional framework of Arabo-Persian topographical *tazkira* (biography). "Let it not be hidden that Italy is a country to the west of Greece, and in ancient times it too was known as Graecia i.e. Greece. The king of Greece occupied it and named it Greece. For some time it was known as Suturia, in the name of Saturan [Saturnus], its ruler. Only after that has it been called Italiya (Italy), when Italiya became its ruler, and even today it is known by that name. Its capital city is Rome (*Ruma*) and the language of Rome is known as Latin. Latin is considered as the language of high status through out the nations of the Western hemisphere (*maghrib zamin*) such as Italy, Hispania/Spain, Albania, Castile and Germany. All the books pertaining to scientific matters (*ilmi*) and practical wisdom (*amali*) are written in this language. The city of Rome is included in the fifth *iqlim* (according to geographical classification) and its weather remains cold and frozen most of the time. (*folio 3*)

Similarly for Greece, the seat of the ancient civilisation the author had this to offer: "Greece was also called Trasia after the name of Taris bin Yafith bin Nuh (for Yunan bin Yafith bin Nuh?), who populated the country first. Later it became known as Graecia, after the name of a king, Greek who occupied this land. In Latin and Greek books it is still known as Grecia. It has eight villages and it is the land of learning and mother of philosophers. The Greeks are known for philosophical accomplishments. It is also included in *iqlim* fifth. Constantinople is also called Rum. Its language is known as Greek. In the aftermath of Alexander's conquest of Persia Greeks migrated to Andalus, a country repopulated by Andalus bin Yafith bin Nuh."

Thereafter, what follows is the story of the arrival of *Maida*, and the fear of attack from Berbers and Arabs is narrated. Greeks were forced to leave Spain due to fear of foreign invasion. Arab-Berber Conquest of

Spain by Tariq bin Ziyad under the Umayyad Caliph Walid bin Abd al-Malik is described. This account is followed by the Portuguese reconquest of Spain under Alfonso VI of Leon and Castile, with the description of events such as the capture of Toledo, conversion of a Mosque into Church and the final expulsion of Muslims with detachment from the Jesuit perspective. For Abd al-Sattar, Spain and Greece were islands but he informed the readers that Padri farangi, i. e. Father Xavier protested that Spain was not an island but a whole country in the West. (*folios 10-12*). Thereafter a story is narrated from a Persian translation of the Old Testament (*Taurah*) about Babel and its rulers. (*folios 12-15*)

The second section of the book under review from folios 15-55 contains the biographical accounts and presentation of the fundamental teachings of the ancient Greek philosophers from Thales, to the classical philosopher Plato (427-347B.C.) and Aristotle. The account of Greek philosophers opens with what is now called the Ionic School and discusses three chief representatives of this school. The first philosopher whose ideas are presented is Thales of Ionian city of Miletus (620-546B.C.), for whom it is noted that he is considered father of Greek philosophy, famous for his astronomical and mathematical learning as well as for his practical sagacity and wisdom. He traveled to Egypt where he studied geometry and mathematics. He started the field of Greek astronomy and introduced geometry into Greece from Egypt. He was one of the Seven Sages. He developed the scientific method, theories to explain why things change, and proposed a basic underlying substance of the world. In his view water is the main source of life. His famous saying "To bring surety brings ruin," is also quoted. Anaximander of Miletus (about 611-547 BCE), the first writer on philosophy and a student of Thales, and his disciple Anaximenes are the other two philosophers whose ideas are described. Other philosophers discussed are Chilon of Sparta on folios 15b-17, Bias of Priene, on



folio 17b, Cleobulus of Lindos, on folio 18, Solon of Athens, on folio 18, Pythagoras of Samos (about 582-504 BCE), on folios 24b-27, Democritus, on folio 27, Heraclitus of Ephesus (about 535-475 BCE) folio 27 etc. Among all the above Socrates of Athens, his ideas and ethical teachings, theory of knowledge, scientific theory of concepts, dialogues with Plato, are described with strange curiosity and uncommon interest. (folios 28b-31b). However, it is to be noted that Plato's life and writings, theory or ideas, literary and philosophical activities occupied greater attention of the author than that of Socrates. (on folio 30b). Plato's account is followed with his own faithful disciple and equally great philosopher Aristotle who is projected not only a rationalist thinker but also a sober and energetic politician. Life and philosophy of the great Aristotle, including his social and political activities are treated with an avid interest. The account includes enrollment in Plato's Academy, life in the Macedonian court, appearance and character, Aristotle's school at Lyceum, ideas on state, aesthetics and theory of art. The philosopher is described as a man of universal learning, in whose person brilliant philosopher was united with political activist. However, Alexander's advice to his royal pupil Alexander on the art of diplomacy, statecraft and warfare are narrated in the most absorbing details. (folios 40-44). Aristotle is represented as an ideal pedagogue and preceptor of his pupil Alexander. On the other hand, Alexander the great is also portrayed as an exemplary figure and for whom the tutelage and companionship of Aristotle helped to rise higher. Alexander's world-wide campaigns, war with Persian king Darius III, invasion of the Indian subcontinent and war with Porus, are treated in the most dispassionate manner. 44b-52. In Jerusalem Alexander was shown Daniel's book of prophecy concerning attack by a Greek ruler.

However, *Samarat al-falasafa* does not contain a biography of Jesus Christ as stated in the preface. But the author noted briefly

that the birth of Jesus Christ occurred in the 42nd year of the reign of Augustus Caesar (63 B.C.-14 A.D.), the founder of the Roman Empire. On the subject the author refers to his earlier work *Mirat al-Quds*, a work according to the author written on the orders of Emperor Akbar. (folio 52).

The work was completed on Friday 13th Rabi al-Awwal 1012 Hilali [i.e. Hijri], equivalent to 29th Amardad Ilahi, the 48th Regnal year of the Shahinshah [Emperor Akbar] which means August-September, 1603 A.D. The work was less popular than the other works produced by Xavier and Abdus Sattar such as the above mentioned *Mirat al-Quds*. But a few copies have survived in India and Europe such as Hyderabad, Rampur, King's College Cambridge, Manchester, and the British Library (London) and Mashhad in Iran.

The present manuscript was copied by Azam Ali Khan in Sardhana qasba (district Meerut, U.P.) from a copy in possession of Padre Sahab(?) on 8th Rabi al-Awwal, 1204 Hijri/ 1790 A.D. The work remains a unique Mughal document in the history of intercultural exchange. Jesuits brought history, myth, art, and culture to India along with the ideas of Renaissance and Counter- Reformation. More significantly, it sheds important light on the contemporary socio-intellectual milieu of Mughal court and its intellectual-courtiers. It reveals purely intellectual concerns of the Mughal ruling elite under the most enlightened emperor Jalaluddin Akbar (1556-1605) and their sincere endeavours to understand the roots of Western civilisation in its historical perspective without any binary distinction between the East and West.

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Introduction to Kharoṣṭī Script

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The study of Kharoṣṭī paleography began with the decipherment of the script which was accomplished through the efforts of Masson, Prinsep, Lassen, Norris and Cunningham. They used the bi-script coins of the Indo-Greek and Indo-Scythian kings to decipher the script. These early efforts were confirmed and improved by the discovery of Kharoṣṭī Aśokan edicts.

According to literary accounts, Brāhmī and Kharoṣṭī are the two most ancient Indian scripts, if the undeciphered 3rd millennium B.C., Indus script is at the moment set aside. Unlike the Pan-Indian Brāhmī script, Kharoṣṭī was confined to the northwest of India, centered on the region of Gandhara (modern, northern Pakistan and eastern Afghanistan). The details of its origin remain obscure despite the attention of several generations of scholars. But according to some scholars, the evolution of this script took place during the Achaemenid conquest and occupation of Gandhara region from 559–336 B.C. The script first appeared in a fully developed form in the Aśokan inscriptions of Shahbazgahi and Mansehra, around the middle of the 3rd century B.C. It continued to be used in Gandhāra and neighboring regions, sometimes alongside Brāhmī, until in or around the 3rd century A.D., when it disappeared from its homeland. The Kharoṣṭī script was also used for official documents and epigraphs in the Central Asian kingdoms of Khotan and Kroraina in the third and fourth centuries A.D., and appears to have survived in the cities of the Northern route as late as the seventh Century A.D.

Nomenclature

We have ample textual evidences regarding the original name of the Kharoṣṭī script. In the Jain texts, such as the 'Paṇḍavana Sūtra and Samvāyaṅga Sūtra (8th Century A.D.), Kharoṣṭī is referred to as one of the eighteen scripts of ancient India. More interestingly, the Buddhist work Lalitavistāra (1st Century A.D.) enumerates as many as sixty four scripts of which Kharoṣṭī stands second, next to Brāhmī. In Mahavastu (4th Century A.D.) also the name of the Kharoṣṭī is found. There is a Chinese commentary, namely Fan-Wan-Shu-Lin (7th Century A.D.) where it is mentioned as Kharoṣṭī.

The Kharoṣṭī script is known by various names. In early 19th century, when the script was first deciphered and many inscriptions were read, the eminent epigraphists and archaeologists however began to call it by different names. The credit really goes to Terrien de La Couperie (1886), who first proposed the name Kharoṣṭī, on the basis of a list of scripts found in the Chinese Encyclopedia *Fan-wan-shu-lin*, and the Chinese translation of the Lalitavistāra i.e. 'Kai-lu-she-ti' (4th century A.D.).

This name is found with numerous spelling and dialectical variants in the different versions of the Buddhist and Jaina script lists: *kharoṣṭī*, *khaloṣṭī*, *karottī*, *kharoṣṭī*, *khārāstrī*, *kharoṭṭhī* and *kharoṭṭhiyā* (Salomon 1998a: 50).

The debate over the etymology and origin of this term has attracted the attention of a great many scholars over



Guttarals	:	Ka-	𑀓	Kha-	𑀔	Ga-	𑀕	Gha-	𑀖	Na-	𑀗
Palatals	:	Ca-	𑀘	Cha-	𑀙	Ja-	𑀚	Jha-	𑀛	Ña-	𑀜
Linguals	:	Ṭa-	𑀝	Ṭha-	𑀞	Ḍa-	𑀟	Ḍha-	𑀠	Ṇa-	𑀡
Dental	:	Ta-	𑀢	Tha-	𑀣	Da-	𑀤	Dha-	𑀥	Na-	𑀦
Labials	:	Pa-	𑀧	Pha-	𑀨	Ba-	𑀩	Bha-	𑀪	Ma-	𑀫

Kharoṣṭī Letters

the last century, but no secure conclusion has been reached so far. Unless some new evidences come to light that can reveal more about the origins of this name, it is perhaps best to think of it as a Sanskritized form of a foreign (likely Old Iranian) term whose etymology is uncertain.

1. Some scholars use the name as '**Indo-Bactrian' or Bactrian-Pali**
2. E. J. Thomas called it '**Bactrian Alphabet**'
3. A. Cunningham preferred to call '**Gandharian Alphabet**'
4. Lassen called it '**Kabulian**'
5. M. Senart called it '**Western Alphabet**'
6. Wilson thought its name as '**Arianian**'

Some early European scholars attempted to compare 'Kharostrā' with 'Zardusht' 'Zarathustra' to find its real name as 'Kharoṣṭī'. The Chinese encyclopedia, '*Fa-wan-shu-lin*', reports a traditional legend attributing the invention of writing to three individuals, namely 1. Fan (Brahma), i.e. the Brāhmī script, who wrote from left to right; 2. 'Kai-lu or Kai-lu-she-ti', i.e. the Kharoṣṭī script, who wrote from right to left, and 3. Tsang-hieh, i.e. the Chinese script, who wrote from top to bottom. The word, 'Kai-lu' was transcribed variously but explained as 'ass-lipped' which is the meaning of Kai-lu-she-ti or Kharoṣṭī.

The exact name of god, who invented Kharoṣṭī is given there as Kia-lu or Kia-lu-she (ti). In the Chinese translation of the Lalitavistāra in which the names of 64 scripts occur, the name as Kia-Lu-She (ti) is given for Kharoṣṭī script.

Sylvan Levi held another view and instead of calling it 'Kharosthi' he preferred to designate it 'Kharostri' a compound of two terms khara + ustra i.e. ass and camel. He tried to establish that the region where the script was in use was the 'land of khara (ass) and the camel'. So Kharostri is probably the writing of this country. To support this view he has taken the reference from the Chinese source that the word 'Shu-le' and 'Kai-lu-shu' have the same meaning.

R. B. Panday (1957:53) asserts that the name is definitely Indian, a Prakritised form of Sanskrit 'Kharaustha'. The script may have been called so due to the fact that most of the characters in this script consist of irregularly elongated curves and they resemble the moving lips of an ass (khara= ass + oṣṭha = lip). Originally it must have been a nickname which got currency in course of time.

Origin of the Script

Several recent publications have revived the discussion of the origin of the Kharoṣṭī script, which had, for most of the last century, been based on Bühler's study. *The Origin of the Kharoṣṭī Alphabet*. The main point of Bühler's argument, that Kharoṣṭī is derived from the Aramaic script, is still accepted by most of the authorities. But, some details of his derivation need reconstruction in the light of discoveries and developments in this field in the recent past.

Buehler was successful in tracing the probable prototypes of the letter *kha* in the Aramaic alphabet. We may summarize his findings in the following lines. He correctly

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noticed close resemblances between a number of letters of Aramaic script with that of Kharoṣṭī script. He found affinity between Aramaic *beth* with *ba*, *gamel* with *ga*, *daleth* with *da*, *he* with *ha*, *wav* with *va*, *zain* with *ja*, *cheth* with *sa*, *yod* with *ya*, *kaph* with *ka*, *lamda* with *la*, *mem* with *ma* and *nun* with *na*, *phe* with *pa*, *ysade* with *ca*, *ooph* with *pha*, *resh* with *re* and *shin* with *sa* and *taw* with *tha*.

First of all, the Kharoṣṭī script follows the Semetic system in writing, from right to left. It was the sufficient clue to suggest its origin from the foreign source. A close affinity existing between Aramaic and Kharoṣṭī was first noticed by Edward Thomas. Thomas pointed out a common origin of both the scripts and showed the common Semetic style of writing from right to left direction. He also rightly followed that many of the letters had purely Semetic formations which indicated that many of the letters were retained intact as the representatives with their identical phonetics values, although new adaptations had to be made in order to suit the new Indian phonetics.

James Prinsep in 1835 pointed out a number of signs 'identical to or holding normal configurations with Semetic alphabets'. He also suggested its derivation from the Phoenician and its augmentation and systematization from the local Indian language. He showed apparent Semetic similarities with respect to a number of letters, for instance, *caph* with *ka*, *teth* with *ta*, *wav* with *va* etc.

General A. Cunningham also expresses a similar view that the introduction of Aramaic script in India was made by the Achemenian conquerors who ruled over Punjab and Afghanistan in about 5th Century B.C. Although supported the view of Isaac Taylor, Cunningham says that the 'Gandharian' script as he calls Kharosthi was expanded and its vowels and aspirate letters came into being in about 4th Century B.C., after contacts with the more fully developed system of Indian alphabet i.e. Brāhmī.

Notable Features

Like Brāhmī, Kharoṣṭī seemed to have been developed for Prakrit dialects. For instance, the earliest example of Brāhmī and Kharoṣṭī did not have the diphthongs /ai/, /au/, and the vocalic /r/ and /i/, which existed in Sanskrit but not in Prakrit. In particular, Kharoṣṭī seemed to be used primarily for the Prakrit dialect of Gāndhārī, the language of the ancient kingdom of Gāndhara. Kharoṣṭī had no descendants. It is used to write Gāndhārī and Sanskrit language also.

It was written from right to left in horizontal lines. Orthographically the alphabet consists of mostly linear, vertical symbols along with horizontal strokes angularly attached. The loops and the curves are restricted to the minimum in the early phase. It has all the symbols required for writing Indian languages and also certain symbols for Persian also.

On the country the Kharoṣṭī script continued to remain structurally the same in different areas. Since the writers and the engravers of this script did not take full liberty of introducing ornamental flourishes, loops and curves in different periods and regions they almost adhered to a set pattern of a static and standardized style. Therefore it did not get chance of developing onto other regional scripts. It may not be argued that the medium of writing materials has enabled the writers and engravers to go for innovations in Brāhmī script. For we find that the materials such as rock, stone pillar, stone slabs, metal plates, vases, coins, cameos, birch bark, wood and paper utilized for writing Brahmi were also utilized for Kharoṣṭī as well.

Kharoṣṭī includes only one stand alone vowel sign which is used for initial vowels in words. Other initial vowels are used with a character modified by diacritics. Using epigraphic evidence Salomon has established that the vowel order is a, e, i, o, and u rather than the usual vowel order for Indic scripts, a i u e o. This is the same as the Semitic



1	=	1 1
2	=	11 11 1 1
3	=	111 111 1 1 1
4	=	1111 1111 X X 1
5	=	11111 11111 1X 1X
6	=	11X 11X
7	=	111X 111X
8	=	XX XX
9	=	1XX 1XX
10	=	1 1 1
20	=	3 3
100	=	11 1 1 1 1 1 1 1
200	=	111
300	=	1111
1000	=	11 1
2000	=	111
4000	=	11X
6000	=	111X
8000	=	1111X
10000	=	111

Kharostī Numerals

vowel order. Also, there is no differentiation between long and short vowels in Kharostī.

Kharoṣṭī Numerals

The Kharoṣṭī numerals occur in the Aśokan Edicts at Shahbazgarhi and Mansehra. They are shown as slanting or vertical line for number one and parallel slanting or vertical lines for two, four and five. These numerical symbols have been preceded by words denoting them. The symbol for 10 representing the Kharoṣṭī letter for 'A' and 20 representing in the Kharoṣṭī letter for 'Dha' have at first been noticed in the Maira inscription. The sign for 100 has different Kharoṣṭī inscriptions found at various places. During this period numeral 1000 also occurs. For multiples of 1000, the required number is added to the right of symbol for 1000. Thus to write 8000, two 4 symbols are added before the symbol for 1000.




Punctuation in Kharoṣṭī Script

Notation of punctuation varies considerably from one scribe to another. It is used to separate the pādas in verse. Some scribes use it to indicate a phrase or sentence break, and sometimes to separate items in a list. Circles of various sizes and degrees of completeness are also used.

Syllabic Modifiers

In addition to the vowel diacritics and the diacritically modified conjuncts two types of additional signs or strokes have been used in different periods of the Kharoṣṭī script to indicate modified syllables. The most common of these is the anusvāra. The use of the anusvāra is rather inconsistent in Kharoṣṭī. In some documents it is not written at all, in others it is written where it is etymologically expected.

Anusvāra: There are three types of anusvāra found in the Aśokan inscriptions and some coins of the Indo-Greek kings. **

1.  2.  3. 

For instance:

Visarga: The sign for visarga consists of two dots placed above the character, e.g.,



It is found in the few manuscripts written in Sanskritized Gāndhārī or Sanskrit, notably Niya documents

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Indological Writings in Latin

Satkari Mukhopadhyaya

Latin (Lingua Latina) belongs to the Italic branch of the Indo-European family of languages. She is the parent of the modern Romance languages, such as Italian, French, Spanish, Portuguese, and a few minor ones. Originally spoken by small groups of people living along the river Tiber, Latin spread with the expansion of Roman political dominance, first throughout Italy and most of Western and Southern Europe and then the Mediterranean regions of Northern Africa. The modern Romance languages developed from the spoken Latin of various parts of the Roman Empire. Though Latin ceased to be used as a spoken language but it was widely used in the West for academic and literary purposes down the middle ages till the 20th century. Until the latter part of the 20th century it was used in the liturgy of the Roman Catholic Church. Till the modern times, Latin formed an important part of the educational curricula and children's education was started with Latin in grammar schools.

Latin is a sonorous language with pleasing sound and is wonderfully copious. In these qualities it is second only to Sanskrit.

The importance of the academic use of Latin may be understood from a few examples, such as:

1. Nicolaus Copernicus (1473–1543) the illustrious scientist astronomer from Poland wrote his *De revolutionibus orbium coelestium* (Torinensis de revolutionibus 1543) in Latin.
2. Galileo Galeli (1564–1642) the scientist from Italy wrote a few works in Latin, the most well-known of which is *Sidereus Nuncius* (1610).

3. The British scientist Isaac Newton (1643–1727) also used Latin in his works, such as *De Motu Corporum in Gyrum* (1684), *Philosophiae naturalis principia mathematica* (1687), *Arithmetica universalis* (1707), etc.
4. Many Greek texts were translated into Latin, of which mention may be made of the History of Herodotus (one copy may be seen in IGNCAL Kalanidhi rare book collection). Arabic translations of many Greek philosophical and scientific works had been translated into Latin in the mediaeval ages, which had been being taught in European universities.
5. All Greek texts published in the 20th century under the series *Oxford Classical Texts*, issued by the Oxford University Press have introduction in Latin.

It is interesting to know that quite a good number of European orientalists wrote on Indological subjects in Latin. Such writings include research works (dissertations etc.) and Latin translations of Indic texts. We are presenting below a bibliographic survey of Indological writings in Latin.

(Note: The information about the works marked with asterisks have been collected from secondary sources, others have been physically examined by the author of this article)

Vedas

Rigveda Specimen /Friedrich Rosen. 1830.
(Seven hymns with Latin translation).

Rigveda Samhita: liber primus/Friedrich Rosen. London, 1838. (First octave with Latin translation and notes; posthumous publication).



Yajurvedae (=Vajasaneya-Sanhitae) Specimen:
cum commentario primus/editit
Albrecht Weber. Breslau, 1846. (From
the 9th Adhyaya of the Madhyandini
Samhitā of the *Yajurveda*)
Another edition '*Particula posterior*',
Berlin, 1847. (Ch. 9th and 10th, text in
Roman with Latin translation).

Aitereya-brahmanae specimen, Dissertatio
inauguralis... in Academia Vratislaviensi
.../Aemilius Schoenborn. Berlin: A. W.
Schade, 1862
(Book 8, ch. 5-20): Text in Roman with
Latin translation.

Vedic Auxiliary Works

De usu dattivi in carminibus Rigvedae/
Berthold Delbrück.
(On the use of dative in the hymns
of the Ṛgveda; Thesis: not known
whether published or not).*

Bharadvajasiksha: cum versione latina exerptis
ex commentario ad inotionibus
criticis et exegeticis/Emil Sieg. 2 vols.
Berlin, 1891-92. (Thesis: Text on Vedic
phonetics, with Latin translation and
excerpts from the commentary of
Jaṭāvallabhaśāstri Laksman)

Suparnadhyayah: Suparni fabula/editit Elimer
Grube. Berlin, 1875.
(Thesis containing the text of the
Suparnadhyaya, in Roman).

Ṛgvidhanam.../Rudolf Meyer. Berlin, 1877
(Thesis with text)

Ṛgvidhanam/editit cum praefatione Rudolf
Meyer. Berlin, 1878.

Upalekha: de Kramapatha libellus, Textum
sanskritum recensuit...versionem latinam
adjecit William Pertsch, Berlin 1854. (A small
text on Kramapatha, step by step chanting
of the Ṛgveda; a thesis, later on published in
book form.

Upanisads

Oupnek'hat: id est secretum tegendum)
ad verbum ē Parsico idiomate,

Sanskreticis vocabulis intermito in
latinum; studio et opera/ Anquetil
Duperron. 2 vols. Paris 1801-
1802(Latin translation from Dara
Siko's Sirre-Akbar in Persian: 50
Upanisads).

Epic

(Ramayana and Mahabharata)

Ramayana, id est carmen epicum de Ramae
rebus gestis poetae antiquissimi
Valmici opus ...interpretationem
latinam et annotationes criticas
adiecit August Wilhelm von Schlegel.
3 vols. Bonna 1829, 1833, 1838.
(First two Kandas of the Rāmāyaṇa,
edition with Latin translation).

Nalus: carmen sanscritum e Mahābhārata/
edidit latine vertit Franz Bopp.
London, 1819. (Nala episole from the
Mahābhārata with Latin translation
and notes).

Gita

Bhagavad-Gita: id est *theopesion melos* sive
almi Crishnae et Arjunae colloquium
de rebus divinis... textum recensuit
et interpretationem latinam/adiecit
Augustus Wilhelm von Schlegel.
Bonn, 1823.
(Bhagavadgītā: Sanskrit text in
Devanagari with Latin translation and
annotations).

_____: editio altera auctor et emandatio
eura Chritiani Lasseni. Bonn, 1846
(A revised edition of Schlegel's
work).

Purana

Brahma-vaivarta-purani specimen: Textum
e codice manuscripto Bibliothecae
Regiae Berolienensis/Friedrich Stenzler.
Berlin, 1829.
(Thesis: Two chapters of the
Brahmavivarta-Purana with Latin
translation).*

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Vyakarana

Descriptive grammar based on Pāṇini/
Heinrich Roth.

(Written in Agra, 1660-1662. Pub:
Facsimile edition, Leiden, 1988).*

Grammatica Damulica/Bartholomaeus
Ziegenbalg. Halle 1716. (Tamil
grammar in Latin)

Institutiones linguae Prakriticae/Christian
Lassen. Bonn, 1837.
(Prakrit Grammar)

Corporis radicum Sanscritarum prolusio. Bonn,
1826. Radices Sanscritae. Bonn, 1827
(Both by Friedrich Rosen, on Sanskrit
verbal roots or *dhatu*s)

*De conjugatione in mi linguae Sanskritae ratione
habita*/Abalbert Kuhn.
(Thesis on conjugation of Sanskrit
verbs. Thesis, submitted, Berlin,
1837)*

De Prakrita Dialecto libri duo/Albrecht Hoefer.
Berlin, 1836.
(Two books on the Prakrit Dialect:
Thesis based on the editions of
the dramas. His first lecture as a
professor was also in Latin: *De studio
etymologico recte instituendo* in
1837).

De accentu compositorum Sanskritorum/
Theodor Aufrecht. Halle, 1847.
(Thesis: Accents on Sanskrit samasas)*

Kaccāyanappakaraṇae specimen/Ernst Kuhn.
Halle, 1869, 1874. (Chapters 2 and 6
of the Pali Grammar of Kaccayana)

De Grammaticis Prakritices/Richard Pischel.
Breslau, 1874.

Sanskrit grammar in Latin and French/J.F. Pons.
(Written in 1739 in Chandernagar;
based on some Sanskrit grammars of
Bengal tradition. Sanskrit words, etc.
in Bengali scripts. Being edited by P.S.
Fillizet)*

Sidharubam: seu grammatical Sanscrit[i]damica
/Ivan Filip Vesdin (alias Paulinus a
Sancta Bartholomae), Rome, 1790.

(Sanskrit grammar in Latin; believed
to be the first published grammar in
a European language)

Poetry, Drama & Ethics

Ritusamhara: id est Tempestatum cyclus,
Carmen Sanskritumedidit latina
interpretatione, germanica versione
metrica atque annotationibus criticis
instruxit/Peter von Bohlen. Leipzig,
1840. (Kālidāsa's Ritusamhāra with
Latin prose translation, German
versified translation and notes)

Prabodha Chandrodaya: Krishna Misri comedia.
Sanskrite et latine/edidit Hermann
Brockhaus. Leipzig, 1835 (text), 1845
(notes)
(Kṛṣṇamīśra's allegorical, Sanskrit
drama, text with Latin translation)

Raghuvansa: Kalidasae carmen, Sanskritae
et latine/edidit Adolph Friedrich
Stenzler. London, 1832.

Kumara Sambhava: Kalidasae carmen Sanskritae
et latine/edidit Adolph Friedrich
Stenzler. London, 1832.

Mṛcchakatika: id est curriculum figlinum,
Sudrae regis fabula/Sanskrite
edidit Adolph Friedrich Stenzler.
Bonn, 1847. (Edited Sanskrit text
with introduction and notes in Latin
gives definitions of different Prakrit
dialects)

Kalidasae Meghaduta et Cringaratilaka: ex
recensione Johannes Gildemeister.
Bonn, 1841. (Text with Latin glossary)

*Observationes ad Kalidasae
Malavikagnimitram*/Carl Capeller.
(Thesis: Berlin, 1868. Pub.: In his Kleine
Schriften und *Sanskrit-Gedichte*,
Wiesbaden, 1977)

De Kalidasae Cakuntali recensionibus/Richard
Pischel.
(Thesis: Breslau, 1870; on
various recensions of Kālidāsa's
Abhijñānaśākuntala)



Hitopadesas: id est Institutia salutoris
.....interpretationem latinam et
annotationes criticas/adiecerunt
Augustus Guilelmus a Schlegel et
Christianus Lassen. Bonn, 1829
(text), 1831 (critical commentary)/
Edition, Latin translation and critical
commentary of the *Hitopadesa*, a
book of fables).

Hitopadaesi particula: libri introductionem et
fabulas duas .../edidit D. Georg Henr.
Bernstein. Breslau (?), 1823* (A part
of the *Hitopadesa*, containing the
introductory portion and two stories.
It could not be ascertained whether
the edition contains the text or not).

Gita Govinda: Jayadevae poetae indici drama
lyricum; textum ... recognovit
...interpretationem latinam/adiexit
Christianus Lassen. Bonn, 1836.
(Jayadeva's lyrical poem *Gitagovinda*,
text with Latin translation; the editor
calls it a lyrical drama).

De trecentis Canakyae poetae indici
sententiis/Johannes Klat. 1873.
(Text of a collection of Cāṇakyanīti
in Roman characters with Latin
translation).*

Nalodaya: Sanskritum Carmen Calidaso
adscriptum adscriptum.../edidit latina
interpretatione atque annotationibus
criticis/Ferdinand Benary. Berlin, 1830.
(A short Sanskrit poem ascribed to
Kālidāsa, text with Latin translation).

Philosophy

Gymnosophista: sive indicae philosophiae
documenta, vol. 1, fasc. 1.
Isvaracrishnae Sankhya-caricem
tenensis/Christian Lassen. Bonn, 1832.
(Text and Latin translation of
Īśvarakṛṣṇa's *Sāṅkhyakārikā*).

History & Geography

*Commentatio geographica atque historica de
Pentapotamia Indica*/Christian Lassen.

(Thesis: Geographical and historical
notes on Indian Punjab. Bonn, 1827.*

*Dissertatio de insula Taprobane veteribus
cognita*/Christian Lassen. Bonn 1842.
(Notes on the Island of Ceylon,
found in the works of Greek and
Indian authors).

*De rebus indiae quo modo in Arabum notitiam
venerit*/Johannes Gildemeister. Bonn.
(Thesis: On Indian matters as made
known by Arab writers).*

Astronomy & Astrology

Bhaskarae Acharyae Siddhanta Shiromani: sic
dicti operis pars tertia, Ganitadhiam,
sive astronomiam continens, latine
verit/Eduard Roeer. 1844.
(Latin translation of the Ganitadhyaya
and parts of Goladhyaya of
Bhāskarācārya's *Siddhantasiromani*).

*De astrologiae indicae 'Hora' appellatione
originibus*/Hermann Jacobi (Thesis:
Bonn, 1872 On the origins of Indian
astrological term *hora*).

Glossary & Lexicography

Sanskrit-Latin glossary/Franz Bopp. 1830.
Two more editions of 1847 and 1867
are known.*

De lexicographiae Sanskritae principiis/
Friedrich Stenzler. 1847 (On the origin
of Sanskrit Lexicography).*

Amarakosa/translated into Latin by Jean-
Francois Pons.
(Most probably never published; the
manuscript was deposited in the
Royal Library in Paris).*

Law

De jure Indorum criminali/Julius Oppert.
(A thesis on Indian criminal law. Not
much is known about this author and
the work, except he was a professor
and one of the pioneers in deciphering
the cuneiform script).*

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Juris criminalis veterum Indorum specimen/
Friedrich Stenzler. Breslau, 1842.
(Specimen of Criminal law of the
Ancient Indians).

Medicine

Susruta Ayurvedash. id est medicinae
systema a venerabili Dhanvantare
demonstratum a Susruta discipulo
compositum. Nunc primum ex
Sanskrita in Latinum sermonem/
vertit Francis Hessler.
3 vols. 1844-1850.

Buddhism

Dhammapadam: ex tribus codicibus
Hauniensibus palice edidit, Latine
vertit, excerpts ex commentario
palico, notisque illustravit/V. Fousböll.
Leipzig and London, 1855. (Pali
text and excerpts from the Pali
commentary *Dhammapadaṭṭhakhā* in
roman with Latin translation).

Bibliography

Bibliothecae Sanskritae: sive Recensus
librorum Sanskritorum hucusque
typis vel lapide ex scriptorum critice
specimen/ Johannes Gildsmeister.
Part 1. 1847. (Bibliography of all
Indological publications, brought out
till 1847).

Catalogus codicum manuscriptorum
Bibliothecae Regiae/ Jean-Francois
Pons. Paris, 1739. (Catalogue of 287
Indian manuscripts, out of which 250
are in Sanskrit collected from India by
the author and then deposited in the
Royal Library, Paris).*

Biographical Sketches of some the Orientalists writing in Latin

Biographical sketches of the renowned
Orientalists, who wrote in Latin are prepared
below (arranged in chronological order; their

works are described above in Bibliographic
Survey):

1. Jean Francois Pons (1698-1770)

A French Jesuit Missionary, who lived first
in Chandernagar where he studied Sanskrit
grammar with the help of Vopadeva's
Mughabodha and then in Karnataka, where he
studied Panini's grammar. The manuscripts,
along with the manuscripts of his own works
were deposited in the King's Library in Paris.

2. Ivan Filip Vesdin alias Paulinus a Sancto Bartholomae (1748-1806)

A Croat Roman Catholic monk, was one
among the first who noticed similarity
between Sanskrit and Latin.

3. Heinrich Roth (1620-1668)

A German Jesuit missionary. First lived in Goa
where he learnt Kannada, Persian and Urdu.
Later he went to Agra where he worked as
a doctor in the Mughal court, learnt Sanskrit
and studied Pāṇini's grammar. He was well
versed in Sanskrit literature and Indian
philosophy. Roth acquired such proficiency in
Sanskrit that he could discuss on philosophy
in the language with Indian scholars.

4. Abraham Hyacinthe Anquetil- Duperron (1731-1805)

A French orientalist born in Paris and
educated in Paris and Utrecht. Duperron
was a versatile polyglot, knowing Hebrew,
Greek, Latin, Arabic, Persian, Avesta, Pahlavi,
Sanskrit, etc. He lived in India for seven years
(1755-1761) where he studied Avesta and
Persian from Parsi Priests. He translated the
Zoroastrian sacred text Avesta into French,
most probably with the help of its Persian
translation published in 1771 which was the
first printed Zoroastrian work (Zend Avesta;
3 vols. IGCA Library possesses a copy of this
rare publication).

His Latin translation of fifty Upanishads,
from the Persian translation, *Sirr-e-Akbar*



of Prince Dara Siko (described above) was the first introduction of the Upanishads to Europe which earned warm tributes from the German philosopher Schopenhauer.

5. Bartholomaeus Ziegenbalg (1682-1719).

A German Protestant missionary who was one of the pioneers of European experts of Dravidian language and culture. He lived in Tranquebar, learnt Tamil methodically and founded a Tamil printing press. He thoroughly studied religion, customs and manners and the pantheon of the people of South India and wrote quite a few books on these subjects.

6. Michael Viggo Fausböll (1821-1908)

A Danish indologist and pioneer of the Pali studies in Europe. He was a professor of Sanskrit in Copenhagen. Besides his edition and translation of the *Dhammapada* Fausböll is more known for his edition of the Pali Jatakas with commentary, in roman characters (*The Jataka together with its commentary*, being Tales of the anterior births of Gotama Buddha. London 1877-1897).

7. August Wilhelm von Schlegel (1767-1845)

Born in Hannover Schlegel studied classical philology in Goettingen. He was introduced to Sanskrit studies in Paris by Franz Bopp. He was the first incumbent of the first chair of Indology in Germany in the University of Bonn, where he joined in 1818. In 1820 he started a journal under title *Indische Bibliothek*. He brought the Devnagari font of types, developed in Paris by The Asiatic Society in 1822, to Germany for the first time.

8. Franz Bopp (1791-1867)

Born in Mainz, Bopp first studied Arabic and Persian under Silvestre de Sacy in Paris and then learnt Sanskrit through the method of self-teaching by reading books particularly

the *Ramayana* himself. The credit of establishing the affinities among Sanskrit, Persian, Greek, Latin and German methodically and convincingly goes. Among many of his research works in this field, mention must be made of *Vergeleichende Grammatik des Sanskrit, Zend, Griechischen, Latinischen, Litauischen, Altslawischen, Gothischen, und Deutschen* (in 6 parts 1833-1852).

9. Peter von Bohlen (1796-1840)

Peter von Bohlen studied in Hamburg, Halle and Bonn. He learnt Hebrew, Arabic, Persian and of course under August Wilhelm von Schlegel and Franz Bopp. He became a professor in Königsberg. He believed that ancient Egypt was culturally influenced by ancient India.

10. Christian Lassen (1800-1876)

Born in Bergen in Norway, Lassen studied in Heidelberg and Bonn Universities. He was a student under August Wilhelm von Schlegel and while in Paris, became a friend of E. Burnouf, with whom he coauthored a book on the Pali language. He closely worked in many academic projects with von Schlegel. His contribution to Indological studies are great in quantity and quality.

11. Friedrich Rosen (1805-1837)

Born in Hannover, Rosen studied in Goettingen, Leipzig and Berlin. He studied Sanskrit with Franz Bopp. Besides Sanskrit and Latin, he mastered Arabic, Persian, Bengali and Hindustani. He was one of the most brilliant scholars among the European indologists. At the young age of 23, he became the chairman of the Oriental Languages of the University College of London. He was so well grounded in Arabic that he could translate the Algebra of Mohammed bin Musa, the oldest Arabic book on Mathematics into English and showed that the Arabs borrowed Algebra from the Indians.

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The notes appended to his edition with Latin translation of the first octave of the *Rgveda*, published posthumously, show the depth of his knowledge of the Vedic literature, his acquaintance with Sanskrit manuscripts and mastery over Latin which he handled with great facility. He died in 1837, in the prime of life, only at the age of 32.

12. Eduard Roer (1805-1866)

Born in Braunschwig, Johann Heinrich Roer studied Philosophy in Koenigsberg and became a professor in Berlin, where he studied Sanskrit with Franz Bopp. He came to Calcutta in 1839 and after two years was appointed Librarian of the Asiatic Society of Bengal. From 1847, he was editor of the *Bibliotheca Indica* series of the society. Among his many works mention may be made of the English translation of the *Vedantasara* and several Upanishads, text, Sankara's commentary and English translation and the *Bhtasaparccheda*.

13. Hermann Brockhaus (1806-1877)

Born in Amsterdam, Hermann Brockhaus studied oriental languages in Leipzig, Goettingen and Bonn. After working as an associate professor in Jena for two years he became a professor, in 1841, in the Leipzig University. One of his noted works was an edition of the *Kathasaritsagara* with German translation. He also studied Avesta and Persian, his two works in this area of scholarship are: 1) *Vendidad Sade* and 2) *Lieder des Hafiz* (songs of Hafiz, Persian text with the commentary of Sadi).

14. Friedrich Stenzler (1807-1877)

Born in Wolgast, Adolph Friedrich Stenzler studied Arabic and Persian in Greifswald and Sanskrit in Berlin under Franz Bopp. Besides his editions and Latin translations of Sanskrit classical poems and drama, Stenzler was well known for his Sanskrit grammar (*Elementarbuch der Sanskritsprache*) which ran into seventeen editions over a long period

from 1868 to 1980. He edited and translated the *Yajnavalkyasmṛti* with Vijnanesvara's commentary *Mitaksara*, and several Grhyasutras.

15. Adalbert Kuhn (1812-1881)

Born in Koenigsberg, Kuhn started learning Sanskrit when he was a student in a school. He specialized in the study of history, mythology and linguistics of the Indo-European people. He worked as the director of a boys high school throughout his career.

16. Johannes Gildmeister (1812-1890)

Born in Mecklenburg, Gildmeister learnt Hebrew, Latin and Sanskrit. He became a professor in the Bonn University, first as a professor of Sanskrit and then of Semitic studies. He revised Lassen's *Anthologia Sanscritica*. He was well known for writing a number of polemical pamphlets on various topics.

17. Albrecht Hoffer (1812-1883)

Born in Greifswald, Hoffer studied in Greifswald, Goettingen and Berlin. The areas of his specialization had been Sanskrit, Prakrit and Indo-European linguistics. He edited the journal *Zeitschrift fuer die Wissenschaft der Sprache*. His writings on the Vedic grammar and Prakrit language are important.

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