

BOOK - REVIEW

A Descriptive Catalogue of Sanskrit and Prakrit Manuscripts in the collection of the Asiatic Society of Bombay, compiled by H. D. Velankar, Second Edition, edited by V. M. Kulkarni and Devangana Desai, pp. xvi + 500, colour photographs 18; published by the Asiatic Society of Bombay, Mumbai, 1998. Rs. 1200.

Hari Damodar Velankar (1893-1967), long-time Professor of Sanskrit at Wilson College, Bombay, and the first Bhandarkar Professor of Sanskrit at the University of Bombay, made seminal contributions to Sanskrit metrics and manuscriptology. Notable among the catalogues he prepared for various manuscript collections in western India are *A Descriptive Catalogue of Saṅskṛta and Prākṛta Manuscripts in the Library of the Bombay Branch of the Royal Asiatic Society*, which appeared in four volumes between 1926 and 1930, and *A Descriptive Catalogue of the Sanskrit Manuscripts in the Icchārām Sūryarām Desai Collection in the Library of the University of Bombay*, Bombay 1953. Equally important is the *Jinaratnakośa: an Alphabetical Register of Jain Works and Authors, vol. I: Works*, Poona 1944, which is a catalogue of catalogues. These are indispensable works of reference for Indologists, but have been long out of print.

It is gratifying that the Asiatic Society of Bombay has now brought out the second

edition of their catalogue in a single volume with a slightly altered name under the editorship of Dr. V.M. Kulkarni and Dr. Devangana Desai, who enriched this edition with a valuable introduction and several reproductions of exquisite miniature paintings. In their Introduction, the editors give a brief life-sketch of Prof. Velankar and explain that the major source of these manuscripts were the collections made by Dr. Bhau Daji and Pandit Bhagavanlal Indrajī. They also highlight some of the important manuscripts in the collection and draw attention to the importance of some manuscripts for the art history.

The catalogue describes 2093 manuscripts, which are arranged subject-wise. The subjects are broadly divided, but with continuous pagination. Vol. I: Technical Literature; II: Hindu (Brahmanical) Literature; III: Jain Literature; IV: Vernacular Literature (Gujarati, Hindi, Marathi). These are followed by Appendix A, which describes 18 Buddhist manuscripts acquired from Nepal and Appendix B on the *Rasendramangala* of Nāgarjuna. There are indices of works, authors and authorities cited for vols. I and II, (pp. 360-379); of Jain authors and works for vols. III and IV (pp. 495-500).

For the readers of this journal, Volume I on technical literature should be of special interest. It encompasses linguistic science

(phonetics, philology, grammar, dictionary), literary science, medicine, astronomy and astrology, architecture and miscellaneous. Though the majority of the manuscripts in these sections are well known, there are some rare and interesting items. Thus among the medical manuscripts, there is the *Kṣemakautūhala of Kṣemaśarmā* (No. 170), "a manual of cookery based upon hygienic principles in twelve chapters, composed in 1548 A.D." On astronomy and astrology, the following rare works may be mentioned : the *Yantrādhyāya* of Nityānanda's *Sarvasiddhāntasāra* which deals with the astrolabe (No. 264); commentaries on Bhāskara's *Lilāvati* by Moṣadeva (273, 274) and Dhaneśvara (275); Lakṣmīdāsa's *Tattvacintāmaṇi*, written in A.D. 1500, on Bhāskara's *Siddhāntaśiromaṇi* (287); the commentaries on the *Sūryasiddhānta* by Caṇḍeśvara (293) and Madanapāla (294); Abhayacandra's *Ulluṅṭhavādīmukha-kīlaka* on practical astrology in Prakrit (299); the anonymous *Samjñā-nighaṅṭu*, a synonymic dictionary of technical terms in Jyotiḥśāstra (341); and so on.

Besides several copies (405-411) of the works of Sūtradhāra Maṇḍana who was in the employ of king Kumbhakarṇa of Mevād, the section on architecture contains a rare copy of Bhoja's *Samarāṅgaṇa-sūtradhāra* (413). Since the published text of this work (GOS 25, Baroda 1966) is based on four manuscripts only and is not quite satisfactory, this manuscript may provide better readings in some cases. In this section there are also twelve manuscripts by different authors

on the construction of sacrificial fire-pits (*kuṇḍa*). The *kuṇḍas* have to be constructed in diverse geometrical shapes but conforming to a given area. Therefore these manuals are important for the history of practical geometry in India but did not receive much scholarly attention (with two exceptions: Takao Hayashi, *Ritual Application of Mensuration Rules in India: An Edition of Gaṇeśa's Kuṇḍasiddhyudāhṛti* with Mathematical Commentary, *Bulletin of the National Museum of Ethnology, Osaka*, 1987, 12.1, pp. 199-224; R.P. Kulkarni, *Engineering Geometry of Yajña-Kuṇḍas and Yajña-Manḍapas*, Pune, (1998). Two manuscripts from the Miscellaneous section are worthy of notice: *Aśvaśāstra of Sukhānanda* (427) and the *Kodaṇḍamaṇḍana* of unknown authorship on archery in 22 chapters.

In the other volumes too there are manuscripts that are of interest to the history of science and technology. Thus among the sūtra works, besides the well known *Śulvasūtras* of Kātyāyana (Nos. 515, 516) and Mānava (No. 536), there is the *Mānava-Maitrāyaṇīya-Śulvasūtra* with the commentary by Śāṅkara, who must have lived after the first half of the 15th century.

Three manuscripts of this collection deserve special mention because they throw interesting light on the status of Sanskrit in the medieval period, refuting the assumptions that Sanskrit remained the preserve of Brahmins and that it suffered decline under Muslim rulers. Ms No. 59 is a commentary by Puñjarāja on Anubhūtiśvarūpa's *Sarasvatīprakriyā*, a

grammatical work. This Puñjarāja was a minister of Ghiyasuddin Khilji of Malwa (1469-1500). Likewise, Ms. 85 contains the *Śabdabhūṣaṇa* of Dānavijayopādhyāya, who wrote this work for the instruction of one Bade Miyan, son of Fatah Khan, of Gujarat. Finally, Nos. 273-274 have a commentary, written before 1473, on Bhāskara's *Līlāvātī* by one Moṣadeva, who calls himself a *hemakara* (goldsmith). The first two were composed under Muslim patronage and the third was written by a non-Brahmin of the artisan class.

It must be emphasized that this catalogue is not just a dry enumeration of manuscript titles. For each manuscript, the compiler first gives the details of its physical appearance, such as the size, script, material and the age; this is followed by a crisp account of the work and information about the author. There are copious cross references to other manuscript catalogues and printed literature. Long extracts are given if the manuscript is rare.

In the preface to the catalogue, Professor Velankar laid down the principles of manuscript cataloguing. In recent decades, the preparation of descriptive catalogues of Sanskrit manuscripts came to a virtual halt and what are produced now are indifferent hand-lists. Therefore, Velankar's principles are worth reproducing verbatim: "The author of a catalogue has (1) to study all that is said about a work under notice, and its author; (2) to note down additional points either conforming or disproving what is already said about them; (3) to give

a brief summary of the contents when a work is unknown or unpublished and to express an opinion, where possible, regarding its age and author and c.; (4) to prepare a list of authorities quoted by authors of known and unknown dates with a view to settle their relative dates; (5) to mention important editions of a work under notice and (6) to note down all important particulars about the Ms. itself." Needless to say that Velankar followed these salutary principles very scrupulously in the compilation of the present catalogue.

It is not generally realized that manuscript repositories are also repositories of pictorial art. They may often contain manuscripts with illustrations, illuminations or ornate calligraphy. Such manuscripts are valuable for the reconstruction of the Indian art history. The present manuscript collection is no exception. Indeed, this collection possesses some outstanding illustrated manuscripts. As the editors point out in their Introduction, the profusely illustrated manuscript of the *Āraṇyakaparvan* (no. 966), which was copied and illustrated in 1516 in the reign of Sikandar Lodi for one Bhānudāsa Chaudharī in Yoginīpura (i.e. present Delhi) is a very important document for the study of the pre-Mughal miniature paintings of the sixteenth century. Therefore, the renowned art-historians Karl Khandalavala and Moti Chandra devoted an entire monograph to the paintings of this manuscript (*An Illustrated Aranyaka Parvan in the Asiatic Society of Bombay*, Bombay 1974), where they declared that the discovery of this

dated illustrated manuscript was “an event of major importance for the history of Indian miniature painting.” Likewise, the twelfth century palm-leaf manuscript of the *Aṣṭasāhasrikā Prajñāramitā* exhibits beautiful calligraphy and has some exquisite miniatures. There are also three copies of the *Kalpasūtra*, illustrated in the western Indian style. Eighteen paintings from these and other manuscripts are reproduced in this second edition, making the catalogue a visual delight.

The authorities of the Asiatic society of Bombay and the editors deserve felicitations from Indologists and students of art history for the re-issue of this important catalogue in such an imaginative manner.

S.R. SARMA

Mapping an Empire : The Geographical construction of British India. 1765-1843, by Mathew H. Edney, University of Chicago Press. 1997, pp. 436, \$ 35.

The year the British ships first arrived in India (1608) is also the year the telescope was invented in Europe. This may be no more than a coincidence, but it does bring home an important point. Modern science grew hand in hand with the colonial enterprise. Science was needed by the British to reach India. Once in India, it was needed to know the coast and the land, to acquire and control territories, and to govern them in an economical and efficient manner. Science was the empire’s need. It was also the empire’s fetish.

Since the post-da Gama, post-Columbus Europe owed its prosperity to

science, it was able to support, sustain and appreciate science. Science was an individual’s passport to higher social status and a nation’s badge of honour. The academic agenda of science was so thoroughly entwined with the politico-economic that it was difficult to say where one ended and the other began.

Thus while Captain James Cook’s voyage to the Pacific to observe the 1769 transit of Venus across the disc of the sun was a genuine scientific expedition, his secret instructions took him to New Zealand and the east coast of Australia. He made two further voyages even though the transit was long over. The Anglo-French rivalry over India implicated the transit also. The Secretary of the Royal Society of London proudly reminded the (British) East India company that “The first Phenomenon of this kind ever taken notice of was observed about a century ago by an Englishman.....” and declared: The honor of this Nation seems particularly concerned is not yielding the palm to their Neighbours, and the Royal Society intends to exert all its strength and influence in order to have this observation made with the greatest accuracy... in various parts of the British Dominions.”

The colonial pursuit of science followed a pattern. The initial impetus was invariably utilitarian. But then science generated its own momentum which carried it forward. One must thus distinguish between the agenda of science and the practice of science as far as natural sciences were concerned. The science was colonial to the extent that its agenda was dictated by political considerations. But

the natural science that emerged was not tainted on that count. The compulsions of colonial science and romance of science found a happy meeting ground in India, especially in the mapping of India. The first modern, though patchy, map of India was prepared by D'Anville for the French East India Company, in 1752. It dealt primarily with the coastal areas for which data were supplied by the Jesuits. It is only when the British came to occupy inland territories that large-scale mapping of India could take place.

In their transition from trader to ruler, the British passed through the intermediary stage of a zamindar. In 1698, the Company purchased the small zamindari (that is the revenue and tax collecting rights) of three adjoining villages on lower Hugli in Bengal: Govindpur, Sutanati and Kalikata (contrary to popular belief, Kalikata and Kalighat were two distinct locations). The new town was named not after Sutanati where Job Charnock had landed eight years previously but after Kalikata, because the name sounded like Calicut, already well-known in Europe through Portuguese trade. For further developments, the Company had to wait for the strong Bengal Nawabdom to run its course. In 1757, after the battle of Plassey, the Company acquired the district of 24 Parganas and in 1760 practically the whole of lower Bengal, comprising Chittagong, Burdwan and Midnapore. Finally, in 1765, the Company officially became the Diwan (or revenue collector) for Bengal, Bihar and Orissa on behalf of the Mughal emperor in Delhi. In 1765 itself, Major James Rennell was appointed the Surveyor of Bengal, with

Lord Clive writing to London : "I am preparing plans in abundance for you. You shall have very exact charts of Bengal, Bihar and Orissa, and of the Mogul Empire as far as Delhi at least. A map of the Ganges likewise, and the rivers of consequence".

The history of survey of India is also the history of the British entrenchment in India. In 1799, Tipu Sultan of Mysore was annihilated. Just as Plassey had produced its Rennell, Seringapatnam produced its Lambton, only more quickly. The Company's territories in south India now extended from the east coast to the west. Major William Lambton suggested a trigonometric survey of the peninsula and the measurement of an arc of the meridian. In 1817-18, with the crushing of the Mahrattas, the British grip on India became unassailable. As if in commemoration, the trigonometric survey was extended to cover the whole of India, and even beyond. Colonel George Everest joined as Lambton's assistant in 1818, succeeded him in 1823 and finally retired in 1843. That the highest mountain peak in the world should be named after him is a befitting tribute to Everest's contribution to geography and geodesy.

The book covers the period from the appointment of Rennell to the retirement of Everest, describing the cartographic developments in all their complexity. The author refers to a famous satire where the geographers of an empire construct a map which is the same size as the empire itself. The book is a verbal counterpart of that to an extent. It is excruciatingly detailed. An authoritative reference for an informed

reader, it can be of use to lay persons only if they have the time and patience to sift through.

The first chapter discusses the ideological and practical aspects of the British mapping of India in a larger context. The scientific mapping of British India was seen as a metaphor for rational and ordered management of the state itself. In the following nine chapters, grouped into four parts, Edney examines the various aspects of the trigonometrical and related surveys, often in heavy language: 'Buchanan presents perhaps the paradigmatic instance of the failure of the rhetorically infallible sight' (p.79).

Edney makes the valid point that the utilitarian agenda of the colonial science in India did not necessarily mean that the scientific work done in India was of a lower quality than that in Europe, although in this respect he does not seem to be fully aware of the historical research on the subject published in India. Three hundred pages of the main body of the book are followed by a hundred pages of notes and references, giving the work a solid and dependable look.

The author is probably right in saying that the trigonometrical survey of India "served at the time to legitimate British rule". Certainly the period of the glory of the empire was the same as that of the survey. But to see the weaknesses of the survey, as identified now, as metaphor for the inherent weakness of the empire is rather farfetched.

The book is based on the voluminous records of the East India Company preserved by the British Library London

in its Oriental and India Office Collection. Supplementary input comes from the private papers of the then administrators. The view here, thus, is from the top. Not surprisingly then, Indians hardly figure in the book. Radhanath Sickdhar (his spellings) and Syed Mir Mohsin, peripheral in the colonial machinery but important from a native point of view, barely find a mention.

Could such a comprehensive book have been written from India? The answer, unfortunately, is no. There is a symbiotic relationship between scholarship and source material. Existing scholarship cannot flourish if source material is not at hand. The easy availability of source material will in course of time attract talent that would make use of the material.

India is, sadly, acutely deficient in primary and secondary reference material pertaining to its own history. In a knee-jerk reaction to the 1962 Chinese war, R. H. Phillimore's monumental Historical Records of Survey of India was withdrawn from circulation, though it is freely available to scholars (and Chinese officials) outside India. The only losers are the Indian researchers. Also, because of the steady decline in rupee coupled with the increase in dollar prices of books and journals, Indian libraries remain largely ignorant of the current scholarship the world over. Just as old art works are being returned to the country of their origin, there should be a UNESCO-supported project to make available to the former colonies, copies of records pertaining to their history and governance.

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