

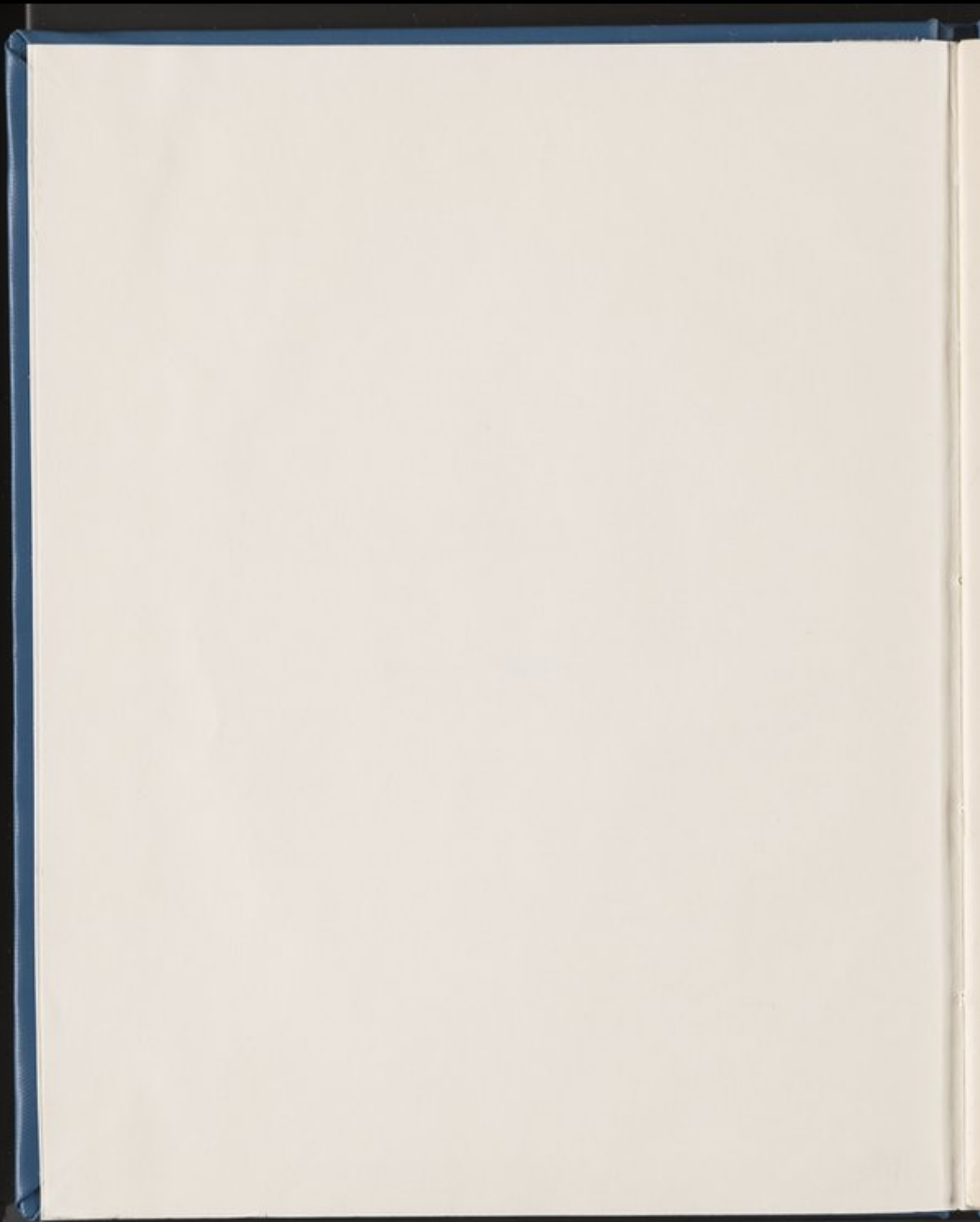
SIZED

Dr. Jerome S. Coles  
Science Library



**NEW YORK UNIVERSITY**  
Elmer Holmes Bobst  
Library





CENSUS OF THE EXACT SCIENCES IN SANSKRIT

NEW YORK UNIVERSITY

LIBRARY

LIBRARY

MEMOIRS OF THE  
AMERICAN PHILOSOPHICAL SOCIETY  
*Held at Philadelphia*  
*For Promoting Useful Knowledge*  
Volume 81

**CENSUS OF THE EXACT SCIENCES**  
**IN SANSKRIT**

SERIES A, VOLUME 1

EDwin

DAVID/PINGREE

*Oriental Institute, University of Chicago*

N. Y. U. LIBRARIES

AMERICAN PHILOSOPHICAL SOCIETY  
INDEPENDENCE SQUARE • PHILADELPHIA

1970

OVERSIZE

Science

Q

II

P58

V.81

c. 1

Copyright © 1970 by The American Philosophical Society

Library of Congress Catalog  
Card Number 70-115882

61113 5673

PHILOSOPHY - PERIODICALS



## PREFACE

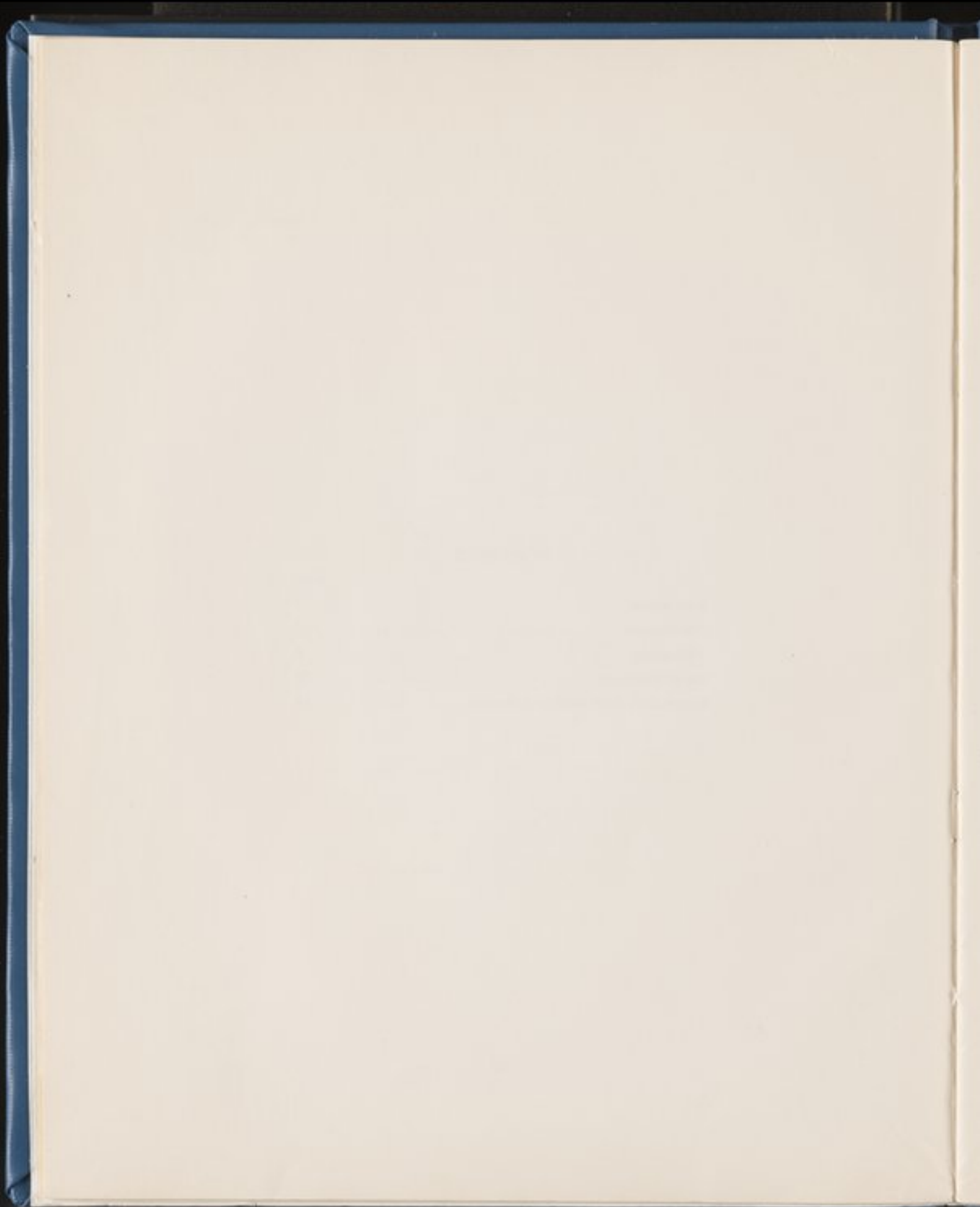
The author in this volume and in its hoped for successors summarizes the material relating to jyotiḥśāstra that he has been collecting since 1955 in various libraries in America, Europe, and India. He is indebted to the authorities of these institutions, and in particular to those of Widener Library at Harvard; the David E. Smith Collection at Columbia; the Library of the University of Pennsylvania; the Library of the University of Chicago; the British Museum and the India Office Library in London; the Bodleian Library; the Bibliothèque Nationale in Paris; the Staatsbibliothek in Berlin; the Universitätsbibliothek in Leipzig; the Biblioteca Nazionale in Firenze; the Bhandarkar Oriental Research Institute, the Deccan College, and the Ānandāśrama in Poona; the Asiatic Society and the University of Bombay in Bombay; the Oriental Institute in Baroda; the Gujarat Vidyā Sabhā, the L.D. Institute, and the B.J. Institute in Ahmadabad; the Scindia Oriental Research Institute in Ujjain; the Viśveśvarānanda Vedic Re-

search Institute in Hoshiarpur; the Sarasvatī Bhavana in Benares; the Vira Pustakālaya and Kaiser Shamsheer Rana in Kathmandu; the Asiatic Society and Sanskrit College in Calcutta; the Oriental Institute in Mysore; the Government Oriental Manuscripts Library in Madras; and the Sarasvatī Mahal Library in Tanjore. He must also express his profound gratitude to the American Philosophical Society for a grant that enabled him to visit India in the summer of 1965 and to investigate many manuscript collections at that time. But the individual to whom this cataloguer owes most is India's foremost student of Sanskrit manuscripts, Professor V. Raghavan of the University of Madras, who most generously made available his numerous handwritten catalogues of Indian and European collections. May this work prove as useful to the students of jyotiḥśāstra as Raghavan's *New Catalogus Catalogorum* is to the students of Sanskrit literature in general.

Faint, illegible text, possibly bleed-through from the reverse side of the page.

## CONTENTS

	PAGE
Introduction .....	1
Abbreviations .....	2
Bibliography .....	4
List of Catalogues .....	26
Census of the Exact Sciences in Sanskrit .....	33



## INTRODUCTION

This is the first installment of a projected *Census of the Exact Sciences in Sanskrit* (hereafter to be referred to as *CESS*), which will provide all available bibliographical information concerning works in  *jyotiḥśāstra*  and related fields and biographical information concerning their authors.  *Jyotiḥśāstra*  is traditionally divided into three  *skandhas*  or branches:  *horā*  or genethiology and other forms of horoscopic astrology,  *gaṇita*  or mathematics and mathematical astronomy, and  *saṃhitā*  or divination. The related fields to which attention is paid in  *CESS*  are cosmology and geography (largely of the Jains) and those aspects of  *dharmasāstra*  that involve the determination of the proper times for the performance of ritual acts. It is intended to include all of the works and all of the authors in these subjects that can be identified.

*CESS*  will consist of two series: Series A will contain articles on the authors arranged in the order of the Sanskrit alphabet, and Series B articles on the books (mainly in Sanskrit, though some non-Sanskritic Indian material is included) arranged in the same manner. A concluding volume will contain tables of astronomical parameters, genealogical stemmata of authors and scribes, and indices of scribes and of proper names. The core of  *CESS*  is formed by the entries in the catalogues listed on pp. 26-32 of this volume, supplemented by printed texts (noted in the articles on the relevant authors and books) and the entries in the bibliography on pp. 4-25 of this volume. As new catalogues of manuscripts, editions of texts, and items for the bibliography are constantly appearing, and as material unwittingly omitted from the present lists will undoubtedly turn up, supplements will be included in the subsequent volumes of  *CESS* . The index in the final volume will, of course, facilitate reference to these supplements.

The article on each author will first give as much information as is available on his date, ancestry, locale, religious affiliation, and social position; it will then list his works relevant to  *jyotiḥśāstra*  and, under each work, list its commentators, its manuscripts and editions, and any discussions of it; finally, there will be given a table of its contents and those passages in it which inform us about the author. In the case of  *dharmasāstra*  works dealing with the relationship of astrology to proper human behavior and in the case of texts (mainly Jaina) on cosmology the references are not intended to be

complete; it is felt that it is sufficient, by and large, to draw the reader's attention to this extensive material that both depends upon and has influenced  *jyotiḥśāstra*  proper. The articles on books will either consist of a simple reference to the author, if he is known (he can then be looked up in Series A); or, if he is not known, there will be a full discussion of the date and locale of the work, a table of its contents, and a list of manuscripts, editions, and studies. All references to items in the bibliography, it should be noted, are abbreviated to the name of the author (the first and middle names are represented by initials) followed by the year of publication in square brackets; if the author published more than one item in any particular year, the first in the bibliography will be denoted by an  *a*  following the date, the second by a  *b* , and so on. If a bibliographical item is to be found in one of the supplementary lists, the series letter and volume number (e.g., A 3) in which that supplementary list is found will be prefixed to the code.

*CESS A 1*  contains in their initial form the list of abbreviations of journals and series, the bibliography, the list of manuscript catalogues, and the articles concerning authors whose names begin with  *a, ā, i, ī, u, ū, ṛ, ṝ, e, ai, o, and au* . It is hoped that Series A can be completed in four more volumes, and Series B in a total of another five or six volumes. There will be an interval of approximately one year between the appearances of successive volumes.

There have been two previous attempts to collect information regarding Indian astronomers and astrologers (S. Dvivedin [1892] and S. B. Dikshit [1896]), and one to gather the references to manuscripts (S. N. Sen [1966]). However, none of these approaches the coverage of the present work or, it is to be hoped, its accuracy and usefulness. That usefulness should lie in providing a preliminary exploration and organization of the vast mass of Sanskrit and Sanskrit-influenced literature devoted to the exact sciences (including astronomy, mathematics, astrology, and divination), and in detailing under each item not only what preceding work has been done, but what manuscript material is known to be available for future investigations. It is hoped that the publication of  *CESS*  will stimulate future editions and studies of  *jyotiḥśāstra* .

## ABBREVIATIONS OF JOURNALS AND SERIALS

- AA—*Artibus Asiae*  
 AAWB—*Abhandlungen der Akademie der Wissenschaften zu Berlin*  
 ABORI—*Annals of the Bhandarkar Oriental Research Institute*  
 AE—*Ancient Egypt*  
 AGM—*Abhandlungen zur Geschichte der Mathematik*  
 AHES—*Archive for History of Exact Sciences*  
 AIHS—*Archives internationales d'histoire des sciences*  
 AJ—*Astronomisches Jahrbuch*  
 A(K)GWG—*Abhandlungen der (Königlich) Gesellschaft der Wissenschaften zu Göttingen*  
 ALS—*Adyar Library Series*  
 AMM—*American Mathematical Monthly*  
 AMP—*Archiv der Mathematik und Physik*  
 AMSHU—*Abhandlungen aus dem Mathematischen Seminar der Hamburgischen Universität*  
 AO—*Acta Orientalia*  
 AP—*Aryan Path*  
 AR—*Asiatic(k) Researches (continues as JAS Bengal)*  
 ARASI—*Annual Report of the Archaeological Survey of India Archeion*  
 Arch Or—*Archiv Orientalni*  
 Arch SS—*Archivio di storia della scienza*  
 A Rel.—*Archiv für Religionswissenschaft*  
 AS—*Annals of Science*  
 ASINIS—*Archaeological Survey of India, New Imperial Series*  
 ASVOI—*Annals of the Sri Venkatesvara Research Institute (continues as JSVOI)*  
 AUS—*Allahabad University Studies*  
 BARB—*Bulletin de l'Académie royale de Belgique*  
 BB—*Bullettino di bibliografia di storia delle scienze matematiche e fisiche*  
 BCMS—*Bulletin of the Calcutta Mathematical Society*  
 BGOML Madras—*Bulletin of the Government Oriental Manuscripts Library Madras*  
 BDCRI—*Bulletin of the Deccan College Research Institute*  
 Bhrati  
 Bhāratīya Vidyā  
 BI—*Bibliotheca Indica*  
 BIFAO—*Bulletin de l'Institut Français d'Archéologie Orientale*  
 BISR—*Beiträge zur indischen Sprachwissenschaft und Religionsgeschichte*  
 BM—*Bibliotheca Mathematica*  
 BMAUA—*Bulletin of the Mathematical Association of the University of Allahabad*  
 BMPG—*Bulletin of the Museum and Picture Gallery, Baroda*  
 BNISI—*Bulletin of the National Institute of Sciences of India*  
 BO—*Bibliotheca Orientalis*  
 BOS—*Bonner Orientalistische Studien*  
 Brahmavidyā  
 BSM—*Bulletin de sciences mathématiques*  
 BSMF—*Bulletin de la Société Mathématique de France*  
 BSO(A)S—*Bulletin of the School of Oriental (and African) Studies*  
 BSS—*Benares Sanskrit Series*  
 BVKSGWL—*Berichte über die Verhandlungen der Königlich Sächsischen Gesellschaft der Wissenschaften zu Leipzig*  
 Centaurus  
 CHM—*Cahiers d'histoire mondiale*  
 CIH—*Corpus Inscriptionum Indicarum*  
 COJ—*Calcutta Oriental Journal*  
 CR—*Calcutta Review*  
 CRHSAS—*Comptes rendus hebdomadaires des séances de l'Académie des Sciences*  
 CSRSGR—*Commentationes Societatis Regiae Scientiarum Göttingensis Recentiores*  
 DCMS—*Deccan College Monograph Series*  
 EI—*Epigraphia Indica*  
 ER—*Edinburgh Review*  
 EUA—*Enciclopedia Universale dell'Arte*  
 EW—*East and West*  
 Ganita  
 GOS—*Gaekwad Oriental Series*  
 GOS (Bombay)—*Government Oriental Series*  
 Grundriss—*Grundriss der Indo-Arischen Philologie und Altertumskunde*  
 Hindū Vīsvavidyālaya Nēpālā Rājya Saṅskṛta Granthamālā  
 HOS—*Harvard Oriental Series*  
 HR—*Hindustan Review*  
 HRel—*History of Religion*  
 HSS—*Haridas Sanskrit Series*  
 IA—*Indian Antiquary*  
 IC—*Indian Culture*  
 IHQ—*Indian Historical Quarterly*  
 IJ—*Indo-Iranian Journal*  
 IIQF—*Indo-Iranische Quellen und Forschungen*  
 IJHS—*Indian Journal of the History of Science*  
 IMI—*Istoriko-matematičeskie issledovānija*  
 IPSS—*Indian Positive Sciences Series*  
 IS—*Indische Studien*  
 Isia  
 Islam C—*Islamic Culture*  
 ISPP—*Indian Studies Past and Present*  
 IT—*Indian Thought*  
 JA—*Journal Asiatique*  
 JAHRS—*Journal of the Andhra Historical Research Society*  
 Jaina Ant.—*Jaina Antiquary*  
 JAOS—*Journal of the American Oriental Society*  
 JARS—*Journal of the Assam Research Society*  
 JAS—*Journal of the Asiatic Society*  
 JAS Bengal—*Journal of the Asiatic Society of Bengal (continues as J(R)ASB/L and J(R)ASB/S)*  
 JAS Bombay—*Journal of the Asiatic Society of Bombay (continues as JBRAS)*  
 JAU—*Journal of the Annamalai University*  
 JBA—*Journal of the British Astronomical Association*  
 JBRAS—*Journal of the Bombay Branch of the Royal Asiatic Society (continues as JAS Bombay)*  
 JB(O)RS—*Journal of the Bihar (and Orissa) Research Society*  
 JDHC—*Journal of Deccan History and Culture*  
 JDL/UC—*Journal of the Department of Letters, University of Calcutta*  
 JDMV—*Jahresbericht der Deutschen Mathematiker-Vereinigung*  
 JDS/UC—*Journal of the Department of Science, University of Calcutta*  
 JGRI—*Journal of the Ganganatha Jha Research Institute*  
 JGRS—*Journal of the Gujarat Research Society*  
 JIBS—*Journal of Indian and Buddhist Studies*  
 JIH—*Journal of Indian History*  
 JIMS—*Journal of the Indian Mathematical Society*  
 JIMS/NQ—*Journal of the Indian Mathematical Society, Notes and Questions*  
 JISOA—*Journal of the Indian Society of Oriental Art*  
 JIG—*Jivārāma Jaina Granthamālā*  
 IKHRS—*The Journal of the Kalinga Historical Research Society*  
 JMN—*Jurnal Ministerstva Narodnogo Prosveteniā*  
 JMU—*Half-yearly Journal of the Mysore University*  
 IOI Baroda—*Journal of the Oriental Institute, Baroda*  
 IOR Madras—*Journal of Oriental Research, Madras*  
 IOS—*Journal of Oriental Studies (Swadhyaya Mandal)*  
 JPUHS—*Journal of the Punjab University Historical Society*  
 JRAS—*Journal of the Royal Asiatic Society*  
 J(R)ASB/L—*Journal of the (Royal) Asiatic Society of Bengal, Letters (continues as JAS)*  
 J(R)ASB/S—*Journal of the (Royal) Asiatic Society of Bengal, Science (continues as JAS)*  
 JS—*Journal des savants*

- JSGYC—*Jahresbericht der Schlesische Gesellschaft für Vaterländische Cultur*  
 JSVOI—*Journal of the Sri Venkatesvara Oriental Institute*  
 JTSML—*Journal of the Tanjore Sarasvati Mahal Library*  
 JUB—*Journal of the University of Bombay*  
 JUG—*Journal of the University of Gauhati*  
 JUP—*Journal of the University of Poona*  
 JUPHS—*Journal of the Uttar Pradesh Historical Society (formerly Journal of the United Provinces Historical Society)*  
 JVSSM—*Jaina Vividha Sāhitya Śāstra Mālā*  
 JWCJ—*Journal of the Warburg and Courtauld Institutes*  
 JWH—*Journal of World History*  
 KSS—*Kāśī Sanskrit Series*  
 LG—*Laghu Granthamālā*  
 Lucifer  
 Madras GOS—*Madras Government Oriental Series*  
 MAIB—*Mémoires présentés par divers savants à l'Académie des Inscriptions et Belles-Lettres de l'Institut de France*  
 MARS—*Mémoires de l'Académie Royale des Sciences. Depuis 1666 jusqu'à 1699*  
 MASB—*Memoirs of the Asiatic Society of Bengal*  
 MASI—*Memoirs of the Archaeological Survey of India*  
 Mathematica  
 Mathesis  
 MCBE—*Monatliche Correspondenz zur Beförderung der Erd- und Himmelskunde*  
 Medhā—*Journal of the Sanskrit University, Rāyapura*  
 MGMNT—*Mitteilungen zur Geschichte der Medizin, der Naturwissenschaften, und der Technik*  
 MHARS—*Mémoires. Histoire de l'Académie Royale des Sciences*  
 MM—*Master Manuscripts*  
 MPAWB—*Monatsberichte der Preussischen Akademie der Wissenschaften zu Berlin*  
 MR—*Modern Review*  
 MS—*The Mathematics Student*  
 MSS—*Mysore Sanskrit Series*  
 NAM—*Nouvelles annales de mathématiques*  
 NIA—*New Indian Antiquary*  
 NNMRP—*The Nava-Nālandā-Mahāvihāra Publication*  
 NO—*Novy Orient*  
 NPP—*Nāgari Pracāriṇī Patrikā*  
 NUJ—*Nagpur University Journal*  
 OE—*Oriens Extremus*  
 OH—*Our Heritage*  
 OHRJ—*Orissa Historical Research Journal*  
 OLZ—*Orientalistische Literaturzeitung*  
 OM—*Osterreichische Mittelschule*  
 Osiris  
 PAIOC—*Proceedings of the All-India Oriental Congress*  
 The Pandit  
 The Pandit (Jaipur)  
 PAOS—*Proceedings of the American Oriental Society*  
 PAPS—*Proceedings of the American Philosophical Society*  
 PBMS—*Proceedings of the Benares Mathematical Society*  
 PhM—*Philosophical Magazine*  
 PIHC—*Proceedings of the Indian History Congress*  
 PKG—*Prācyavidyāsāhodhanīyukannāḍagrānṭhamālā*  
 PM—*Periodico di matematiche*  
 PO—*Poona Orientalist*  
 POS—*Poona Oriental Series*  
 PRASB—*Proceedings of the Royal Asiatic Society of Bengal*  
 PTRSL—*Philosophical Transactions of the Royal Society of London*  
 PWSBT—*Princess of Wales Sarasvati Bhavana Texts (continues as SBG)*  
 QJMS—*Quarterly Journal of the Mythic Society*  
 QST—*Quellen und Studien zur Geschichte der Mathematik, Astronomie und Physik*  
 RGSPA—*Revue générale des sciences pures et appliquées*  
 ROC—*Revue de l'orient chrétien*  
 RPG—*Rājasthāna Purāṇa Granthamālā*  
 RQS—*Revue des questions scientifiques*  
 RSMEP—*Rajwade Sanshodhan Mandal's English Publications*  
 RSS—*Ravivarma Sanskrit Series*  
 Samsodhaka  
 Sāstriya Granthamālā Nāgāpura  
 SAWB—*Sitzungsberichte der Akademie der Wissenschaften zu Berlin*  
 SBAW—*Sitzungsberichte der Bayerischen Akademie der Wissenschaften*  
 SBG—*Sarasvati Bhavana Granthamālā*  
 SBH—*Sacred Books of the Hindus*  
 SBS—*Sarasvati Bhavana Studies*  
 SBW—*Studien der Bibliothek Warburg (continues as SWI)*  
 SC—*Science and Culture*  
 Science  
 Scientia  
 SG—*Sampūrṇānanda Granthamālā*  
 SGVPB—*Shree Gauthami Vidya Peeth Bulletin*  
 SHAW—*Sitzungsberichte der Heidelberger Akademie der Wissenschaften*  
 SIFI—*Studi italiani di filologia indo-iranica*  
 SJS—*Singhi Jain Series*  
 SKBGW—*Sitzungsberichte der Königl. Böhmischen Gesellschaft der Wissenschaften*  
 SM—*Scripta Mathematica*  
 SPAW—*Sitzungsberichte der Preussischen Akademie der Wissenschaften zu Berlin*  
 SRS—*Satyā Rishi Series*  
 SWI—*Studies of the Warburg Institute*  
 TAPS—*Transactions of the American Philosophical Society*  
 TLMS—*Transactions of the Literary Society of Madras*  
 TRAS—*Transactions of the Royal Asiatic Society*  
 TRSE—*Transactions of the Royal Society of Edinburgh*  
 TSS—*Trivandrum Sanskrit Series*  
 UB—*Uttara Bharati*  
 VGM—*Virasevāmandira Grantha Mālā*  
 VII—*Vishveshvaranand Indological Journal*  
 VIPS—*Vishveshvaranand Indological Paper Series*  
 VIS—*Vishveshvaranand Indological Series*  
 VNGZ—*Vierteljahrsschrift der Naturforschenden Gesellschaft in Zürich*  
 VSM—*Vidarbha Samsodhana Maṇḍala*  
 VSS—*Vizianagram Sanskrit Series*  
 WZKM—*Wiener Zeitschrift für die Kunde des Morgenlandes*  
 YASB—*Yearbook of the Asiatic Society of Bengal*  
 ZDMG—*Zeitschrift der Deutschen Morgenländischen Gesellschaft*  
 ZII—*Zeitschrift für Indologie und Iranistik*  
 ZMNU—*Zeitschrift für mathematischen und naturwissenschaftlichen Unterricht*  
 ZMP—*Zeitschrift für Mathematik und Physik*

## BIBLIOGRAPHY

- Abbott, Nabia [1937]. "Indian Astrolabe Makers," *Islam C* 11, 1937, 144-146.
- Abhyankar, K. V. [1944]. "The Date and Time of the Bhārata War: a New Approach on Astronomical Considerations," *ABORI* 25, 1944, 116-136.
- [1946]. "The Precession of the Equinoxes and its Discovery in India," *Acharya Dhruva Smaraka Grantha*, Ahmadabad 1946, vol. 3, pp. 155-164.
- [1947a]. "Omission and Repetition of Tithis or Lunar Days," *ABORI* 28, 1947, 96-111.
- [1947b]. "The Indian Origin of the Week-days," *PO* 12, 1947, 62-68.
- [1962]. "Kṣayamāsa and Performance of Religious Rites in It," *ABORI* 43, 1962, 159-162.
- Acharya, B. N. [1954]. "Reconciliation of Contradictory Statements in the Works of, and Regarding Practical and Applied Astrology (Phaladesia)," *JUB* 23, 2 (*Arts* 29), 1954, 92-97.
- [1957]. "The Philosophy of Jyotiṣa-śāstra," *PAIOC (Summaries of Papers)* 19, 1957, 141.
- Acharya, P. [1962]. "Note on the Navagraha Slab in the Temples of Orissa," *OHR* 11, 1962, 67-72.
- Acharya, P. K. [1926]. "Hindu System of Measurement," *AUS* 2, 1926, 43-77.
- [1928]. "Determination of Cardinal Points by Means of a Gnomon," *PAIOC* 5, 1, 1928, 414-427.
- Agashe, V. T. [1920/21]. "The Two Robins," *ABORI* 2, 1920-21, 91-96.
- Agrawala, Rama Chandra [1952]. "A Study of Weights and Measures as Depicted in the Kharoshthi Documents from Chinese Turkestan," *JBS* 38, 1952, 359-368.
- Agrawala, V. S. [1957/58]. "A Further Reference to Pussamāyava," *JOI Baroda* 7, 1957-58, 24.
- Aiyangar, T. V. Srinivasa. [1929]. "The Present Kaliyuga," *JOR Madras* 3, 1929, 225-230.
- Aiyar, B. V. Kameśvara (=Ayyar). [1919]. "The Lunar Zodiac in the Brāhmanas," *JA* 48, 1919, 95-97.
- [1920/23]. "The Solar Signs in Indian Literature," *OJMS* 11, 1920-21, 267-279 and 412-526; 12, 1921-22, 67-89; and 13, 1922-23, 511-516 and 614-617.
- [1921/22]. "The Age of the Brāhmanas," *OJMS* 12, 1921-22, 171-193; 223-249; and 357-366.
- Aiyar, C. A. Subramania. See C. S. Patel and C. A. S. Aiyar [1957].
- Aiyar, P. V. Seshu. [1910]. "A Historical Note on Indeterminate Equations," *JIMS* 2, 1910, 216-219.
- Aiyar, T. V. Vedamurthi. See C. T. Rajagopal and T. V. V. Aiyar [1951] and [1952].
- Aiyer, Velandai Gopala. [1901]. *The Chronology of Ancient India*, Madras 1901.
- Ali, S. M. [1965]. "Geography in Ancient India," *BNISI* 21, 1965, 258-280.
- [1966]. *The Geography of the Puranas*, New Delhi 1966.
- Alsdorf, Ludwig. [1938]. "Zur Geschichte der Jaina-Kosmographie und Mythologie," *ZDMG* 92, 1938, 464-493.
- [1947]. "Further Contributions to the History of Jain Cosmography and Mythology," *NJA* 9, 1947, 105-128.
- Annandale, Nelson. [1905/07]. "Indian Weighing-beams," *MASB* 1, 1905-07, suppl. iv-v.
- [1918]. "A Bismar Weighing-beam from the Darjeeling District," *JAS Bengal*, NS 14, 1918, 243-244.
- Anonymous. [1772]. "Sur l'astronomie des Indiens," *MHARS*, 1772, pt. 2, 93-112.
- [1834]. "Professor Schlegel's Enigma. Mode of Expressing Numerals in the Sanskrit and Tibetan Languages," *JAS Bengal* 3, 1, 1834, 1-8.
- [1844]. "The Astronomy of the Hindus," *CR* 1, 1844, 257-290.
- [1850]. "The Oriental Astronomer," *CR* 13, 1850, 65-85.
- [1914/15a]. "The Date of the Bharata War and Antiquity of Indian Civilization," *OJMS* 5, 1914-15, 115-120.
- [1914/15b]. "The Sankranti Festival," *OJMS* 5, 1914-15, 121.
- Apte, G. S. [1934]. "Our Vedic and Modern Calendar," *Ojha Commemoration Volume*, Allahabad 1934 (in Hindi).
- Apte, R. N. [1925/26]. "Some Points Connected with the Constructive Geometry of the Vedic Altars," *ABORI* 7, 1925-26, 1-16.
- Athavale, V. B. [1946/47a]. "The Co-ordination of Bhārata Events," *JGJRI* 4, 1946-47, 125-158.
- [1946/47b]. "Date of the Kuru War," *JGJRI* 4, 1946-47, 229-233.
- [1947]. "A Summary of the Research Work Done with Regard to the Chronology and Geography of the Events in the Life History of Shri Kṛṣṇa and the Pāṇḍava Brothers," *PO* 12, 1947, 34-39.
- Atle, Narayan Sastri. [1943]. "Bhūpālvalabha," *NPP* 47, 1943, 245-254.
- Aufrecht, Theodor. [1891]. "Ueber die Praudhamanoramā von Divākara," *ZDMG* 45, 1891, 303-304.
- Ayachit, S. M. [1965]. "Mahādeva Dīkṣita Somayājīn and Hiranyakeśi-Sikhā," *VSM*, 1965, 116-137.
- Ayer, R. Krishnamurthy. [1951]. "Ancient and Modern Astronomy," *SGVPPB* 2, 1951, 7-9.
- Ayer, V. A. K. [1946]. *Everyday Astrology*, Bombay 1946.
- Ayyangar, A. A. Krishnaswami. [1923/24a]. "The Hindu Sine-Table," *JIMS* 15, 1923-24, 121-126.
- [1923/24b]. "A Classical Indian Puzzle-Problem," *JIMS* 15, 1923-24, 214-223.
- [1925/26]. "The Mathematics of Aryabhata," *OJMS* 16, 1925-26, 158-179.
- [1927/29]. "The Hindu Arabic Numerals," *OJMS* 18, 1927-28, 256-267; and 19, 1928-29, 29-40 and 115-133.
- [1929/30a]. "Bhaskara and Samśrīta Kuttaka," *JIMS/NO* 18, 1929-30, 1-7.
- [1929/30b]. "New Proofs of Old Theorems," *JIMS/NO* 18, 1929-30, 151-153.
- [1929/30c]. "New Light on Bhaskara's Chakravala or Cyclic Method of Solving Indeterminate Equations of the Second Degree in Two Variables," *JIMS/NO* 18, 1929-30, 225-248.
- [1933]. "Some Glimpses of Ancient Hindu Mathematics," *MS* 1, 1933, 1-18.
- [1939]. "The Bakshālī Manuscript," *MS* 7, 1939, 1-16.
- [1945]. "Peeps into India's Mathematical Past," *JMU*, NS Arts 5, 1945, 101-115.
- [1950]. "Remarks on Bhaskara's Approximation to the Sine of an Angle," *MS* 18, 1950, 12.
- [1952]. "Indian Magic Squares," *MS* 20, 1952, 166. Reprinted in *SM* 20, 1954, 202.
- Bag, Amulya Kumar. [1966a]. "Binomial Theorem in Ancient India," *JHS* 1, 1966, 68-74.
- [1966b]. "Trigonometrical Series in the *Karṣapād-dhāt* and the Probable Date of the Text," *JHS* 1, 1966, 98-106.
- Bailly, Jean Sylvain. [1777]. *Lettres sur l'origine des sciences*, 2 vols., Paris 1777.
- [1787]. *Traité de l'astronomie indienne et orientale*, Paris 1787.
- Bakhmutskii, E. Ia. [1960]. "Stepennye rādy dīā sin θ i cos θ v rabotakh Indīskikh matematikov XV-XVIII vv.," *IMI* 13, 1960, 325-334.
- [1961]. *Beskonечnye rādy v rabotakh matematikov iujnoi Indii v XV-XVIII vv*, Moskva 1961.
- Balagangadharan, K. [1947]. "A Consolidated List of Hindu Mathematical Works," *MS* 15, 1947, 55-70.



- Banerjee, Gauranga Nath. [1919]. *Hellenism in Ancient India*. Calcutta 1919; 2nd ed., Calcutta 1920. Reprinted Delhi 1961.
- Banerjee, Jitendra Nath. [1925]. "The Representation of Surya in Brahmanical Art." *JA* 54, 1925, 161-171.
- . [1939]. "Chapter LVIII of Varāhamihira's *Bṛhat-sphuṭā*." *PIHC* 3, 1939, 176-184.
- . [1948]. "Surya." *JISOA* 16, 1948, 47-100.
- Banerji, A. [1960]. "Identification of Vyāghraṭaṣṭi Maṇḍala." *IHQ* 36, 1960, 78-79.
- Banerji, B. N. [1893]. *Easy Oriental Astrology or Ramal-vidya*. Calcutta 1893.
- Banerji, Suresh Chandra (= Banerjee). [1919]. "Kalyāṇavarman, a New Name in the History of Bengal." *PIHC* 3, 1919, 577.
- . [1941/42]. "Tithiviveka of Śūlapāṇi." *PO* 6, 1941-42, 230-235; and 7, 1942, 85-95.
- . [1942/43]. "Śūlapāṇi, the Sāhūdyān." *NIA* 5, 1942-43, 145-156 and 169-176.
- . [1944/45]. "Post-Raghuṇandana Smṛti Writers of Bengal." *NIA* 7, 1944-45, 105-110.
- . [1957]. "Minor Smṛti Writers of Bengal." *IHQ* 33, 1957, 191-200.
- Banerji-Sastri, A. [1928]. "Weights in Ancient India: Patna Cylinders." *JBORS* 14, 1928, 75-82.
- . [1937]. "Aya Months." *JBORS* 23, 1937, 261-268.
- Bardhan, U. C. [1961]. "The Concept of Zero in the Mathematics of Ancient India." *SC* 26, 1961, 282-285.
- Barreau, André. [1959]. "Constellations et divinités protectrices des marchands dans le bouddhisme ancien." *JA* 247, 1959, 305-309.
- Barker, Robert. [1777]. "An Account of the Brahmin's Observatory at Benares." *PTRSL* 67, 1777, pt. 2, 598-607.
- Bayer, Gottlieb Siegfried. [1738]. *Historia regni Graecorum Bactriani*. Petropoli, 1738.
- Bayley, E. Clive. [1882/83]. "On the Genealogy of Modern Numerals." *JRAS*, 1882, 335-376 and 1883, 1-72.
- Bedekar, V. M. [1960]. "Sukrācārya in the Mahābhārata." *PO* 24, 1960, 91-103.
- Belasiew, N. T. [1933]. "The Bismar in Ancient India." *AE* 18, 1933, 76-80.
- Bellänkin, I. I. [1908]. *Kratkii očerok parvetiā matematiki ot drevneishikh vremen do nashikh dnei*. Kiev 1908.
- Bell, E. T. [1946]. "Mahavira's Diophantine System." *BCMS* 38, 1946, 121-122.
- Benedict, Suzan Rose. [1916]. *A Comparative Study of the Early Treatises Introducing into Europe the Hindu Art of Reckoning* (Concord, N. H. 1916).
- Bentley, John. [1797]. "Remarks on the principal Eras and Dates of the Ancient Hindus." *AR* 5, 1797, 315-343.
- . [1799]. "On the Antiquity of the Śūrya Siddhānta, and the Formation of the Astronomical Cycles therein contained." *AR* 6, 1799, 537-588.
- . [1805]. "On the Hindu Systems of Astronomy, and their Connection with History in Ancient and Modern Times." *AR* 8, 1805, 193-244.
- . [1823]. *Historical View of Hindu Astronomy*. Calcutta 1823. Reprinted London 1825.
- Bergaigne, Abel. [1885]. "M. Ludwig et la chronologie du Rg-Veda." *JA* 8, 6, 1885, 372-384.
- Bhagwan Das. [1920]. *Hindu Aryan Astronomy*. Dehra Dun 1920.
- Bhandarkar, A. S. [1941/42]. "Method of False Assumption" of Pacioli, an Italian Mathematician." *IC* 8, 1941-42, 256-257.
- . [1954]. "The Decimal Notation." *JBRAS*, NS 29, 1, 1954, 94-95.
- Bhandarkar, D. R. [1902]. "The Ājvikas." *JBRAS* 20, 1902, 399-405.
- Bhandarkar, Ramkrishna Gopal. [1887/89]. "The Epoch of the Gupta Era." *JBRAS* 17, 1887-89, pt. 2, 80-98. Reprinted in R. G. Bhandarkar [1927/33] vol. 3, pp. 384-405.
- . [1927/33]. *Collected Works of Sir R. G. Bhandarkar*, ed. N. B. Utgikar and V. G. Paranjpe, GOS (Bombay) B 1-4, 4 vols., Poona 1927 (vol. 3), 1928 (vol. 2), 1929 (vol. 4), and 1933 (vol. 1).
- Bharadwaj, B. M. [1945]. *Astrology of Annual Readings*. Shikarpur [1945].
- Bhat, M. Manappa. [1945]. "Mathematics in Karnataka of the Middle Ages." *Bhārata-Kaumudī*, vol. 1, Allahabad 1945, 127-136.
- Bhatt, Harihar P., and B. K. Patwa. [1945]. "The Helical Risings and Settings of Heavenly Bodies." *JGRS* 7, 1945, 75-76.
- Bhatt, P. N. [1953]. "Sun-cult in Gujarat and Saurashtra." *PAIOC* 17, 1953, 429-436.
- Bhattacharya, Bhabatosh. [1941]. "Khaṇḍana-darīana." *A Volume of Studies in Indology*. POS 75, Poona 1941, 67-69.
- . [1941/42]. "Govindānanda's Refutation of Sridatta's Views." *IC* 8, 1941-42, 263-266.
- . [1944/45]. "Caṇḍeivara's Indebtedness to Ballāla Sena." *IC* 11, 1944-45, 141-144.
- . [1953/54]. "Raghuṇandana's Indebtedness to his Predecessors." *JASB/L* 19, 1953, 151-202; and 20, 1954, 67-176 and 227-312.
- . [1961]. "The Varṣakriyākaumudī of Govindānanda Kavikaṅkaṇicārya." *Brahmavidyā* 25, 1961, 505-510.
- . [1963/64]. "Studies in Dharmasāstra." *ISPP* 5, 1963-64, 99-111; 275-281; and 283-309. Reprinted Calcutta 1964.
- . [1965/67]. "Studies in Nibandhas." *ISPP* 7, 1965-66, 113-122 and 451-454; and 8, 1966-67, 37-40; 203-209; 245-265; and 305-330. Reprinted Calcutta 1968.
- Bhattacharya, R. N., and A. Chattopadhyaya. [1966/67]. "The Tibetan Sexagenary Cycle." *ISPP* 8, 1966-67, 97-109.
- Bhattacharya, Tarakeshwar. [1950/51]. "The Date of the Bhārata War." *JGRI* 8, 1950-51, 1-76 and 315-354.
- . [1953/56]. "A Forgotten Chapter of the History of Ancient Indian Astronomy." *JGRI* 11-12, 1953-55, 11-54; and 13, 1955-56, 81-118.
- Bhattacharyya, Dinesh Chandra (= Bhattacharjee). [1945]. "Samvatsaraṇapādīpa." *IHQ* 21, 1945, 145-147.
- . [1945/46]. "Dates of Bhāṭṭopāla and Kalyāṇavarman." *IC* 12, 1945-46, 81-82.
- Bhattacharyya, Jagatbandhu. [1962]. "On Two Fundamental Concepts of Hindu Trigonometry." *OII* 10, 1962, 29-34.
- Bhattacharyya, Purushottam. [1943]. "Ancient Kamarupa in Culture of Astronomy and Kamarupa Nibandhanīya Kandaśādhya." *JARS* 10, 1943, 73-81.
- Bhāu Dājī. [1865]. "On Ancient Sanskrit Numerals." *JAS Bengal* 32, 1865, 161-167.
- . [1864/66]. "The Ancient Sanskrit Numerals in the Cave Inscriptions, and on the Sah-Coins, correctly made out; with Remarks on the Era of Śālivāhana and Vikramāditya." *JBRAS* 8, 1864-66, 225-233.
- . [1865]. "Brief Notes on the Age and Authenticity of the Works of Āryabhaṭa, Varāhamihira, Brahmagupta, Bhāṭṭopāla, and Bhāskaraṅcārya." *JRAS*, 1865, 392-418.
- Bhīde, V. V. [1959]. "The Basis of Astrology in the Vedic Literature." *PAIOC* 20, 2, 1, 1959, 19-30.
- Bhonsle, R. Krishna Rao. [1922]. "The Differential Calculus in Ancient India." *JIMS* 14, 1922, 216-223 (repr. from *Ind. Rev. Nov. 1920 and Oct. 1921*).
- Bhut, Onkar. [1841]. *A Comparison of the Puranic and Siddhantic Systems of Astronomy with that of Copernicus*. Agra 1841.
- Billard, Roger. [1956]. "Perspectives nouvelles sur l'astronomie indienne." *AA* 19, 1956, 186-196.
- Blot, I. B. [1840]. "Sur les naçhatras des Hindous et les manions lunaires des Arabes." *JS*, 1840, 264-279.
- . [1845]. "Sur les naçhatras, ou manions de la lune selon les Hindous; extrait d'une description de l'Inde rédigée par un voyageur arabe du XI<sup>e</sup> siècle." *JS* 1845, 39-54.
- . [1859]. Review of Hoisington [1848]. *JS*, 1859,

- 198-211; 271-289; 369-381; 401-418; and 475-498. Reprinted in J. B. Biot [1862] 7-145.
- [1862]. *Etudes sur l'astronomie indienne et sur l'astronomie chinoise*, Paris 1862.
- Biswas, Dilip Kumar. [1949]. "The Maga Ancestry of Varāhamihira," *IHQ* 25, 1949, 175-183.
- [1952]. "Two Solar Legends Re-examined," *OHRJ* 1, 1952, 26-30.
- [1953]. "Origin and Antiquity of the Sūrya Image in India," *PIHC* 16, 1953, 54-56.
- Bloch, E. [1925/28]. "Les sources grecques et chrétiennes de l'astronomie hindoue," *ROC* 3, 5, 1925-26, 400-441; and 3, 6, 1927-28, 32-33.
- Bohynin, Y. V. [1917]. *Drevneindusekafa matematika i otnošenii k nei Drevnei Gretsii. Izvestiia Fiziko-matematicheskogo obščestva pri Kazanskoi universitete* 22, 2, Kazan 1917.
- Boileau, I. T. [1833]. "Description of a Sun-dial in the Court of the Moji Musjid, in the Fort of Agra," *JAS Bengal* 1, 1833, 251.
- Bourquin, A. [1885]. "Considérations sur le calendrier védique et sur quelques points de l'astronomie, de l'astrologie et du rituel des Indous," *Actes du sixième congrès international des orientalistes*, pt. 3, 2, Leide 1885, pp. 607-623.
- Boyer, Carl B. [1945]. "An Early Reference to Division by Zero," *AMM* 50, 1945, 487-491.
- Brennand, W. [1896]. *Hindu Astronomy*, London 1896.
- Brockhaus, Hermann [1842]. "Zur Geschichte des indischen Ziffernsystems," *ZDMG* 4, 1842, 74-83.
- [1852]. "Über die Algebra des Bhāskara," *BVKSGWL. Phil.-hist. Kl.* 4, 1852, 1-46.
- Brown, Charles Philip. [1863]. *Carnatic Chronology. The Hindu and Mahomedan Methods of Reckoning Time Explained*, London 1863.
- Buchner, Friedrich. [1821]. *De algebra Indorum*, Elbingae [1821].
- Bühler, Georg. [1892/94]. "The Two Pralastis of Baijnāth," *ET* 1, 1892-94, 97-118.
- [1894]. "Note on Prof. Jacobi's Age of the Veda and on Prof. Tilak's Orion," *JA* 23, 1894, 238-249.
- [1896]. *Indische Palaeographie. Grundriss* 1, 11, Strassburg 1896.
- Burgess, Ebenezer. [1859]. "The Relation Between the Greek and Hindu Astronomers," *PAOS* 6, 1859, 8.
- [1860]. "Translation of the Sūrya-Siddhānta," *JAOs* 6, 2, 1860, 141-498. Reprinted New Haven 1860; Calcutta 1935.
- [1866]. "On the Origin of the Lunar Division of the Zodiac," *JAOs* 8, 1866, 309-334.
- Burgess, James. [1885]. "The Probable Indian Origin of the Names of the Days of the Week," *JA* 14, 1885, 322-323.
- [1890a]. "The Romaka Siddhānta," *JA* 19, 1890, 284-285.
- [1890b]. "The Pulisa-Siddhānta," *JA* 19, 1890, 316.
- [1891]. "The Sines of Arcs in the Pancha-Siddhāntika," *JA* 20, 1891, 228.
- [1893]. "Notes on Hindu Astronomy and the History of our Knowledge of it," *JRAS*, 1893, 717-761.
- [1904]. "The Navagraha or Nine Planets, and their Names," *JA* 33, 1904, 61-66.
- Bürk, Albert. [1901/02]. "Das Apastamba-Sulba-Sūtra," *ZDMG* 55, 1901, 343-391 and 56, 1902, 327-391.
- Burnell, Arthur Coke. [1878]. *Elements of South-Indian Palaeography*, 2nd ed. London 1878.
- Burrow, Reuben. [1790]. "A Proof that the Hindus had the Binomial Theorem," *AR* 2, 1790, 487-497.
- [1792]. "A Demonstration of One of the Hindoo Rules of Arithmetic," *AR* 3, 1792, 145-147.
- Cajori, F. [1938]. *A History of Mathematics*, 2nd ed., New York 1938.
- Caland, W. [1926]. "Rāhu im Veda," *Beiträge zur Literaturwissenschaft und Geistesgeschichte Indiens (Festgabe Hermann Jacobi)*, Bonn 1926, pp. 240-241.
- Call, John. [1772]. "A Letter to Nevil Maskelyne Containing a Sketch of the Signs of the Zodiac, Found in a Pagoda, near Cape Comorin in India," *PTRSL* 62, 1772, 353-356.
- Cammann, Schuyler. [1968/69]. "Islamic and Indian Magic Squares, Part I," *H Rel* 8, 1968-69, 181-209.
- Cantor, Moritz. [1877]. "Gräko-Indische Studien," *ZMP* 22, 1877, Hist.-lit. Abt., 1-23.
- [1904]. "Über die älteste indische Mathematik," *AMP* 3, 8, 1904, 65-72.
- Carra de Vaux, Bernard. [1917a]. "Notes d'histoire des sciences," *JA* 11, 10, 1917, 449-461.
- [1917b]. "Sur l'origine des chiffres," *Scientia* 21, 1917, 273-282.
- Cassini, Giovanni Domenico. [1691]. "Règles de l'astronomie Siamoise" in S. de La Loubère [1691] vol. 2, pp. 141-294. Reprinted in *MARS* vol. 8, Paris 1730, pp. 211-299 and vol. 5, La Haye 1731, pp. 279-362.
- Caudhuri, Pratāpacandra. See M. Śāstrin and P. Caudhuri [1964].
- Cavendish, Henry. [1792]. "On the Civil Year of the Hindoos, and its Divisions; with Account of Three Hindoo Almanacs Belonging to Charles Wilkins, Esq.," *PTRSL* 82, 1792, 383-399.
- Chakrabarti, Sabyasachee. [1965]. "Origin of the Ideas of Mathematical Analysis: Archimedes and Bhāskara—a Comparative Study," *BNISI* 21, 1965, 287-296.
- Chakravarti, Chintāharan. [1929]. "Date of Bāllālasena," *IHQ* 5, 1929, 133-135.
- [1938]. "Kāśinātha Bhaṭṭa and his Works," *JRASB/L* 4, 1938, 455-465.
- Chakravarti, Gurugovinda. [1932]. "Growth and Development of Permutation and Combination in India," *BCMS* 24, 1932, 79-88.
- [1932/33]. "Typical Problems of Hindu Mathematics," *ABORI* 14, 1932-33, 87-102.
- [1934a]. "Growth and Development of Progressive Series in India," *JDL/UC* 24, 1934, art. 6, pp. 1-18.
- [1934b]. "The Hindu Terms for Area," *JDL/UC* 24, 1934, art. 7, pp. 19-22.
- [1934c]. "On the Earliest Hindu Methods of Quadratures," *JDL/UC* 24, 1934, art. 7, pp. 23-28.
- [1934d]. "Surd in Hindu Mathematics," *JDL/UC* 24, 1934, art. 8, pp. 29-58.
- [1934e]. "On the Hindu Treatment of Fractions," *JDL/UC* 24, 1934, art. 9, pp. 59-76.
- Chakravarti, Manomohan. [1906]. "Sanskrit Literature in Bengal during the Sena Rule," *JAS Bengal*, NS 2, 1906, 157-176.
- [1915]. "Contributions to the History of Smṛti in Bengal and Mithilā," *JAS Bengal*, NS 11, 1915, 311-406.
- Chandrasekharan, T., and T. H. Viswanathan. [1960/61]. "Ītākaratnākarah with Commentary of Bhenāśekhara Dāsa," *BGOML Madras* 13, 2, 1960, 1-34 and 14, 1, 1961, 1-20.
- Charpentier, Jarl. [1923/25]. "A Treatise on Hindu Cosmography from the Seventeenth Century (Brit. Mus. MS. Sloane 2748A)," *BSOS* 3, 1923/25, 317-342.
- Charles, Michel. [1836]. *Mémoire sur la géométrie des Hindous. Analyse de la partie géométrique des ouvrages de Brahmagupta et de Bhāskara Acharya*, Bruxelles 1836.
- [1846]. "Recherches sur l'astronomie indienne," *CRHSAS* 25, 1846, 845-854.
- [1875]. *Aperçu historique sur l'origine et le développement des méthodes en géométrie*, 2nd ed., Paris 1875.
- Chatterjee, Bina. [1949]. "Geometrical Interpretation of the Motion of the Sun, Moon and the Five Planets as Found in the Mathematical Syntaxis of Ptolemy and in the Hindu Astronomical Works," *JRASB/S* 15, 1949, 41-89.
- Chatterji, K. C. [1935a]. "Ketu in Hindu Astrology," *COJ* 2, 10, July 1935, 258.
- [1935b]. "A Chapter from Varāhamihira on the

- Defence of Womanhood with an Original Commentary," *COJ* 2, 9, June 1935, 17-24.
- [1935c]. "Indian Method of Reading a Horoscope," *COJ* 2, 11, August 1935, 271-273.
- Chattopadhyaya, Alaka. See R. N. Bhattacharya and A. Chattopadhyaya [1966/67].
- Chaudhuri, B. L. [1915]. "The Weighing Beam called Bisā dāngā in Orissa, with short notes on some Weights and Measures still current among the rural population of that Division," *JAS Bengal*, NS 11, 1915, 9-16.
- Chhatre, K. L. (= Chatre). [1874]. "Nakṣatras," *JA* 3, 1874, 206.
- Chistiakov, Vasilii Dmitrievich. [1960]. *Materialy po istorii matematiki v Kitae i Indii*, Moskva 1960.
- Chopell, Lili (= Bārhaspatya). [1907]. "Jyotiṣa," *HR* 1907. Reprinted Allahabad 1960.
- Choudhary, Radhakrishna (= Chowdhary). [1949]. "Hindu Contribution to Mathematics," *JOS* 1, 1949, 41-46.
- Chowdhary, Kotta Bhavaiah. [1952/54]. "Indian Eras," *JAHRS* 22, 1952-54, 53-62.
- Clark, Walter Eugene. [1929]. "Hindu-Arabic Numerals," *Indian Studies in Honor of Charles Rockwell Lanman*, Cambridge, Mass., 1929, pp. 217-236.
- [1937]. "Science," *The Legacy of India*, ed. G. T. Garratt, Oxford 1937, pp. 335-368.
- Cœds, G. [1930/32]. "A propos de l'origine des chiffres arabes," *BSOS* 6, 1930-32, 323-328.
- Colebrooke, Edward. [1865]. "Note on the Preceding Article," *JRAS*, 1865, 332-338.
- Colebrooke, Henry Thomas. [1797]. "On Indian Weights and Measures," *AR* 5, 1797, 91-109. Reprinted in Colebrooke [1837], vol. 1.
- [1805]. "On the Vedas or Sacred Writings of the Hindus," *AR* 8, 1805, 369-476. Reprinted in H. T. Colebrooke [1837] vol. 1, pp. 9-113; transl. into German by L. Poley, *H. Th. Colebrooke's Abhandlung über die heiligen Schriften der Indier*, Leipzig 1847.
- [1807]. "On the Indian and Arabian Divisions of the Zodiac," *AR* 9, 1807, 325-376. Reprinted in Colebrooke [1837], vol. 2, pp. 321-373.
- [1816]. "On the Notion of the Hindu Astronomers Concerning the Precession of the Equinoxes and Motions of the Planets," *AR* 12, 1816, 209-250. Reprinted in Colebrooke [1837], vol. 2, pp. 374-416.
- [1817]. *Algebra, with Arithmetic and Mensuration, from the Sanskrit of Brahmagupta and Bhāskara*, London 1817. The preface, "Dissertation on the Algebra of the Hindus," reprinted in Colebrooke [1837], vol. 2, pp. 417-531; the *Līlāvāli* reprinted by H. C. Banerji (see under Bhāskara [b. 1114]).
- [1837]. *Miscellaneous Essays*, 2 vols., London 1837. Reprinted Madras 1872; 2nd ed., 3 vols., London 1873.
- Colin, Georges S. [1933]. "De l'origine grecque des 'chiffres de l'Égypte' et de nos 'chiffres arabes,'" *JA* 222, 1933, 193-215.
- Collins, Mark. [1926]. *On the Octaval System of Reckoning in India*, University of Madras: *Dravidic Studies* 4, Madras 1926.
- Coomaraswamy, Ananda K. [1934]. "Kha and Other Words Denoting Zero in Connection with the Metaphysics of Space," *BSOS* 7, 1934, 87-97.
- Cracroft, William, and J. Prinsep. [1825]. "Latitude of the Hindu Observatory at Benares," *AR* 15, 1825, app. i-vi.
- Cunningham, Alexander. [1885]. *Book of Indian Eras, with Tables for Calculating Indian Dates*, Calcutta 1885.
- [1885]. "The Probable Indian Origin of the Names of the Week-days," *JA* 14, 1885, 1-4.
- Dandekar, R. N. [1940]. "New Light on the Vedic God Savitr," *PAIOC* 10, 1940, 10-11.
- [1964]. "Literature and Sciences in the Age of the Guptas," *JUP* 19, 1964, 1-36.
- Daptari, Kelava Lakṣmana (= Daftari). [1929]. *Bhāratīya-jyotiḥ-śāstranirikṣaṇa, Śāstrīya Granthamālā Nāgarpūra* 1, Nāgarpūra 1929.
- [1942]. *The Astronomical Method and its Application to the Chronology of Ancient India*, Nagpur 1942.
- [1952]. "Pañcāṅga ṅgī kālādarśa," *Kevalamanda Comm. Vol.* 1952, pp. 24-29.
- Das, Sukumar Ranjan. [1925]. "Aspects of the History of Hindu Astronomy," *IHO* 1, 1925, 657-676.
- [1926]. "Motion of the Earth as Conceived by the Ancient Indian Astronomers," *BCMS* 17, 1926, 173-182.
- [1927a]. "The Origin and Development of Numerals," *IHO* 3, 1927, 97-120 and 356-375.
- [1927b]. "Cosmographical Theories of the Hindu Astronomers," *IHO* 3, 1927, 599-605.
- [1927c]. "Precession and Libration of the Equinoxes in Hindu Astronomy," *JAS Bengal*, NS 23, 1927, 403-413.
- [1927d]. "Equation of Time in Hindu Astronomy," *JOR Madras* 1, 1927, 366-370. Reprinted in *AMM* 35, 1928, 540-543.
- [1928a]. "Coordinates Used in Hindu Astronomy," *AMM* 35, 1928, 535-540.
- [1928b]. "Parallax in Hindu Astronomy," *BCMS* 19, 1928, 29-42.
- [1928c]. "The Alleged Greek Influence on Hindu Astronomy," *IHO* 4, 1928, 68-77.
- [1928d]. "Astronomical Instruments of the Hindus," *IHO* 4, 1928, 256-269.
- [1928e]. "Hindu Calendar," *IHO* 4, 1928, 483-511.
- [1928f]. "Seasons and the Year-beginning of the Hindus," *IHO* 4, 1928, 653-666.
- [1928g]. "Lunar and Solar Eclipses in Hindu Astronomy," *JAS Bengal*, NS 24, 1928, 437-454.
- [1928h]. "Planetary Motions in Hindu Astronomy," *JOR Madras* 2, 1928, 129-141.
- [1928i]. "Conjunction of Planets Called Grahayuti in Hindu Astronomy," *JOR Madras* 2, 1928, 201-209.
- [1930]. "Some Notes on Indian Astronomy," *Isis* 14, 1930, 388-402.
- [1931]. "A Short Chronology of Indian Astronomy," *IHO* 7, 1931, 137-149.
- [1932a]. "Time in Ancient, Mediaeval and Modern Chronology," *Acharyya Ray Commemoration Volume*, Calcutta 1932, pp. 483-497.
- [1932b]. "The Jaina School of Astronomy," *IHO* 8, 1932, 30-42 and 565-570.
- [1932c]. "La Théorie des permutations et des combinaisons dans la Ganita hindoue," *PM* 4, 12, 1932, 133-140.
- [1933a]. "Notion of Time in Hindu Philosophy," *IHO* 9, 1933, 149-153.
- [1933b]. "The Jaina Calendar," *Isis* 18, 1933, 432-437. Reprinted in *IHO* 10, 1934, 332-336.
- [1936]. "Scope and Development of Indian Astronomy," *Osiris* 2, 1936, 197-219.
- [1937]. "The Nakṣatras or the Constellations in Jaina Astronomy," *Jhā Commemoration Volume*, POS 39, Poona 1937, pp. 129-138.
- [1939]. "Time-measurement Ancient, Mediaeval and Modern," *MS* 7, 1939, 81-92.
- Dāsa, Hariḡvinda. [1917]. *Haribhadrasūricaritra*, *JVSSM* 2, Benares 1917.
- Das Gupta, C. C. [1950]. "The Numerals in Indian Kharosthi Records," *PIHC* 13, 1950, 51-62.
- Datta, Bibhutibhusan. [1925/26]. "Al-Biruni and the Origin of the Arabic Numerals," *PBMS* 7/8, 1925-26, 9-25.
- [1926a]. "A Note on the Hindu-Arabic Numerals," *AMM* 33, 1926, 220-221.
- [1926b]. "Two Āryabhaṭas of Al-Biruni," *BCMS* 17, 1926, 59-74.
- [1926c]. "Hindu Values of  $\pi$ ," *JAS Bengal*, NS 22, 1926, 25-42.
- [1926/31]. "Early Literary Evidence of the Use of the Zero in India," *AMM* 33, 1926, 449-454; and 38, 1931,

- 566-572.
- [1927a]. "On *Mūla*, the Hindu Term for 'Root,'" *AMM* 34, 1927, 420-423.
- [1927b]. "On the Origin and Development of the Idea of 'per cent.,"' *AMM* 34, 1927, 530-531.
- [1927c]. "Aryabhata, the Author of the 'Ganita,'" *BCMS* 18, 1927, 5-18.
- [1927d]. "Early History of the Arithmetic of Zero and Infinity in India," *BCMS* 18, 1927, 165-176.
- [1927e]. "The Present Mode of Expressing Numbers," *IHQ* 3, 1927, 530-540.
- [1927f]. "The Hindu Method of Testing Arithmetical Operations," *JAS Bengal*, NS 23, 1927, 261-267.
- [1927/29]. "The Hindu Contribution to Mathematics," *BMAUA* 1, 1927 and 2, 1929.
- [1928a]. "The Science of Calculation by the Board," *AMM* 35, 1928, 520-529.
- [1928b]. "The Hindu Solution of the General Pellian Equation," *BCMS* 19, 1928, 87-94.
- [1929a]. "The Bakhshārī Mathematics," *BCMS* 21, 1929, 1-60.
- [1929b]. "The Jaina School of Mathematics," *BCMS* 21, 1929, 115-145.
- [1929c]. "The Scope and Development of the Hindu *Ganita*," *IHQ* 5, 1929, 479-512.
- [1929/31a]. "Origin and History of the Hindu Names for Geometry," *QST* B, 1, 1929-31, 113-119.
- [1929/31b]. "Geometry in the Jaina Cosmography," *QST* B, 1, 1929-31, 245-254.
- [1930a]. "On Mahāvīra's Solution of Rational Triangles and Quadrilaterals," *BCMS* 20, 1930, 267-294.
- [1930b]. "On the Supposed Indebtedness of Brahmagupta to *Chiu-chang Suan-shu*," *BCMS* 22, 1930, 39-51.
- [1930c]. "The Two Bhāskaras," *IHQ* 6, 1930, 727-736.
- [1930d]. "On the Hindu Names for the Rectilinear Geometrical Figures," *JAS Bengal*, NS 26, 1930, 283-290.
- [1931a]. "On the Origin of the Hindu Terms for 'Root,'" *AMM* 38, 1931, 371-376.
- [1931b]. "The Origin of Hindu Indeterminate Analysis," *Archeion* 13, 1931, 401-407.
- [1931c]. "Nārāyaṇa's Method for Finding Approximate Value of a Surd," *BCMS* 23, 1931, 187-194.
- [1931d]. "Early History of the Principle of Place Value," *Scientia* 50, 1931, 1-12.
- [1932a]. *The Science of the Śulba*, Calcutta 1932.
- [1932b]. "Elder Aryabhata's Rule for the Solution of Indeterminate Equations of the First Degree," *BCMS* 24, 1932, 19-36.
- [1932c]. "Testimony of Early Arab Writers on the Origin of Our Numerals," *BCMS* 24, 1932, 193-218.
- [1932d]. "On the Relation of Mahāvīra to Śrīdhara," *Isis* 17, 1932, 25-33.
- [1932e]. "Introduction of Arabic and Persian Mathematics into Sanskrit Literature," *PBMS* 14, 1932, 7-21.
- [1933]. "The Algebra of Nārāyaṇa," *Isis* 19, 1933, 472-485.
- [1937]. "Vedic Mathematics," *The Cultural Heritage of India*, Calcutta 1937, vol. 3, pp. 378-401.
- [1938]. "Application of Intermediate Analysis to Astronomical Problems," *Archeion* 21, 1938, 28-34.
- [1941]. "Chronology of the History of Science in India during the XVIth Century," *Archeion* 23, 1941, 78-83.
- [1946/47]. "Some Instruments of Ancient India and their Working," *JGRI* 4, 1946-47, 249-270.
- Datta, B., and A. N. Singh [1935/38]. *History of Hindu Mathematics*, vol. 1, Lahore 1935; vol. 2, Lahore 1938. Reprinted in one vol., Bombay 1962.
- Datta, Dandi Ram [1941]. "Old Assamese Mathematics," *JARS* 8, 1941, 19-20.
- Davidian, Marie-Louise. [1960]. "Al-Bīrūnī on the Time of Day from Shadow Lengths," *JAS* 80, 1960, 330-335.
- Davis, John Francis [1831]. "Letters from Sir William Jones to the late Samuel Davis, Esq.," *TRAS* 3, 1831, 1-31.
- Davis, Samuel. [1790]. "On the Astronomical Computations of the Hindus," *AR* 2, 1790, 225-287.
- [1792]. "On the Indian cycle of Sixty Years," *AR* 3, 1792, 209-227.
- Deb, Harit Krishna. [1925]. "The Five-yearly Yuga and the Saptarīhī Cycle," *JAS Bengal*, NS 21, 1925, 221-231.
- [1931]. "The Hindu Calendar and the Earlier Siddhantas," *JAS Bengal*, NS 27, 1931, 271-283.
- Decourdemanche, Jean Adolphe. [1911]. "Note sur l'ancien système métrique de l'Inde," *JA* 10, 18, 1911, 367-378.
- [1913a]. *Traité des monnaies, mesures et poids anciens et modernes de l'Inde et de la Chine*, Paris 1913.
- [1913b]. "L'estimation de la longueur du degré terrestre chez les grecs, les arabes, et dans l'Inde," *JA* 11, 1, 1913, 427-444.
- de La Loubère, Simon. [1691]. *Du royaume de Siam*, 2 vols., Paris 1691. English translation, London 1693.
- Delambre, Jean-B.-F. [1806]. "On the Hindoo Formulae for computing Eclipses, Tables of Sines, and Various Astronomical Problems," translated into English by T. S. Evans, *PhM* 28, 1807, 18-25 (from an article in *Connaissance des temps... pour l'an 1808*, Paris 1806).
- [1817]. *Histoire de l'astronomie ancienne*, 2 vols., Paris 1817, vol. 1, pp. 400-556.
- Delbos, Leon. [1892]. "Les Mathématiques aux Indes orientales," *BSM* 2, 16, 1, 1892, 93-112.
- [1893]. "L'Astronomie aux Indes orientales," *BSM* 2, 17, 1, 1893, 145-172.
- de Menasse, P. [1949]. "Livres indiens en Perse sassanide," *JA* 237, 1949, 1-3.
- Demme, Karl. [1886]. "Bemerkungen zu den Regeln des Ahmes und des Baudhāyana über die Quadratur des Kreises," *ZMP* 31, 1886, Hist.-lit. Abt., 132-134.
- de Paravey, Chevalier. [1836]. "Note sur l'identité des cycles arabes, indiens et chinois, appliqués aux jours, aux années et aux ères diverses," *JA* 1, 3, 1836, 394-400.
- de Saussure, L. [1919]. "La Symétrie du zodiaque lunaire asiatique," *JA* 11, 14, 1919, 141-148.
- [1930]. *Les Origines de l'astronomie chinoise*, Paris 1930.
- Destombes, Marcel. [1962]. "Un astrolabe carolingien et l'origine de nos chiffres arabes," *AHNS* 15, 1962, 3-45.
- Devkar, V. L. [1954]. "Omens on Birds as Described in the Citraprasna or Sakunamālī MSS. in the Baroda Museum," *BMPG* 10-11, 1954, 25-31.
- Dhama, B. L. [1928/29]. "On a Celestial Sphere (Persian) dated 1659-60 in Delhi Fort Museum," *ARASI* 28, 1928-29, 144.
- Dhruva, K. H. [1930]. "Historical Contents of the Yuga-purāṇa," *JBORS* 16, 1930, 18-66.
- Diels, H., and A. Rehm. [1904]. "Parapegmenfragmente aus Milet," *SBAW* 1904, 92-111.
- Dikshit, Meereshwar G. [1957]. "Narjī, the One-pan Scales in Ancient India," *BDCRI* 18, 1957, 5-7.
- Dikshit, Shankar Balkrishna. See R. Sewell and S. B. Dikshit [1896].
- [1887]. "The Method of Calculating the Week-days of Hindu Tithis and the Corresponding English Dates," *JA* 16, 1887, 115-122. Reprinted in J. F. Fleet [1888], pp. 145-159.
- [1888a]. "The Twelve-year Cycle of Jupiter," *JA* 17, 1888, 1-7 and 312-317. Reprinted in J. F. Fleet [1888], pp. 161-176.
- [1888b]. "A Table for the Abdapa, Tithi-suddhi, and Tithi-kendra," *JA* 17, 1888, 268-272.
- [1890a]. "The Original Surya-Siddhanta," *JA* 19, 1890, 45-54.
- [1890b]. "The Romaka Siddhanta," *JA* 19, 1890,

- 133-142.
- . [1890c]. "The Panchasiddhantika," *JA* 19, 1890, 439-440.
- . [1891]. "Examination of Some Errors in Warren's Kalasankalita," *JA* 20, 1891, 35-45.
- . [1895]. "The Age of the Satapatha Brahmana," *JA* 24, 1895, 245-246.
- . [1896]. *Bhāratīya Jyotiḥśāstra*, Poona 1896. Reprinted Poona 1931. Hindi translation by S. Jharkhaṇḍī, Lucknow 1957.
- Dikshīt, S. K. [1939/40]. "Chandragupta II, Śāhasāṅka alias Vikramāditya and the Nine Jewels," *JC* 6, 1939-40, 191-210 and 377-392.
- Dikshīt, V. R. Ramachandra [1933]. "The Lunar Cult in India," *JA* 62, 1933, 175-176.
- Divatia, N. B. [1930/31]. "Certain Fractional Numerals in Gujarātī," *ABOR* 12, 1930-31, 256-259.
- Dixit, K. R. [1951]. "The History of Indian Astronomy," *Scientia* 86, 1951, 315-318.
- Djalalov, G. D. [1962]. "Indiiskā astronomiā v knige Biruni 'India,'" *Istoriko-astronomičeskie issledovanīa* 8, Moskva 1962, pp. 195-220.
- Dreackhahn, Friedrich. [1936]. "Zur Zirkulatur des Quadrats und Quadratur des Kreises in den Sulvasūtra," *JDMV* 46, 1936, 1-13.
- Dumont, Paul-Émile. [1954]. "The Iṣṭis to the Nakṣatras," *PAPS* 98, 1954, 204-225.
- Dutt, Girindranath. [1904]. "Method of Preparing Calendars and Fixing Festivals Dates by the Hindus," *PRASB*, 1904, 3.
- Dvivedin, Padmakara (= Dvivedī). [1920]. "Kamalākara-bhāṣya," *PBMS* 2, 1920, 67-80.
- . [1923]. "A Seventeenth Century Astrolabe," *SBS* 2, 1923, 129-156.
- . [1925]. "Gaṇita-Kaumudī of Nārāyaṇa Paṇḍita," *SBS* 4, 1925, 89-107.
- Dvivedin, Sudhākara. [1892]. *Ganakaśāstrāṅgī*, *The Pandit*, NS 14, 1892, 1-16; 57-72; 113-128; 169-184; 225-240; 275-290; 331-346; 387-402; and 491-496. Reprinted Benares 1892; repr. Benares, 1935.
- . [1901/02]. "Brāhmasphuṭasiddhānta and Dhyaṇa-grahopadeśādhyāya," *The Pandit*, NS 25, 1901, 309-324; 389-404; 453-468; 517-532; 581-596; and 645-660; 24, 1902, 1-16; 65-80; 137-142; 209-240; 273-312; 321-360; 385-416; 465-496; 529-576; 593-624; 657-688; and 721-755. Reprinted Benares 1902.
- . [1907]. "Yājñajñiṣya with the Commentary of Somākara," *The Pandit*, NS 29, 1907, 305-320; 337-352; 465-480; and 517-528; "Āraṇyaka," *ibid.*, 529-532 and 587-591; Introduction to both, *ibid.*, 581-585; "Laghuvivaraṇa," *ibid.*, 593-605; appendix by Muralīdhara Jhā, *ibid.*, 607-625; and errata, *ibid.*, 627-628. Reprinted Benares 1907.
- Enestrom G. [1905]. "Über einen Näherungswert für  $\cos x$ ," *BM* 3, 6, 1905, 323-324.
- Engle, Susan. See E. S. Kennedy, S. Engle, and J. Wamstad [1965].
- Esnouf, Anne-Marie. [1959]. "Les songes et leur interprétation dans l'Inde," *Les songes et leur interprétation*, Paris 1959, pp. 207-247.
- Euler, Leonard. [1738]. "De Indorum anno solaris astronomico," in G. S. Bayer [1738], pp. 201-213.
- Faddegon, B. [1925a]. "The Catalogue of Sciences in the Chāndogya-Upaniṣad," *AO* 4, 1925, 42-54.
- . [1925b]. "The Thirteenth Month in Ancient Hindu Chronology," *AO* 4, 1925, 124-133.
- Fazy, R. [1930]. "Note sur une éclipse du temps d'Açoka," *JA* 217, 1930, 135-136.
- Filozat, Jean. [1949]. "L'énigme des 256 nuits d'Açoka," *JA* 237, 1949, 143-153.
- . [1953]. "L'Inde et les échanges scientifiques dans l'antiquité," *CHM* 1, 1953, 353-367.
- . [1955/56]. "Ancient Relations between Indian and Foreign Astronomical Systems," *JOR Madras* 25, 1955-56, 1-8.
- . [1956a]. "Scientific Thought in Ancient Asia," *EW* 6, 1956, 285-292.
- . [1956b]. *Les Sciences dans l'Inde ancienne, Université de Paris. Les Conférences du Palais de la Découverte D 40*, [Paris 1956].
- . [1962]. "Notes d'astronomie ancienne de l'Iran et de l'Inde," *JA* 250, 1962, 325-350.
- . [1965/66]. "The Enigma of the 256 Nights of Açoka," *ISPP* 7, 1965-66, 411-419 (translation of J. Filozat [1949]). Reprinted in J. Filozat [1967], pp. 9-19.
- . [1967]. *Studies in Asokan Inscriptions*, Calcutta 1967.
- . [1968]. "La détermination des positions du Soleil en astronomie indienne ancienne," *AHIS* 21, 1968, 89-94.
- Fleet, John Faithful. [1887]. "The Scheme and Equation of the Years of the Gupta Era," *JA* 16, 1887, 141-154.
- . [1888]. *Inscriptions of the Early Gupta Kings and their Successors, CII 3*, Calcutta 1888. Reprinted Benares 1963.
- . [1889]. "A New System of the Sixty-year Cycle of Jupiter," *JA* 18, 1889, 221-224.
- . [1890]. "Calculations of Hindu Dates. No. 32," *JA* 19, 1890, 41-43.
- . [1890/94]. "A Note on a Matter Arising out of the Gupta Era," *JBRAS* 18, 1890-94, 71-87.
- . [1892]. "Bhadrabāhu, Chandragupta, and Śravaṇa-Belgoja," *JA* 21, 1892, 156-160.
- . [1893]. "The Topographical List of the Brihat-Samhita," *JA* 22, 1893, 169-195.
- . [1909a]. "The Day on which Buddha Died," *JRAS*, 1909, 1-34.
- . [1909b]. "The Origin of the Buddhavarsha, the Ceylonese Reckoning from the Death of the Buddha," *JRAS*, 1909, 323-356.
- . [1910]. "The Saka Era," *JRAS*, 1910, 818-828.
- . [1911a]. "Aryabhata's System of Expressing Numbers," *JRAS*, 1911, 109-126.
- . [1911b]. "The Standard Height of an Indian Man," *JRAS*, 1911, 208-209.
- . [1911c]. "The Kaliyuga Era of B.C. 3102," *JRAS*, 1911, 479-496 and 675-698.
- . [1911d]. "Brihaspati and Tishya," *JRAS*, 1911, 514-518.
- . [1911e]. "The Use of the Abacus in India," *JRAS*, 1911, 518-521.
- . [1911f]. "The Katapayadi System of Expressing Numbers," *JRAS*, 1911, 788-794.
- . [1911g]. "Brihaspati and Tishya," *JRAS*, 1911, 1119-1122.
- . [1912a]. "Imaginative Yojanas," *JRAS*, 1912, 229-239.
- . [1912b]. "The Katapayadi Notation of the Second Arya-Siddhanta," *JRAS*, 1912, 459-462.
- . [1912c]. "The Yojana and the Parasang," *JRAS*, 1912, 462-465.
- . [1912d]. "Some Hindu Values of the Dimensions of the Earth," *JRAS*, 1912, 463-470.
- . [1912e]. "The Use of the Planetary Names of the Days of the Week in India," *JRAS* 1912, 1039-1046.
- . [1912f]. "A Note on the Puranas," *JRAS*, 1912, 1046-1053.
- . [1913a]. "The Puranic Order of the Planets," *JRAS*, 1913, 384-385.
- . [1913b]. "The Vishṇu-Purāṇa and the Planets," *JRAS*, 1913, 1066.
- . [1915a]. "The Ancient Indian Water-clock," *JRAS*, 1915, 213-230.
- . [1915b]. "Tables for Finding the Mean Place of the Planet Saturn," *JRAS*, 1915, 741-756.
- . [1916a]. "The Indian Day," *JRAS*, 1916, 356-362.

- [1916b]. "The Indian Day," *JRAS*, 1916, 561-567.
- [1916c]. "Prati-Sravana-purvani Nakshatranī" *JRAS*, 1916, 567-570.
- Frank, Josef, and M. Meyerhof. [1925]. *Ein Astrolab aus dem indischen Mogulreiche*, Heidelberg 1925.
- Fris, O. [1955]. "K dejnam indické matematiky," *NO* 10, 1955, 25.
- Gal, G. S. [1955/56]. "Cultural Significance of Full-Moon and New-Moon Names in Karpātaka," *OJMS* 46, 1955-56, 95-98.
- Ganguli, Sarada Kanta (= Ganguly). [1926a]. "Bhāskarāchārya and Simultaneous Indeterminate Equations of the First Degree," *BCMS* 17, 1926, 89-98.
- [1926b]. "Was Āryabhaṭa indebted to the Greeks for his Alphabetic System of expressing numbers?," *BCMS* 17, 1926, 195-202.
- [1926c]. "Notes on Āryabhaṭa," *JBORS* 12, 1926, 78-91.
- [1927a]. "The Elder Āryabhaṭa and the Modern Arithmetical Notation," *AMM* 34, 1927, 409-415.
- [1927b]. "Bhāskarāchārya's References to Previous Teachers," *BCMS* 18, 1927, 65-76.
- [1928]. "The Source of the Indian Solution of the So-called Pellian Equation," *BCMS* 19, 1928, 151-176.
- [1929]. "Notes on Indian Mathematics. A Criticism of George Rusby Kaye's Interpretation," *Isis* 12, 1929, 132-145.
- [1930]. "The Elder Āryabhaṭa's Value of  $\pi$ ," *AMM* 37, 1930, 16-22.
- [1931/32a]. "Bhāskara and Simultaneous Indeterminate Equations of the First Degree," *JIMS/NO* 19, 1931-32, 6-9.
- [1931/32b]. "India's Contribution to the Theory of Indeterminate Equations of the First Degree," *JIMS* 19, 1931-32, 110-120; 129-142; and 153-168.
- [1932]. "On the Indian Discovery of the Irrational at the Time of Sulvaśūtras," *SM* 1, 1932, 135-141.
- [1932/33]. "The Indian Origin of the Modern Place-Value Arithmetical Notation," *AMM* 39, 1932, 251-256 and 389-393; and 40, 1933, 25-31 and 154-157.
- Garrett, Arthur Ffolliott, and C. Guleri [1902]. *The Jaipur Observatory and its Builder*, Allahabad 1902. The translation of Jayasīma's *Yantṛaśāstrīkīrikā* reprinted in *The Pandit [Jaipur]* 1, 1924, art. 3, 4 pp.
- Garver, Raymond. [1932]. "Concerning Two Square Root Methods," *BCMS* 24, 1932, 99-102.
- Ghatak, Jyotishchandra. [1923]. "The Conception of the Indian Astronomers Concerning the Precession of the Equinoxes," *JAS Bengal*, NS 19, 1923, 311-321.
- [1927]. "The Date of Mricchakatika from Astrological Data," *JDL/UC* 14, 1927, art. 2, pp. 1-15.
- Ghosh, Ekendranath. [1928]. "An Internal Evidence for Determining the Time of the Later Redactions of the *Sūtrasamhitā*," *IHO* 4, 1928, 557-559.
- [1929]. "Was the Equation of Time known to the Vedic Sages?," *IHO* 5, 1929, 136-137.
- [1930]. "The Twin-gods Aivins of the Rg-Veda," *IHO* 6, 1930, 172-175.
- [1932]. "Studies on Rigvedic Deities—Astronomical and Meteorological," *JAS Bengal*, NS 28, 1932, 1-122.
- Ghosh, Jogendra Chandra. [1937/38]. "Date of Commencement of the Gāngeya Era," *IC* 4, 1937-38, 508-512.
- Ghosh, Pratap Chandra (= Ghose). [1867]. "On the Adjustment of the Hindu Calendar," *PRASB*, 1867, 105-106.
- [1868]. "The Adjustment of the Hindu Calendar," *JAS Bengal* 37, 2, 1868, 181-191.
- Gibson, G. E. [1951]. "The Vedic Nakṣatras and the Zodiac," *Semitic and Oriental Studies Presented to William Popper*, Berkeley 1951, pp. 149-165.
- Gilchrist, John. [1797]. "Account of the Hindustanee Horometry," *AR* 5, 1797, 81-89.
- Ginsburg, Iekuthial. See D. E. Smith and J. Ginsburg [1918].
- Ginzel, Friedrich Karl. [1894]. "Über einen Versuch, das Alter der vedischen Schriften aus historischen Sonnenfinsternissen zu bestimmen," *SBAW*, Math.-Nat. Kl., 1894.
- [1906/14]. *Handbuch der mathematischen und technischen Chronologie*, 3 vols., Leipzig 1906-14.
- Goblet d'Alviella, E. F. A. [1897]. *Ce que l'Inde doit à la Grèce*, Paris 1897; new ed., Paris 1926.
- Gode, Parashuram Krishna. [1929/30]. "Date of Bijaprabodha," *ABORI* 10, 1929-30, 160-161.
- [1930]. "Date of Gaṇitāmṛtalahari of Rāmakṛṣṇa," *ABORI* 11, 1930, 94-95.
- [1933/34a]. "Date of Saṃvatsarādhikāphalakaḥ of Somadaivajña—A.D. 1642," *ABORI* 15, 1933-34, 243-244.
- [1933/34b]. "A Manuscript of Tithiratna by Somadaivajña," *ABORI* 15, 1933-34, 244.
- [1934/35]. "Date of Sārāvālī of Kalyāṇavarman—Between A.D. 550 and 966," *ABORI* 16, 1934-35, 147-148. Reprinted in P. K. Gode [1953/56], vol. 1, pp. 103-104.
- [1936]. "Notes on Indian Chronology. IV," *PO* 1, 2, 1936, 55-58.
- [1937a]. "References to a Lost Work on the Pāṭiṅgānī of Śrīdharaśārya by Makkibhaṭṭa (1377 A.D.) and by Rāghavabhaṭṭa (1493 A.D.)," *JIH* 16, 1937, 259-262. Reprinted in P. K. Gode [1953/56], vol. 1, pp. 406-409.
- [1937b]. "Description of the Aivamedha Performed by Sevai Jayasing," *Mīmāṃsā Prakāśa* 2, 1937, 43-46.
- [1937/38a]. "Identity of Makkibhaṭṭa, the Author of a Commentary on Śrīpati's Siddhāntaśekhara, with Makkibhaṭṭa, the Author of a Commentary on the Rāghuvamśa," *IC* 4, 1937-38, 479-484. Reprinted in P. K. Gode [1953/56], vol. 1, pp. 410-416.
- [1937/38b]. "Aivamedha Performed by Sevai Jayasing of Amber," *PO* 2, 1937-38, 166-180.
- [1938]. "Appayadikṣita's Criticism of Āryabhaṭa's Theory of the Diurnal Motion of the Earth (Bhūbhramavāda)," *ABORI* 19, 1938, 95-95. Reprinted in P. K. Gode [1953/56], vol. 2, pp. 49-52.
- [1940a]. "The Chronology of the Works of Mahādhara, the Author of the Vedādīpa and Mantra-Mahodadhī—Between A.D. 1530 and 1610," *ABORI* 21, 1940, 248-261. Reprinted in P. K. Gode [1953/56], vol. 2, pp. 107-121.
- [1940b]. "A New Approach to the Date of Bhaṭṭojī Dīkṣita," *ASVOI* 1, 2, 1940, 117-127. Reprinted in P. K. Gode [1953/56], vol. 2, pp. 65-74.
- [1940c]. "Bernier and Kavindrācārya Sarasvatī at the Mughal Court," *ASVOI* 1, 4, 1940, 1-16. Reprinted in P. K. Gode [1953/56], vol. 2, pp. 364-379.
- [1940d]. "Date of Malayagirisūri—Between A.D. 1100 and 1175," *Jaina Ant* 5, 1940, 153-156. Reprinted in P. K. Gode [1953/56], vol. 1, pp. 22-25.
- [1941/42]. "Date of Meghavijayagaṇi's Commentary on the Hastasañjivana—Between A.D. 1680 and 1700," *Bhūrurīya Vidyā* 3, 1941-42, 126-130. Reprinted in P. K. Gode [1953/56], vol. 1, pp. 86-91.
- [1942]. "A Contemporary Manuscript of the Hastasañjivanaśāstra of Meghavijayagaṇi, Belonging to Rāghunātha Mahādeva Ghāṭe—Between A.D. 1680 and 1700," *Jaina Ant* 8, 1, 1942, 25-29. Reprinted in P. K. Gode [1953/56], vol. 1, pp. 92-95.
- [1943/44]. "The Kavindrācāryasūci—is it a Dependable Means for the Reconstruction of Literary Chronology?," *NIA* 6, 1943-44, 41-42.
- [1946/47]. "An Interesting Anecdote about Kavindrācārya Sarasvatī Recorded by Bernier in his Letter from Delhi Dated the 1st July, 1663," *JKHRS* 1, 1946-47, 183-185.
- [1953/56]. *Studies in Indian Literary History*, vol. 1, *SJS* 37, Bombay 1953; vol. 2, *SJS* 38, Bombay 1954; and vol. 3, Poona 1956.
- [1954]. "Vāstuśiromāṇi, a Work on Architecture by Saṃkara, the Guru of Śyāmasāha, Son of Mānarendra—after c. A.D. 1550," *ABORI* 35, 1954, 35-41. Reprinted in P. K. Gode [1953/56], vol. 3, pp. 196-202.

- [1954/55]. "The Contact of Bhājōji Dīkṣita and Some Members of his Family with the Keladi Rulers of Ikkeri—Between A.D. 1592 and 1645," *JOI Baroda* 4, 1954-55, 33-36.
- [1955]. "The Relative Chronology of Some Works of Nāgajihhāṭa—Between c. A.D. 1670 and 1750," *OT* 1, 2, 1955, 45-52. Reprinted in P. K. Gode [1955/56], vol. 3, pp. 212-219.
- Gokhale, Shobhana Laxman. [1966]. *Indian Numerals, Deccan College Building Centenary and Silver Jubilee Series* 45, Poona 1966.
- Gopani, A. S. [1940]. "Indian Astronomy before the Greek Contact," *Bhāratiya Vidyā* 1, 1940 (in Gujarati).
- [1942/43a]. "Satyasamhitā and Gandhiji's Horoscope," *Bhāratiya Vidyā* 4, 1942-43, 65-74.
- [1942/43b]. "Satyasamhitā—A Further Study," *Bhāratiya Vidyā* 4, 1942-43, 167-183.
- [1946a]. "Between Varāhamihira and Kalyāṇavarmā," *Bhāratiya Vidyā* 7, 1946, 31-32.
- [1946b]. "Astrology and Aṣṭakavarga," *Bhāratiya Vidyā* 7, 1946, 39-41.
- [1946c]. "Third Stanza of Bṛhajjīta," *Bhāratiya Vidyā* 7, 1946, 161-162.
- Gore, N. A. [1946/47]. "Kavi Kalkya," *JGRI* 4, 1946-47, 173-179.
- Govindasami, S. K. [1941]. "Omens and Divination in Early Tamil Religion," *JAU* 11, 1941, 1-7.
- Gowd, P. N. [1918/19]. "The Exact Sciences in the Veda," *OJMS* 9, 1918-19, 237-251.
- Gray, Louis H. [1910]. "The Pārsī-Persian Burj-Nimāh, or Book of Omens from the Moon," *JACS* 30, 1910, 336-342.
- Grierson, George A. [1912]. "Kālmīri Almanacs," *JRAS*, 1912, 719-721.
- [1926]. "Sortes Tulasianae," *Beiträge zur Literaturwissenschaft und Geistesgeschichte Indiens (Festschrift Hermann Jacobi)*, Bonn 1926, pp. 449-455.
- Guérin, J. M. F. [1847]. *Astronomie indienne*, Paris 1847.
- Guleri, Chandradhar. See A. F. Garrett and C. Guleri [1902].
- Gundel, Wilhelm. [1936]. *Dekane und Dekansternebilder*, SBW 19, Glückstadt-Hamburg 1936.
- Gunther, Robert William Theodore. [1932]. *The Astrolabes of the World*, 2 vols., Oxford 1932.
- Gupta, Hansraj. [1940]. "On the Extraction of Square-root of Surds," *PBMS*, NS 2, 1940, 35-37.
- Gupta, Parmeshwari Lal. [1961]. "Samvatsaras in the Parivṛkajaka Inscriptions," *IHO* 37, 1961, 197-202.
- [1963]. "The Gupta Era—A Re-assessment," *IBRS* 49, 1963, 71-87.
- Gurjar, L. V. [1942a]. "The Value of  $\sqrt{2}$  Given in the Sulvasūtras," *JUB*, NS 10, pt. 5, 1942, 6-10.
- [1942b]. "The Problem of Squaring the Circle as Solved in the Sulvasūtras," *JUB*, NS 10, pt. 5, 1942, 11-16.
- [1947]. *Ancient Indian Mathematics and Vedha*, Poona 1947.
- Haas, Karl. [—]. "Die Mathematik der Inder," *OM* 18.
- Habibullah, A. B. M. [1938]. "Medieval Indo-Persian Literature relating to Hindu Science and Philosophy, 1000-1800 A.D.," *IHO* 14, 1938, 167-181.
- Hacker, Paul [1959]. "Two Accounts of Cosmogony," *Jānu-mukābhāṣā*, New Delhi 1959, pp. 77-91.
- Hall, Fitz-Edward. [1860]. "On the Arya-Siddhānta," *JACS* 6, 1860, 556-559.
- Hamilton, Alexander. [1820]. *A Key to the Chronology of the Hindus*, 2 vols., Cambridge 1820.
- Hans Raj. [1956]. *Science in the Vedas*, Ludhiana [1956].
- Harshe, R. G. [1948]. "Two Illustrated Manuscripts on Dreams," *Bhāratiya Vidyā* 9, 1948, 246-268.
- Hartner, Willi. [1938]. "The Pseudo-Planetary Nodes of the Moon's Orbit in Hindu and Islamic Iconographies," *Ars Islamica* 5, 1938, 113-154.
- Hazra, R. C. [1945]. "The Samvatsarapradīpa," *IHO* 21, 1945, 49-55.
- Henry, Victor. [1901]. "Le Triangle et le carreau (R. V. 1 152, 2)," *Actes du douzième congrès international des orientalistes*, vol. 1, Florence 1901, pp. 5-17.
- Heras, H. [1939]. "The Numerals in the Mohenjo Daro Script," *A Volume of Indian and Iranian Studies, NIA Extra Ser.* 2, Bombay 1939, pp. 136-146.
- Hertel, Johannes. [1924]. *Die Himmelstare im Veda und im Avesta*, HGF 2, Leipzig 1924.
- Hilgenberg, Luise. [1934]. *Die kosmographische Episode im Mahābhārata und Padmapurāṇa*, BOS 4, Stuttgart 1934.
- Hodson, T. C. [1913]. "Note on the Numeral Systems of the Tibeto-Burman Dialects," *JRAS*, 1913, 315-336 and 1064-1065.
- Hoernle, A. F. Rudolf. [1888a]. "On the Bakhshālī Manuscript," *Verhandlungen des VII internationalen Orientalisten-Congresses, Aische Section*, Wien 1888, pp. 127-147.
- [1888b]. "The Bakhshālī Manuscript," *IA* 17, 1888, 33-48 and 275-279.
- Hoisington, H. R. [1848]. *The Oriental Astronomer*, Jaffna 1848.
- Holtzman, Adolf. [1841]. *Über den griechischen Ursprung des indischen Tierkreises*, Karlsruhe 1841.
- Hommel, Fritz. [1891]. "Ueber den Ursprung und das Alter der arabischen Sternnamen und insbesondere der Mondstationen," *ZDMG* 45, 1891, 592-619.
- Hunter, William. [1797]. "Some Account of the Astronomical Labours of Jayasinha, Rajah of Amberg, or Jaynagar," *AR* 5, 1797, 177-211.
- Inamdar, M. G. [1927/28]. "A Long Forgotten Method," *ABORI* 9, 1927-28, 304-308.
- [1945]. "An Interesting Proof of the Formula for the Area of a (Cyclic) Quadrilateral and a Triangle Given by the Sanskrit Commentator Ganesh in about 1545 A.D.," *NUJ* 11, 1945, 36-42.
- [1950]. "A Formula of Bhaskara for the Chord of a Circle Leading to a Formula for Evaluating  $\sin a^\circ$ ," *MS* 18, 1950, 9-11.
- Indrajī, Bhagvanlal. [1876]. "On Ancient Nāgarī Numeration; from an Inscription at Nāneghāt," *IBRRAS* 12, 1876, 404-406.
- [1877]. "On the Ancient Nāgarī Numerals," *IA* 6, 1877, 42-48.
- Íulkevič, A. P., and B. A. Rozenfeld. [1960]. "Matematika v stranakh Vostoka v srednie veka," *Iz istorii nauki i tekhniki v stranakh Vostoka*, vol. 1, Moskva 1960, pp. 349-421.
- Iyer, H. Subramani. [1937]. "A Method of Computing the Beginning of the Indian Solar Year," *MS* 5, 1937, 96-99.
- Iyer, K. Sundaram. [1937]. "Kerala's Contribution to Astronomy and Astrology," *PAIOC* 9, 1937, 1109-1119.
- Iyer, P. R. Chidambara. [1946/47]. "So-called Geographical and Astronomical Evidence to the Mahābhārata Problem," *JGRI* 4, 1946-47, 35-44.
- [1947]. "The Year of the Bhārata War as Disclosed by the Bhīṣma Chronogram *muñcati gītām*," *ABORI* 27, 1947, 65-83.
- Iyer, R. Venkatchalam. [1950]. "Pīṣṅāṅga and the Hindu Abacus," *MS* 18, 1950, 79-82.
- [1954]. "The Hindu Abacus," *SM* 20, 1954, 58-63.
- Iyer, S. Venkatasubrahmanya. [1952/53]. "Acyuta Pīṣṅāṅga: His Date and Works," *JOR Madras* 22, 1952-53, 40-46.
- Iyer, V. Venkataschellam. [1914]. "Year-measurements in Ancient Times," *IBRRAS* 25, 1914, 282-327.
- Jacobi, Hermann. [1872]. *De astrologiae indicae horū appellatae originibus*, Bonn 1872.
- [1888]. "Methods and Tables for Verifying Hindu Dates, Tithis, Eclipses, Nakshatras, etc.," *IA* 17, 1888, 145-180.
- [1888/92]. "The Computation of Hindu Dates in Inscriptions, etc.," *EI* 1, 1888-92, 403-460.
- [1892/94]. "Tables for Calculating Hindu Dates in True Local Time," *EI* 2, 1892-94, 487-498.
- [1893]. "Über das Alter des Rig-Veda," *Festgruss an*

- Rudolf von Roth, Stuttgart 1893, pp. 68-74.
- [1895a]. "Beiträge zu unserer Kenntnis der indischen Chronologie," *Actes du dixième congrès international des orientalistes*, Leide 1895, pp. 101-108.
- [1895b]. "Der vedische Kalender und das Alter des Veda," *ZDMG* 49, 1895, 218-230.
- [1896]. "Nochmals über das Alter des Veda," *ZDMG* 50, 1896, 69-83.
- [1900]. "How to Calculate the Lagna," *JA* 29, 1900, 189-190.
- [1909]. "On the Antiquity of Vedic Culture," *JRAS*, 1909, 721-726.
- [1910]. "The Antiquity of Vedic Culture," *JRAS*, 1910, 456-464.
- [1911/12]. "New Special Tables for the Computation of Hindu Dates," *EI* 11, 1911-12, 158-175.
- [1913/14]. "The Planetary Tables," *EI* 12, 1913-14, 79-120.
- [1920]. "Einteilung des Tages und Zeitmessung im alten Indien," *ZDMG* 74, 1920, 247-265.
- Iaccoliti, Louis. [ND]. *Occult Science in India and among the Ancients*, trans. from the French by Willard L. Felt, London [ND].
- Jacquet, E. [1835]. "Mode d'expression symbolique des nombres, employé par les Indiens, les Tibétains et les Javanais," *JA* 2, 16, 1835, 5-42 and 97-116.
- Jaggi, O. P. [1966]. *Scientists of Ancient India and their Achievements*, Delhi 1966.
- Jaina, Lakshmicandra. [1958]. *Tiloyapatra kī Ganita*, Sholapur 1958.
- Jayaswal, K. P. [1917]. "Chronological Tables in Puranic Chronicles and the Kaliyuga Era," *JBORS* 3, 1917, 246-262.
- [1918]. "The Week-days and Vikrama," *JA* 47, 1918, 112.
- [1928a]. "Demetrius, Khāravēla and the Garga-Saṃhitā," *JBORS* 14, 1928, 127-128.
- [1928b]. "Historical Data in the Garga-Saṃhitā and the Brahmin Empire," *JBORS* 14, 1928, 397-421.
- [1929]. "The Paris Manuscript of the Garga Saṃhitā," *JBORS* 15, 1929, 129-133.
- [1931]. "An Exact Date in the Reign of Aśoka," *JBORS* 17, 1931, 400.
- Jensen, P. [1919]. "Indische Zahlwörter in keilinschriftlichen Texten," *SAWB*, 1919, 367-372.
- Jhā, Muralidhara. [1908/16]. "Siddhāntairomaṇi with Vāsanābhāṣya, Vāsanāvēntika, and Maricī of Munīśvara," *The Paṇḍit*, NS 30, 1908, 225-240; 305-320; 353-368; 449-466; 609-624; and 697-712; 31, 1909; 32, 1910; 33, 1911; 35, 1913; 36, 1914; 37, 1915; 38, 1916; and 39, 1917. Reprinted Benares 1917.
- Jinavijaya Muni. [1956]. Ed., *Kharataragacchabhāṣyagurvūli*, SJS 42, Bombay 1956.
- Jones, William. [1790a]. "On the Chronology of the Hindus," *AR* 2, 1790, 111-147 and 389-403. Reprinted in W. Jones [1807], vol. 4, pp. 1-69.
- [1790b]. "On the Antiquity of the Indian Zodiac," *AR* 2, 1790, 289-306. Reprinted in W. Jones [1807], vol. 4, pp. 71-92.
- [1792]. "The Lunar Year of the Hindus," *AR* 3, 1792, 257-293. Reprinted in W. Jones [1807], vol. 4, pp. 126-165.
- [1807]. *The Works of Sir William Jones*, 13 vols., London 1807.
- Joseph, T. K. [1949]. "Āntu and Etir-āntu or Year and After-Year," *JHH* 27, 1949, 55-58.
- Joshi, [1906]. *Oriental Astrology*, Allahabad 1906.
- Kalita, Dandiram. [1941]. "Old Assamese Mathematics," *JARS* 8, 1941, 19-20.
- Kalyan, Sohrab A. [1948]. *Horoscopic Determinism*, Bombay 1948.
- Kamalamma, K. N. [1948]. "On the Solution of a Problem on Indeterminate Equations Occurring in the Sulva-sūtras," *BCMS* 40, 1948, 140-144.
- Kane, Pandurang Vaman [1930/62]. *History of Dharmasāstra*, *GOS (Bombay)* B 6, 5 vols. in 7, Poona 1930-62.
- [1948]. "The Problem of the Introduction of Rāsis in Indian Astronomy and Astrology," *Bhāratīya Vidyā* 9, 1948, 310-315.
- [1948/49]. "Varāmhira and Utpala: their Works and Predecessors," *JBRAS*, NS 24/25, 1948-49, 1-31.
- [1950/52]. "Varāha-Mihira and the Saka Era," *JAHRS* 21, 1950-52, 41-45.
- [1951]. "Some Rāmāyaṇa Problems," *JOI Baroda* 1, 1951, 5-8.
- [1953]. "The Decimal Notation," *JBRAS*, NS 28, 1953, 159-160.
- [1953/54]. "King Bhoja and his Works on Dharmasāstra and Astrology," *JOR Madras* 23, 1953-54, 94-127.
- [1955a]. "Yavaneivara and Utpala," *JAS Bombay* 30, 1, 1955, 1-8.
- [1955b]. "The Yavanajātaka of Sphujidhvaja," *JAS Bombay* 30, 2, 1955, 1-5.
- [1956]. "Passages from the Rāmāyana on Tithi, Vratas and Utsavas," *ABORI* 36, 1956, 306-339.
- [1958]. "Date of Utpala," *JAS Bombay*, NS 33, 1958, 147-149.
- [1963]. "The Vaṭakaṇikā of Varāmhira," *VJ* 1, 1963, 63-65.
- Kangle, R. P. [1960]. "The Steelyard in Kauṭilya," *P. K. Gode Commemorative Volume*, POS 93, Poona 1960, pt. 2, pp. 113-116.
- Kānitakara, Śrīkṛṣṇāśāstri. [1963/65]. "Pāṇinīye Kālavācaka-sādhā," *Meṣhā* 3-4, 1963-65, 17-38.
- Kannan, S. [1967]. *Fundamentals of Hindu Astrology*, Madras 1967.
- Kapadia, Hiralal R. [1932]. "Note on Śrīpati," *IHO* 8, 1932, 351.
- [1934]. "A Note on Jaina Hymns and Magic Squares," *IHO* 10, 1934, 148-153.
- [1941]. *A History of the Canonical Literature of the Jainas*, Surat 1941.
- [1952]. "Horoscopic Data in the Jaina Literature," *JOI Baroda* 2, 1952, 41-49.
- Karambelkar, V. W. [1952]. "Nabābhāṣyānācāritam," *IHO* 28, 1952, 240-248.
- Karandīkar, A. J. [1957]. "The Riddle of 'Indra' and 'Soma,'" *PO* 22, 3-4, 1957, 12-22.
- Karpinski, L. C. See D. E. Smith and L. C. Karpinski [1911].
- [1910/11]. "Hindu Numerals in the Fibrist," *BM* 3, 11, 1910-11, 121-124.
- [1912]. "The Hindu Arabic Numerals," *Science* 35, 1912, 969-970.
- [1912/13]. "Hindu Numerals among the Arabs," *BM* 3, 13, 1912-13, 97-98.
- [1928]. "The Unity of Hindu Contributions to Mathematical Science," *Scientia* 43, 1928, 381-388.
- Katre, Sadashiva L. [1942a]. "Bhūpālāvallabha: the Work, its Author and Date," *ABORI* 23, 1942, 224-241.
- [1942b]. "A Family of Learned Authors of Jyauṭīya: Correction of an Error in Aufrecht's CC," *PO* 7, 1942, 43-48.
- [1942/43]. "Śivādīta's Jyotiribandha: the Work and its Date," *NJA* 5, 1942-43, 275-279.
- [1944/45]. "Kalyāṇavarman's Śārāvalī: Fresh Light on its Date," *JC* 11, 1944-45, 1-9.
- [1947]. "Exact Date of Rāma Vījāpēyī's Nāḍīpārikā," *PO* 12, 1947, 20-22.
- Kavi, M. Ramakrishna. [1941]. "Utpala-parimalam," *JSVOI* 2, 1941, 49-55.
- Kaye, George Rusby. See M. Ramanujacharya and G. R. Kaye [1912/13].
- [1907]. "Notes on Indian Mathematics—Arithmetical Notation," *JAS Bengal*, NS 3, 1907, 473-508.
- [1908a]. "Notes on Indian Mathematics No. 2—



- Aryabhata, *JAS Bengal*, NS 4, 1908, 111-141.
- [1908b]. "The Use of the Abacus in Ancient India," *JAS Bengal*, NS 4, 1908, 293-297.
- [1909/10]. "The Two Aryabhatas," *BM* 3, 10, 1909-10, 289-292.
- [1910]. "The Source of Hindu Mathematics," *JRAS*, 1910, 749-760.
- [1910/11]. "Notes on Hindu Mathematical Methods," *BM* 3, 10, 1910-11, 289-299.
- [1911a]. "Old Indian Numerical Symbols," *IA* 40, 1911, 49-58.
- [1911b]. "A Brief Bibliography of Hindu Mathematics," *JAS Bengal*, NS 7, 1911, 679-686.
- [1911c]. "References to Indian Mathematics in Certain Mediaeval Works," *JAS Bengal*, NS 7, 1911, 801-816.
- [1912]. "The Bakhshali Manuscript," *JAS Bengal*, NS 8, 1912, 349-361.
- [1915]. *Indian Mathematics*, Calcutta 1915.
- [1918a]. *The Astronomical Observatories of Jai Singh*, *ASINIS* 40, Calcutta 1918.
- [1918b]. "L'Origine de notre notation numérique," *Scientia* 24, 1918, 53-55.
- [1919a]. "Indian Mathematics," *Isis* 2, 1919, 327-356.
- [1919b]. "Ancient Hindu Spherical Astronomy," *JAS Bengal* 15, 1919, 155-189.
- [1919c]. "Influence grecque dans le développement des mathématiques hindoues," *Scientia* 25, 1919, 1-14.
- [1920a]. *A Guide to the Old Observatories at Delhi; Jaipur; Ujjain; Benares*, Calcutta 1920.
- [1920b]. "Hindu Astronomical Deities," *JAS Bengal* 16, 1920, 57-75.
- [1921a]. *Astronomical Instruments in the Delhi Museum*, *MASI* 12, Calcutta 1921.
- [1921b]. "The Nakshatras and Precession," *IA* 50, 1921, 44-48.
- [1921c]. "The Rig-Veda: A Note on the Arrangement of the Books," *JAS Bengal* 17, 1921, 325-327.
- [1924]. *Hindu Astronomy*, *MASI* 18, Calcutta 1924.
- Kearns, J. F. [1876]. "Śilpa Śāstra," *IA* 5, 1876, 230-257 and 293-297.
- Kedar, T. J. [1942]. "A New Interpretation of a Disputed Reference in Garga Samhitā," *NUJ* 8, 1942, 1-5.
- Kedarnath. [1924]. "Śrīmanmahārājādhirājāsīrījyasīphaviracitā Yantraśikṣālikā," *The Pandit (Jaipur)* 1, 1924, art. 2, 8 pp.
- Keith, A. Berriedale. [1909]. "On the Antiquity of Vedic Culture," *JRAS*, 1909, 1100-1106.
- [1910]. "The Antiquity of Vedic Culture," *JRAS*, 1910, 464-466.
- [1911]. "The Planet Brhaspati," *JRAS*, 1911, 794-800.
- [1914]. "The Vedic Calendar," *JRAS*, 1914, 627-640.
- [1916a]. "Day and Night in India," *JRAS*, 1916, 143-146.
- [1916b]. "The Indian Day," *JRAS*, 1916, 555-561.
- [1917]. "The Order of the Nakshatras in the Epic, and the Epic Month," *JRAS*, 1917, 135-139.
- [1925]. *Religion and Philosophy of the Veda*, 2 vols., *HOS* 31-32, Cambridge, Mass. 1925.
- Kennedy, Edward S. [1957]. "Comets in Islamic Astronomy and Astrology," *JNES* 16, 1957, 44-51.
- [1958]. "The Sasanian Astronomical Handbook Zīj-i Shāh and the Astrological Doctrine of 'Transit' (Mamarr)," *JAOS* 78, 1958, 246-262.
- [1964]. "Ramifications of the World-Year Concept in Islamic Astrology," *Actes du dixième congrès international d'histoire des sciences*, 2 vols., Paris 1964, vol. 1, pp. 23-43.
- Kennedy, E. S., S. Engle, and J. Wamstad [1965]. "The Hindu Calendar as Described in al-Bīrūnī's Masūdī Canon," *JNES* 24, 1965, 274-284.
- Kennedy, E. S., and A. Muruwuwa [1958]. "Bīrūnī on the Solar Equation," *JNES* 17, 1958, 112-121.
- Kennedy, E. S., and B. L. van der Waerden [1963]. "The World-Year of the Persians," *JAOS* 83, 1963, 315-327.
- Kern, H. [1863]. "On Some Fragments of Aryabhata," *JRAS* 20, 1863, 371-387. Reprinted in Kern [1913/29], vol. 1, pp. 31-46.
- [1868/76]. "Die Yogayātrā des Varāhamihira," *IS* 10, 1868, 161-212 (1-5); 14, 1876, 312-358 (4-6); and 15, 1878, 167-184. Reprinted in H. Kern [1913/29], vol. 1, pp. 97-168.
- [1870/75]. "The Brhat-Saṁhitā; or, Complete System of Natural Astrology of Varāhamihira. Translated from Sanskrit into English," *JRAS*, 1870, 430-479; 1871, 45-90 and 231-288; 1873, 36-91 and 279-338; and 1875, 81-134. Reprinted in H. Kern [1913/29], vol. 1, pp. 169-319, and vol. 2, pp. 1-154.
- [1913/29]. *Vespreide Geschriften*, 16 vols., 's-Gravenhage 1913-1929.
- Ketkar, D. V. [1954]. "Precession in Varaha's Time was 3° 20'," *SC* 20, 1954, 22-24.
- [1959]. "Date of Kalidasa," *PO* 24, 1959, 109-137.
- Ketkar, V. B. [1900/03]. "Astronomy and its Bearing on the Antiquity of the Aryans," *JBRAS* 21, 1900-03, 24-33.
- [1922]. "The Use of Astronomical Phenomena in Fixing the Chronological Periods in Indian History," *PAIOC* 1, 1922, 445-459.
- [1923]. *Indian and Foreign Chronology*, *JBRAS*, Extra No., Bombay 1923.
- Khareghat, M. P. [1895/97]. "On the Interpretation of Certain Passages in the Pancha Siddhāntikā of Varāhamihira, an Old Hindu Astronomical Work," *JBRAS* 19, 1895-97, 109-141.
- [1950]. *Astrolabes*, M. P. Khareghat Memorial Volume, vol. 2, ed. D. D. Kapadia, Bombay 1950.
- Kielhorn, F. [1888/92]. "Pāpā Inscription of the Time of the Yadava Singhana and his Feudatories Soldeva and Hemādīdrva," *El* 1, 1888-92, 338-346.
- [1889a]. "Tafeln zur Berechnung der Jupiter-Jahre nach den Regeln des Sūrya-Siddhānta und des Jyotistatva," *AKGWG*, Hist.-Phil. Kl. 36, 1889.
- [1889b]. "The Sixty-year Cycle of Jupiter," *IA* 18, 1889, 195-209 and 380-386.
- [1891]. "The Meanings of Vyatipata," *IA* 20, 1891, 292-295.
- [1893]. "Die Epoche der Cedi-Aera," *Festgruss an Rudolf von Roth*, Stuttgart 1893, pp. 53-56.
- [1894/95]. "Bahā Inscription of the Yadava King Singhana," *El* 3, 1894-95, 110-113.
- [1896]. "Warren's Rules for Finding Jupiter's Place," *IA* 25, 1896, 233-237.
- [1897]. "Festal Days of the Hindu Lunar Calendar," *IA* 26, 1897, 177-187.
- [1906]. "Wrongly Calculated Dates, and some Dates of the Lakṣmanasena Era," *JRAS*, 1906, 1009-1011.
- Kincaid, C. A. [1943]. "The Romance of the Indian Calendar," *JRAS*, 1943, 255-259.
- Kirfel, Willibald [1920]. *Die Kosmographie der Inder*, Bonn 1920. Reprinted Hildesheim 1967.
- [1927]. *Das Purāna Pañcalakṣana*, Leiden 1927.
- [1954]. *Das Purāna vom Weltgebäude*, *BOS*, NS 1, Bonn 1954.
- [1959a]. *Zur Eschatologie von Welt und Leben*, *BOS* NS 5, Bonn 1959.
- [1959b]. "Vergleichs- und Beiworte der Sonne im Rg- und Atharvaveda," *Jñānamuktāvālī*, New Delhi 1959, pp. 111-119.
- Kitel, F. [1873]. "Notes Concerning the Numerals of the Ancient Dravidians," *IA* 2, 1873, 24-25 and 124.
- Kohl, Josef Friedrich. [1938]. "Der Zodiac des Siva-Tempels im Foet von Trichinopoly," *ZDMG* 92, 1938, 28-46.
- Kokaje, Raghunath Sastrī. [1952]. "Pañcāṅga, jyotiṣa, api dharmāśāstra," *Kevelananda Commemoration Volume*, 1952,

- pp. 36-42.
- Konow, Sten. [1926]. "Some New Facts about the Eras of the Kharoshī Inscriptions," *AO* 5, 1926, 28-38.
- . [1929]. *Kharoshī Inscriptions*, *CH* 2, 1, Calcutta 1929.
- Konow, S., and W. E. van Wijk. [1924]. "The Eras of Indian Kharoshī Inscriptions," *AO* 3, 1924, 53-91.
- Kosambi, D. D. [1941/42]. "On the Study and Metrology of Silver Punch-marked Coins," *NJA* 4, 1941-42, 1-62.
- . [1952]. "The Cintāmaṣīrasāṅgikā of Daśabala," *JOR Madras* 19, 2, 1952, suppl.
- Krishnadas, Ray. [1950]. "Prācīna bhāratīya pañcāṅga aurā rāmacāritā samayāvālī," *NPP* 59, —, 93-115.
- Krishnamurthy, R. [1943]. "Reform of the Hindu Calendar," *MS* 11, 1943, 81-85.
- . [1945]. "Precession or Ayanamsa," *MS* 13, 1945, 77-81.
- . [1948]. "References to Zodiacal Signs and Week-days in the Vedas," *PAIOC* 14, 1948, 13-15.
- . [1950]. "Devas and Asuras in Astronomy," *JDHC* 1, 1950, 91-95.
- Krishnarao, Bhavaraja Venkata. [1956]. "The Initial Year of the Ganga Era of Kalinga," *JBS* 42, 1956, 116-141.
- Krishnaswami, G. V. [1950]. "Reform of the Indian Calendars," *Isis* 14, 1950, 405-410.
- Kṛṣṇa, Bate. [1959]. "A Note on Dr. P. K. Gode's Paper on Vāstūśāstrīyā," *ABORI* 40, 1959, 376-379.
- Kulkarni, Bhaurao Rangnath. [1943]. *The Laguna System of the Vedāṅga-Jyotiṣha*, *RSMEP* 1, Dhulia 1943.
- . [1944]. "The Vedic Background of the Epoch of the Vikrama Era," *Sāṃśodhā* 13, 1944 (in Marathi).
- . [1947]. "The 'Pushya Period' in the Vedic Culture," *PIHC* 10, 1947, 126-128.
- . [1948]. "Some Astronomical References from the Arthashastra and their Significance," *JUB* 17, 1, (History, Economics and Sociology 33), 1948, 1-3.
- (Kumbha). [1927]. *Highways in Astrology*, Madras 1927.
- Lahiri, N. C. [1941]. "The Length of the Year in Hindu Astronomy," *IC* 8, 1941, 114-116.
- Lal, Jagdish. [1943]. "Yogayātrā," *Oriental College Magazine, Lahore*, Nov. 1943, Reprinted Lahore, 1944.
- Lanman, Charles Rockwell. [1893]. "Rigveda V 40 and its Buddhist Parallel," *Festgruss an Rudolf von Roth*, Stuttgart 1893, pp. 187-190.
- Lapin, V. I. [1858]. "O kvadrature kruga u indliisev i besko-neŭykh rūdakh," *JMNP* 20, 1858, 528-551.
- Larwood, H. J. C. [1962]. "Western Science in India before 1850," *JRAS*, 1962, 62-76.
- Law, N. N. [1960/61]. "Age of the Rgveda," *IHO* 36-37, 1960-61, suppl.
- Le Gentil de la Galaisière, G.-J.-H.-B. [1772]. "Premier mémoire sur l'Inde, particulièrement sur quelques points de l'astronomie des gentils tamouls sur Pondichery & ses environs," *MHARS*, 1772, pt. 2, 169-214 and 221-266.
- . [1784]. "Remarques et observations sur l'astronomie des indiens, & sur l'ancienneté de cette astronomie," *MHARS*, 1784, 482-501.
- Lesley, Mark. [1957]. "Bīrīnī on Rising Times and Daylight Lengths," *Centaurus* 5, 1957, 121-141.
- Leumann, Ernst. [1928]. "Die Göttin Aditi und die vedische Astronomie," *ZfI* 6, 1928, 1-15.
- Levi, B. [1908/09]. "Osservazioni e congetture sopra la geometria degli indiani," *BM* 3, 9, 1908-09, 97-105.
- Lewis, C. [?]. *Historical Survey of the Astronomy of the Hindus*, [?].
- Löffler, Eugen. [1912]. "Zur Geschichte der indischen Ziffern," *AMP* 3, 19, 1912, 174-178.
- Longhena, M. [1901]. "Il catalogo geografico del Kūrmāvibhāga nella Brāhmasamhitā," *SIFI* 4, 1901, app., pp. 1-11.
- Loria, Gino. [1933]. "La geometria degli altari eretti in onore di Brahma," *Archivon* 15, 1933, 395-407.
- Loria, G., and A. N. Singh. [1937]. "Sur un système d'équations algébriques considéré par les Indiens," *Mathesis* 51, 1937, 327-330.
- Löschhorn, Karl. [1902]. "Über das Alter des Pythagoräischen Lehrsatzes," *ZMNU* 33, 1902, 183.
- Lüders, H. [1933]. "Zur Geschichte des ostasiatischen Tierkreises," *SPAW*, Phil.-hist. Kl. 24, 1933, 998-1022.
- Ludwig, A. [1885]. "Über die Erwähnung von Sonnenfinsternissen im Rgveda," *SKBGW*, Phil.-histor.-philolog. Classe 1885, 76-90.
- . [1894]. *The Late Prof. W. Dwight Whitney's Views on the Solar Eclipses Mentioned in the Rgveda Illustrated*, Prag 1894.
- Mackenzie, J. S. F. [1874]. "Panchāṅga, or Indian Almanac," *JA* 3, 1874, 137-142.
- Mahapatra, Kedarnath. [1962a]. Raghunātha Dāsa, A Celebrated Author of Some Sanskrit Works of Orissa," *OHRJ* 11, 1962, 73-84.
- . [1962b]. "Reckoning of Chāturmāsī, Lunar and Solar Months and Different Eras in Orissa," *OHRJ* 11, 1962, 135-146.
- Majumdar, M. R. [1961]. "A Dated MS of the Kākarastulāstra Illustrated in the Western Indian Style," *Lalit Kalā* 9, 1961, 55-56.
- Majumdar, R. C. [1953]. "Growth of Scientific Spirit in Ancient India," *SC* 18, 1953, 463-472.
- . [1959]. "The Value of Astronomical Data in Ancient Indian Inscriptions," *JBS* 45, 1959, 10-12.
- . [1960]. "Scientific Spirit in Ancient India," *CHM* 6, 1960, 265-275. Reprinted in G. S. Métraux and F. Crouzet, ed., *Studies in the Cultural History of India*, Agra 1965, pp. 103-114.
- Makoday, G. B. [1933]. "The Date of Karkācārya," *IHO* 9, 1933, 923-929.
- Malurkar, S. L. [1958]. "Determination of Seasons and Equinoxes in Old India and Related Festivals," *JAS Bombay*, NS 33, 1958, 101-105.
- . [1963/64]. "Determination of Seasons, Religious Festivals and Temples in Ancient India," *OJMS* 54, 1963-64, 18-29.
- Mankad, D. R. [1930/31]. "The Arctic Regions in the Rgveda," *ABORI* 12, 1930-31, 260-273.
- . [1941/42]. "The Yugas," *PO* 6, 1941-42, 206-216.
- . [1942]. "The Manvantara," *IHO* 18, 1942, 208-230.
- . [1943]. "Chronology of Kālī Dynasties," *PO* 8, 1943, 87-99 and 177-187.
- . [1947]. "A Critically Edited Text of the Yuga-Purāṇa," *JUPHS* 20, 1947, 32-64. Reprinted Vallabhvidyanagar 1951.
- . [1951]. *Pyramic Chronology*, Anand 1951.
- Marar, K. Mukunda, and C. T. Rajagopal. [1944]. "On the Hindu Quadrature of the Circle," *JBRAS*, NS 20, 1944, 65-82.
- . [1945]. "Gregory's Series in the Mathematical Literature of Kerala," *MS* 13, 1945, 92-98.
- Marre, Aristide. [1887]. "Théorème du carré de hypoténuse," *BB* 20, 1887, 404-406.
- Marsden, William. [1790]. "On the Chronology of the Hindoos," *PTRSL* 80, 1790, 560-584.
- Mason, Francis. [1865]. "Religion, Mythology, and Astronomy among the Karens," *JAS Bengal* 24, 2, 1865, 173-188 and 195-250.
- Mayer, L. A. [1956]. *Islamic Astrologists and their Works*, Genève 1956.
- Mazumdar, Narendra Kumar (=Majumdar). [1911/12]. "Aryabhaṭa's rule in relation to Indeterminate Equations of the First Degree," *BCMS* 3, 1911-12, 11-19.
- . [1913/14]. "On Chinese Indeterminate Analysis," *BCMS* 5, 1913-14, 9-11.
- . [1921]. "Dhikoti-Karanam of Śrīpati," *JAS Bengal*, NS 17, 1921, 275-278.
- . [1922a]. "Mānava Sulba Sūtram," *JDL/UC* 8, 1922, 327-342.

- [1927b]. "On the Different Sulba Sutras," *PAIOC* 2, 1922, 561-564.
- [1927]. "Laghumānasam of Muñjala," *JDL/UC* 14, 1927, art. 8, pp. 1-5.
- [1934]. "Dhikojikaraṇa of Sripati," *COJ* 1, 1934, 286-299.
- [1939/43]. "Laghumānasam," *IC* 6, 1939-40, suppl.; 7, 1940-41, suppl.; 8, 1941-42, suppl.; and 9, 1942-43, suppl. Reprinted *IPSS* 2, Calcutta 1951.
- Mehta, Dharma Deva. [1959]. *Some Positive Sciences in the Vedas*, New Delhi 1959.
- [ND]. *The Bases of Astrology in the Vedas*, Delhi [ND].
- Mehta, D. M. [1931?]. *Theory of Simple Continued Fractions*, Bhavnagar [1931?].
- Meister, P. W. [1954]. "Buddhistische Planetendarstellungen in China," *OE* 1, 1954, 1-5.
- Menon, C. P. Sivarama. [1952]. *Early Astronomy and Cosmology: a Reconstruction of the Earliest Cosmic System*, London [1952].
- [1940]. "The Magic Cakras and Rectilinear Orbits in Ancient Astronomy," *JRSB/S* 6, 1940, 51-67.
- Meyer, J. J. [1929]. "Die menschlichen Körpertheile in ihrer Bedeutung für Schicksal und Charakter," *WZKM* 36, 1929, 108-135 and 242-262.
- Meyerhof, Max. See L. Frank and M. Meyerhof. [1925]. [1937]. "On the Transmission of Greek and Indian Science to the Arabs," *Islam* C 11, 1937, 17-29.
- Michalski, F. Stanislaw. [1954]. "Zodiacal Light in the Rgveda," *JBR* 40, 1954, 17.
- Middleton, J. [1839]. "Description of an Astronomical Instrument Presented by Rajah Ram Sing, of Kkota, to the Government of India," *JAS Bengal* 8, 1839, 831-838.
- [1841]. "Description of a Persian Astrolabe, Submitted to the Asiatic Society by Major Pottinger," *JAS Bengal* 10, 1841, 759-777.
- Millard, Gaston. [1910]. "La Géométrie d'Apastamba," *RGSPA* 21, 1910, 512-520.
- Mirashi, Vasudev Vishnu. [1957/58]. "The Epoch of the Kalachuri-Chedi Era," *EI* 24, 1957-58, 116-125. Also in *PAIOC* 9, 1957, 746-762.
- [1941/42]. "Epoch of the Gaṅga Era," *EI* 26, 1941-42, 326-336. Reprinted in V. V. Mirashi [1960/66], vol. 2, pp. 110-127.
- [1947/48]. "Further Notes on the Epoch of the Gaṅga Era," *EI* 27, 1947-48, 192. Reprinted with additions in V. V. Mirashi [1960/66], vol. 2, pp. 128-139.
- [1953]. "The Harsha and Bhātika Eras," *IHO* 29, 1953, 191-195. Reprinted in V. V. Mirashi [1960/66], vol. 2, pp. 147-152.
- [1955]. *Inscriptions of the Kalachuri-Chedi Era*, *CH* 4, Ootacamund 1955.
- [1956]. "The Epoch of the Ganga Era," *JBR* 42, 1956, 309-315.
- [1957]. "New Light on the Ancient History of Malwa," *IHO* 33, 1957, 314-320. Reprinted in V. V. Mirashi [1960/66], vol. 1, pp. 206-212.
- [1959]. "Ujjayini was the Capital of the Later Aulikaras," *IHO* 35, 1959, 254-258. Reprinted in V. V. Mirashi [1960/66], vol. 2, pp. 180-184.
- [1960]. "The Epoch of the Ganga Era," *IHO* 36, 1960, 120-127. Reprinted in V. V. Mirashi [1960/66], vol. 2, pp. 140-146.
- [1960/61]. "Recent Theories on the Date of Kālidāsa," *IWH* 6, 1960-61, 305-330. Reprinted in V. V. Mirashi [1960/66], vol. 4, pp. 1-29.
- [1960/66]. *Studies in Indology*, 4 vols., Nagpur 1960-66.
- [1961]. "When Did the Decimal Notation Come into Vogue?" V. V. Mirashi [1960/66], vol. 2, pp. 249-253.
- [1966]. "The Gaṅga Era," V. V. Mirashi [1960/66], vol. 4, pp. 166-204.
- Mirza, Arshad. See H. I. J. Winter and A. Mirza [1952].
- Misra, Baladeva. [1962]. "Mithilā meṃ jyotiṣa," *JBR* 48, 1962, sect. 3, pp. 61-68.
- Misra, B. K. [1948]. "Hindu Mathematics," *PAIOC* 14, 1948, 150-152.
- Mitra, Debala. [1965]. "A Study of Some Graha-images of India and their Possible Bearing on the Nara-devās of Cambodia," *JAS* 7, 1965, 13-38.
- Mitra, Sarat Chandra. [1932]. "On Ancient Indian Dream-Loec," *Acharyya Ray Commemoration Volume*, Calcutta 1932, pp. 511-518.
- Moḍaka, Janārdana Bājjī. [1877]. *Bhāskara Achārya and his Astronomical System*, [NP] 1877. Marathi translation, *Bhāskara Achārya va tatkrīya jyotiṣa*, Ratnagiri 1877.
- Modi, J. J. [1914]. "An Account of the Comets as Given by Mahomedan Historians and as Contained in the Books of the Pishiniglān or the Ancient Persians Referred to by Abul Fazl," *JBRAS* 25, 1914, 147-184.
- Mody, Ramniklā R. [1935]. *Indian Astrology*, [NP] 1935.
- Mohan, Brij. [1958/59]. "The Terminology of Lilāvati," *JOI Baroda* 8, 1958-59, 159-168.
- [1959/60]. "The Terminology of Bhāskara," *JOI Baroda* 9, 1959-60, 17-22.
- [1963]. "The Beginnings of Calculus in the East," *BNISI* 21, 1963, 255-257.
- Mollien, Erard. [1853a]. "Recherches sur le zodiaque indien," *MAIB* 1, 3, 1853, 240-275.
- [1853b]. "Remarques sur cinq zodiaques copiés dans les pagodes indiennes," *MAIB* 1, 3, 1853, 275-276.
- Mookerjee, Dharendra Nath (=Mukerji). See Dharendranath Mukhopadhyaya.
- [1921]. "Notes on Indian Astronomy," *JDL/UC* 5, 1921, 277-302.
- I The Libration of Equinoxes.
- II The Libration of Colures and Consequent Changes in the Commencement of the Hindu Nirayana Year.
- III The So-called Sidereal Year and the Sidereal Periods of the Planets in Hindu Astronomy.
- [1934/35a]. "The Era Used by the Kuṣāna Kings," *IC* 1, 1934-35, 477-479.
- [1934/35b]. "The Correct Interpretation of the Intercalary Month in the Grant of Sarvanītha," *IC* 1, 1934-35, 693-694.
- [1935/36]. "A Correlation of the Mayan and Hindu Calendars," *IC* 2, 1935-36, 685-692.
- [1941a]. "The Gupta Era," *IHH* 20, 1941, 71-84 and 249-250.
- [1941b]. "Chandragupta and Bhadrabahu," *IHH* 20, 1941, 249-274.
- [1942]. "The Genealogy and Chronology of the Early Imperial Guptas," *IHH* 21, 1942, 34-56.
- [1945a]. "The Gupta Era (A Reply)," *Bhāratīya Vidyā* 5, 1945, 96-114.
- [1945b]. "The Kṛta Era," *IHH* 24, 1945, 105-109.
- Moraes, G. M. [1951/52]. "Astronomical Missions to the Court of Jaipur 1730-1743," *JBRAS*, NS 27, 1951-52, 61-65 and 85.
- Moses, S. T. [1958/59]. "Water Divining," *OJMS* 29, 1958-59, 24-28.
- Muir, John [1845]. "On the Genuine Character of the Horā Śāstra, as Regards the Use of Greek Terms," *JAS Bengal* 14, 1845, 809-811.
- Mukherjee, Braja Lal. [1912]. "The Date of Varaha Mihira's Birth," *JAS Bengal*, NS 8, 1912, 275-278.
- Mukherjee, Prabhat. [1962]. "Navagraha Slab of the Konarak Temple," *OHRJ* 11, 1962, 32-35.
- Mukherjee, S. C. [1958]. "Some Observations on Lilāvati of Bhāskara Achārya," *PIHC* 21, 1958, 142-149.
- Mukherji, Kalinath. [1905]. *Popular Hindu Astronomy*, Calcutta 1905.
- Mukhopadhyay, Sukhamay. [1963]. "The Lakṣmaṇasena Samvat of Mithilā," *PIHC* 25, 1963, 196-201.

- Mukhopadhyaya, Dhirendranath. See Dhirendra Nath Mookerjee.
- \_\_\_\_\_. [1924]. "The Hindu Nakshatras," *JDS/UC* 6, 1924, astron. sec., 1-60.
- \_\_\_\_\_. [1930]. "The Evection and the Variation of the Moon in Hindu Astronomy," *BCMS* 22, 1930, 121-132.
- \_\_\_\_\_. [1935]. "True Dates of the Buddha and Other Connected Epochs," *JDL/UC* 27, 1935, art. 5, pp. 1-23.
- Müller, Conrad. [1929]. "Die Mathematik der Sulvasūtra, eine Studie zur Geschichte indischer Mathematik," *AMSHU* 7, 1929, 173-204.
- Müller, Friedrich Max. [1862]. "On Ancient Hindu Astronomy and Chronology," in his ed. of *Rig-Veda-Samhitā*, 2nd ed., Oxford 1862, vol. 4, pp. vii-lxxxvi.
- Muruwawa, Ahmad. See E. S. Kennedy and A. Muruwawa [1958].
- Nadvi, Syed Sulaiman. [1935]. "Some Indian Astrolabe Makers," *Islam* C 9, 1935, 621-631.
- \_\_\_\_\_. [1937]. "Indian Astrolabe Makers," *Islam* C 11, 1937, 537-539.
- Nagar, M. M. [1939]. "A New Image of Rāhu from Mathurā," *PIHC* 3, 1939, 446-448.
- Nagarajan, K. S. [1949]. "Bhaskara's Leelavathī," *AP* 20, 1949, 310-314.
- Naidu, W. S. Krishnaswami. [1889]. *Southern Indian Chronological Tables*, Madras 1889 (ed. R. Sewell).
- Naraharaya, S. N. [1923/24]. "Note on the Hindu Table of Sines," *JIMS/NO* 15, 1923-24, 105-113.
- Narahari, H. G. [1941]. "The Date and Works of Naimiṣṭha Rāmacandra," *Brahmavidyā* 5, 1941, 37-40 and 86-92.
- \_\_\_\_\_. [1962]. "Astronomy in Vedic India," *AP* 33, 1962, 219-223.
- Narain, A. K. [1957]. *The Indo-Greeks*, Oxford 1957.
- Narasimha Svami, S. P. L. [1911]. "The Kaliyuga, Yudhisthira and Bharatayuddha Eras," *JA* 40, 1911, 162-164.
- Narayanaiah, H. [1944/45]. "The Double-Stars and Their Knowledge by the Ancient Hindus," *OJMS* 35, 1944-45, 214-223.
- Nau, François. [1910]. "La Plus ancienne mention orientale des chiffres indiens," *JA* 10, 1910, 225-227.
- Nazim, M. [1929/30]. "A Unique Manuscript on Astronomy," *ARASJ* 29, 1929-30, 1935, 232-233.
- Needham, Joseph. [1954/ ]. *Science and Civilization in China*, Cambridge 1954.
- Neugebauer, Otto. [1952a]. "Hindu Astronomy at Newminster in 1528," *AS* 8, 1952, 211-228.
- \_\_\_\_\_. [1952b]. "Tamil Astronomy," *Osiris* 10, 1952, 252-276.
- \_\_\_\_\_. [1952c]. *The Exact Sciences in Antiquity*, Providence 1952; 2nd ed. Providence 1957.
- \_\_\_\_\_. [1956]. "The Transmission of Planetary Theories in Ancient and Medieval Astronomy," *SM* 22, 1956, 165-192.
- \_\_\_\_\_. [1957a]. "Variants to the Greek Translation of Abū Ma'shar's Version of the Paratellonta of Varāhamihira and Teukros," *BARB*, Cl. des Lettres 5, 45, 1957, 133-140.
- \_\_\_\_\_. [1957b]. "Notes on al-Kaldī," *JAOS* 77, 1957, 211-215.
- \_\_\_\_\_. [1963]. "The Survival of Babylonian Methods in the Exact Sciences of Antiquity and Middle Ages," *PAPS* 107, 1963, 528-535.
- Neugebauer, O., and D. Pingree. [1967]. "The Astronomical Tables of Mahādeva," *PAPS* 111, 1967, 69-92.
- Noti, Severin. *Land und Volk des königlichen Astronomen Dschaisingh II Maharadscha von Dschalpur*, Berlin 1911.
- Oertel, Hanns. [1936]. "The Expressions for 'The year consists of twelve months' and the like in Vedic Prose," *BSOS* 8, 1936, 685-694.
- Oldenberg, Hermann. [1894]. "Der vedischen Kalendar und das Alter des Veda," *ZDMG* 48, 1894, 629-648.
- \_\_\_\_\_. [1895]. "Nach einmal der vedische Kalendar und das Alter des Veda," *ZDMG* 49, 1895, 470-480.
- \_\_\_\_\_. [1896]. "Vedische Untersuchungen V: Zum Kalendar und der Chronologie des Veda," *ZDMG* 50, 1896, 450-457.
- \_\_\_\_\_. [1909]. "On the Antiquity of Vedic Culture," *JRAS*, 1909, 1095-1100.
- \_\_\_\_\_. [1910]. "The Antiquity of Vedic Culture," *JRAS*, 1910, 846-850.
- \_\_\_\_\_. [1919]. *Vorwissenschaftliche Wissenschaft: die Weltanschauung der Brāhmana-Texte*. Göttingen 1919.
- Padhye, K. A. [1937]. "The Anthropological Aspects of Astrology among the Hindus," *JAS Bengal* 15, 1937, 631-641.
- Pai, M. Govind. [1951]. "Year 1 of the Kanishka Era," *JOI Baroda* 1, 1951, 165-169.
- Pandit, Vasantkumar R. [1951a]. "Tikanikayātrā of Varāhamihira," *JUB* 20 (Arts No. 26), 1951, 40-63.
- \_\_\_\_\_. [1951b]. "Omens and portents in Vedic literature," *PAI/OC* 13, 2, 1951, 65-71.
- \_\_\_\_\_. [1957]. "Origin and Growth of the Jyotiṣa-śāstra," *JUB* 26, pt. 2 (Arts 52), 1957, 73-122.
- Panse, Murlidhar Gajanan. [1956]. "Jyotiṣaratnamālā of Śrīpatibhāṣya," *BDCRI* 17, 1956, 237-502. Reprinted *DCMS* 14, Poona 1957.
- \_\_\_\_\_. [1960]. "Śrīpati's Marathi Commentary on his own Jyotiṣaratnamālā," *Professor P. K. Gode Commemorative Volume*, *POS* 93, Poona 1960, pt. 3, pp. 151-156.
- Pantulu, N. K. Venkatesam. [1934/35]. "Govinda Deekshita and his Literary Successors," *JAHRS* 9, 1, 1934-35, 12-23.
- \_\_\_\_\_. [1945/46]. "Double Stars," *OJMS* 36, 1945-46, 121-123.
- Pargiter, F. E. [1914]. "The Inscription on the Manikiala Stone," *JRAS*, 1914, 641-660. (See S. Konow [1929]).
- \_\_\_\_\_. [1915]. "The Telling of Time in Ancient India," *JRAS*, 1915, 699-715.
- Patavardhan, Ramchandra Vinayak. [1934]. "Astronomical Implications in the Vedāṅga Jyotiṣa," *K. B. Pathak Commemorative Volume*, *GOS (Bombay)* B 7, Poona 1934, pp. 473-478.
- Patel, Chandulal Sakaralal and C. A. S. Aiyar [1957]. *Ashtakavarga*, Bombay 1957.
- Pathak, Bhagwan Das. [1920]. *Hindu-Aryan Astronomy and Antiquity of Aryan Race*, Dehra Dun 1920.
- Pathak, P. D. [1963/64]. "A Further Evidence on Sawai Jai Singh and the New City of Jaipur Founded by him with Reference to Buddhivilāsa—A Contemporary Jain Work," *JOI Baroda* 13, 1963-64, 281-284.
- Patkar, M. M. [1938a]. "Muhūrtaratna," *PO* 3, 1938, 82-85.
- \_\_\_\_\_. [1938b]. "Mughal Patronage to Sanskrit Learning," *PO* 3, 1938, 164-175.
- Pattabhi, C. R. Raman. [1943]. "The Hindus and the Skies," *TO* 25, 1943, 243-245.
- Patwa, Bhogilal K. See H. P. Bhatt and B. K. Patwa [1945].
- Petri, Winfried. [1966a]. "Uighur and Tibetan Lists of the Indian Lunar Mansions," *JHS* 1, 1966, 83-90.
- \_\_\_\_\_. [1966b]. "Od astronomičeskom soderžanii pervoi knigi Kalatakra-santra (sanskritskii i tibetskii teksty)," *Istoriko-astronomičeskie issledovanii* 9, Moskva 1966, pp. 171-178.
- Pihan, Antoine Paulin. [1860]. *Exposé des signes de numération usités chez les peuples orientaux anciens et modernes*, Paris 1860.
- Pillai, G. Subramania. [1951]. "Omens and Beliefs of the Early Tamils," *JAU* 16, 1951, 37-55.
- Pillai, Lewis Dominic Swamikannu. [1911]. *Indian Chronology*, Madras 1911.
- \_\_\_\_\_. [1921/22]. "Sūryasiddhānta as Guide to Verification of Burmese Dates," *ARASJ* 21, 1921-22, 122-123.
- \_\_\_\_\_. [1922]. *An Indian Ephemeris A.D. 700 to A.D. 1799*, 6 vols., Madras 1922.
- \_\_\_\_\_. [1924/25]. "Astrology in its Historical Aspect," *OJMS* 15, 1924-25, 101-113.
- Pillai, T. R. [1905]. *Āryabhaṭa or the Newton of Indian Astronomy*, Madras 1905.
- Pingree, David. See O. Neugebauer and D. Pingree [1967].
- \_\_\_\_\_. [1959a]. "The Empires of Rudradāman and Yaśodharman: Evidence from Two Astrological Geographies,"

- JAOS 79, 1959, 267-270.  
 [1959b]. "A Greek Linear Planetary Text in India," JAOS 79, 1959, 282-284.  
 [1961/62]. "The Yavanajātaka of Sphujidhva," JOR Madras 31, 1961-62, 16-31.  
 [1962]. "Historical Horoscopes," JAOS 82, 1962, 487-502.  
 [1963a]. "Astronomy and Astrology in India and Iran," Isis 54, 1963, 229-246.  
 [1963b]. "The Indian Iconography of the Decans and Horii," JWCJ 26, 1963, 223-254.  
 [1964]. "Rejoinder to Wayman's *The Buddha's Birth-date*," JAOS 84, 1964, 174-175.  
 [1965a]. "Representation of the Planets in Indian Astrology," JIF 8, 1965, 249-267.  
 [1965b]. "The Persian 'Observation' of the Solar Apogee in ca. A.D. 450," JNES 24, 1965, 334-336.  
 [1968a]. *The Thousands of Abū Ma'šhar*, SWI 30, London 1968.  
 [1968b]. "Fragments of the Works of Ya'qūb ibn Tāriq," JNES 27, 1968, 97-125.  
 Pisharoti, K. Rama. [1930/31]. "Sastras—Practical and Theoretical," OJMS 21, 1930-31, 206-231.  
 Pizzagalli, A. M. [1932]. "La scienza indiana e il suo valore," *Scientia* 51, 1932, 431-439.  
 Playfair, John. [1790]. "Remarks on the Astronomy of the Brahmans," TRSE 2, 1790, 135-192.  
 [1795]. "Questions and remarks on the astronomy of the Hindus," AR 4, 1795, 159-163.  
 [1798]. "Observations on the Trigonometrical Tables of the Brahmans," TRSE 4, 1798, 83-106.  
 [1807]. Review of J. Bentley [1805] in ER 10, 1807, 455-471.  
 [1817]. Review of H. T. Colebrooke [1817] in ER 29, 1817, 141-164.  
 Plunket, Emmeline Mary. [1901]. "Astronomy in the Rig Veda," *Actes du douzième congrès international des orientalistes*, vol. 1, Florence 1901, pp. 55-100. Reprinted in E. M. Plunket [1903].  
 [1905]. *Ancient Calendars and Constellations*, London 1905.  
 Potts, D. H. [1946]. "Solution of a Diophantine System Proposed by Bhaskara," BCMS 38, 1946, 21-24.  
 Poucha, Pavel. [1949]. "La Iyotisaratanamāllā ou Guirlande des joyaux d'astrologie de Śrīpatibhāṭṭa," Arch. Or. 16, 1949, 277-309.  
 Prabhu, R. K. [1949]. "The Riddle of the Vedic Calendar," PAIOC 15, 1949, 1-17.  
 [1953]. "A Note on the gavām ayana," PAIOC 17, 1953, 150-151.  
 Prakash, Satya. [1965]. *Founders of Science in Ancient India*, New Delhi 1965.  
 Prannath, Pandit. [1875]. "Krishna-cultus in the Bṛhat-Saṃhitā," JAS Bengal 44, 1, 1875, 15-19.  
 Prasad, D. [1918]. *The Scientific Knowledge in Vedic Times*, Lahore 1918.  
 Prasad, Gopak. [1935]. "Astronomical Evidence on the Age of the Vedas," JBORS 21, 1935, 121-136.  
 [1936]. "On the Age of the Bhaudhāyana Śrauta Sūtra," IRAS, 1936, 417-421.  
 [1946/47]. "The Astronomy of the Vedāṅga Iyotisa," JGJRI 4, 1946-47, 239-248.  
 [1956]. *Bhāratīya Iyotīṣakā Itihāsa*, Lucknow 1956.  
 Pratt, John H. [1842]. "Observations on the Herat Astrolabe," JAS Bengal 11, 1842, 720-722.  
 [1858]. "The Great Indian Arc of Meridian, and the Figure of the Earth," JAS Bengal 27, 1858, 201-213.  
 [1859]. "A Second Letter on the Indian Arc," JAS Bengal 28, 1859, 22-27.  
 [1862]. "On Colebrooke's determination of the Date of the Vedas," JAS Bengal 31, 1862, 49-50.  
 Prinsep, James. See W. Croft and I. Prinsep [1825].  
 [1834]. "Professor Schlegel's Enigma—Mode of Expressing Numerals in the Sanskrit and Tibetan Languages," JAS Bengal 3, 1834, 1-8.  
 [1858]. *Essays in Indian Antiquities*, 2 vols., London 1858.  
 Pullé, F. L. [1901]. "Disegno della cartografia antica dell'India," SIFI 4, 1901, I-XXIII and 1-158.  
 Puri, Baij Nath. [1940/41]. "Some Dates of the Kuṣāṅga Kharaṅghī Records and their Bearing on the Initial Year of the Kuṣāṅga Era," IC 7, 1940-41, 490-492.  
 Purnaiya, P. N. [1873]. "The Calendar of Tipū Sultan," IA 2, 1873, 112-115.  
 Radhakrishnan, E. P. [1941/42]. "Maṣīrāma Dikṣita," NIA 4, 1941-42, 109-110.  
 Raghavan, V. [1940]. "Kavindrīcārya Sarasvatī," D. R. Bhandarkar Volume, Calcutta 1940, pp. 159-165.  
 Raghunathji, K. [1885]. "Omens from the Falling of House Lizards," IA 14, 1885, 112-115.  
 Rahurkar, V. G. [1956]. "The Bhāṣū-Yogavūṣiṭhāra of Kavindrīcārya Sarasvatī," PO 21, 1956, 95-108.  
 [1957]. "The solar eclipse in the Ṛgveda," PAIOC 19, 1957, 3.  
 Rai, Gulshan. [1932]. "The Persian Emperor Cyrus the Great and the Indian 'Saka' Era," JPUHS 1, 1932, 61-75 and 123-136.  
 Raja, C. Kunhan. [1942]. "Kālidāsa and Astronomy," JUPHS 15, 1942, 5-23.  
 Raja, K. Kunjunnī. [1958]. *The Contribution of Kerala to Sanskrit Literature*, Madras 1958.  
 [1963]. "Astronomy and Mathematics in Kerala," *Brahmavidyā* 27, 1963, 118-167.  
 Rajagopal, C. T. See K. M. Marar and C. T. Rajagopal [1944].  
 [1949]. "A Neglected Chapter of Hindu Mathematics," SM 15, 1949, 201-209.  
 Rajagopal, C. T., and T. V. V. Aiyar. [1951]. "On the Hindu Proof of Gregory's Series," SM 17, 1951, 65-74.  
 Rajagopal, C. T., and T. V. V. Aiyar. [1952]. "A Hindu Approximation to Pi," SM 18, 1952, 25-30.  
 Rajagopal, C. T., and A. Venkataraman. [1949]. "The Sine and Cosine Power-series in Hindu Mathematics," JRSB/S 15, 1949, 1-13.  
 Rajaguru, Satyanarayan. [1964]. "The Bhauma-Samvat," OHRJ 12, 1964, 100-108.  
 Rajan, C. G. [1933]. *Planetary Tables (for 6300 years) (from 3200 B.C. to 3100 A.D.)*, Raja Jyothidā Ganitham or Śiddhanta Raja Sironmani (Gṛaha Karamam), Madras 1933.  
 [1941]. *Astrological Tables of Lagna and Other Houses (i.e.) Bhavas for Latitudes from 0° to 36° North*, [Madras] 1941.  
 Rajwade, V. K. [1928]. "Candra," PAIOC 5, 1, 1928, 273-277.  
 Ramachandran, T. N. [1954]. "An Interesting Sūrya Sculpture from Kōṅārka, Orissa," *Sarūpa-Bhāratī*, Hoshiarpur 1954, pp. 280-285.  
 Ramadas, Purātatva Kovida G. [1934]. "The Initial Date of the Gaṅga Era," JBORS 20, 1934, 33-40.  
 Ramani, Bangalore Venkata. [1958]. *Hindu Astrologie*, München 1958.  
 [1950/51]. *Three-hundred Important Combinations (yoga)*, 2 pts. Bangalore 1950-51.  
 [1956]. *Astrology and Modern Thought*, Bangalore 1956.  
 [1962]. *Ashtakavarga System of Prediction*, Bangalore 1962.  
 Ramana-sastrin, V. V. [1922]. "Professor Houtman on Greek Astrology," CR 36, 1922, 20-21.  
 [1930]. "Kankah," Isis 14, 1930, 470.  
 Ramanujacharya, N., and G. R. Kaye [1912/13]. "The Trīatikā of Śrīdhārīcārya," BM 3, 13, 1912-13, 205-217.  
 Ramesam, Vepa. [1948/49]. "The Principle of Naming the Months," JAHRS 19, 1948-49, 159.  
 Rao, Bangalore Suryanarain. [1929]. *The Results of the Years Shukla & Pramodita (1929-30 and 1930-31)*, Bangalore

- 1929.
- \_\_\_\_\_. [1964]. *Strijana or Female Horoscopy*, 6th ed., Bangalore 1964.
- Rao, Gobburu Venkatananda Raghava. [1956/58]. "Nakṣatramulu," *JAHRS* 24, 1956-58, 131-146.
- Rao, M. Raja. [1941]. "The Eclipse-Code of the R̥gvedic Aryans as Revealed in the Sunah̥sepa Hymns and the Br̥hmapas," *PO* 6, 1941, 1-28.
- \_\_\_\_\_. [1943]. "The Pravargya Legend—A Story of Precession of the Equinox," *PO* 8, 1943, 68-80.
- \_\_\_\_\_. [1949]. "The Astronomical Classification of the Mahābhārata Text," *Bhāratīya Vidyā* 10, 1949, 104-132.
- \_\_\_\_\_. [1952]. "The Astronomical Background of Vedic Rudra and Purānic Siva," *Bhāratīya Vidyā* 13, 1952, 158-168.
- \_\_\_\_\_. [1954]. "The Correlation of Mahābhārata Comets with Those of Vr̥ddhagarga," *Sarūpa-Bhāratī*, Hoshiarpur 1954, pp. 286-295.
- Rav, I. V. M. Krishna. [1956]. "The Motion of the Moon in Tamil Astronomy," *Centaurus* 4, 1956, 198-220.
- Ray, Jogesh Chandra. [1929]. "Astrology in India," *MR* 46, 1929, 250-256.
- \_\_\_\_\_. [1939/40]. "Vedic Antiquity from Satapatha Br̥hmana," *IC* 6, 1939-40, 77-81.
- Ray, Priyada Ranjan. [1951]. "Sciences in Ancient and Medieval India," *SC*, 1951, 301-307.
- Ray, Sarat Chandra. [1924]. "Magical Practices, Omens and Dreams among the Birbers," *JBORS* 10, 1924, 209-220.
- Rehm, A. See H. Diels and A. Rehm. [1904].
- Rele, Vasant Gangaram. [1935]. *Directional Astrology of the Hindus as Propounded in Vimshottari Dakṣ*, [NP] 1935.
- Rice, Lewis. [1874]. "Bhadra Bāhu and Sravapa Belgola," *JA* 3, 1874, 153-158.
- Richards, F. I. [1913/14]. "The Ryt's Calendar," *OJMS* 4, 1913-14, 172-176.
- Rizvi, Sayyid Samad Husain. [1963/ ]. "A Unique and Unknown Book of al-Beruni: *Ghurar-as-Zijāt or Kurānī Tilākā*," *Islam* C 37, 1963, 112-130; 167-187; and 223-245; 38, 1964, 47-74 and 195-212; 39, 1965, 1-26 and 137-180.
- Rocher, Ludo J. [1953/54]. "Euclid's Stoicheia and Jagannātha's Rekṣhāgāṇita," *JOI Baroda* 3, 1953-54, 236-256.
- Rodet, Léon. [1878]. "L'Algèbre d'al-Khārizmī et les méthodes indienne et grecque," *JA* 7, 11, 1878, 5-98.
- \_\_\_\_\_. [1879a]. "Sur une méthode d'approximation des racines carrées, connue dans l'Inde antérieurement à la conquête d'Alexandre," *BSMF* 7, 1879, 98-102 and 159-167.
- \_\_\_\_\_. [1879b]. "Leçons de calcul d'Āryabhata," *JA* 7, 13, 1879, 393-434.
- \_\_\_\_\_. [1880]. "Sur la véritable signification de la notation numérique inventée par Āryabhata," *JA* 7, 16, 1880, 440-485.
- Roer, E. [1844]. "Bhāscarā Achārya Siddhānta Shīrōmāni sic dicti operis pars tertia, Gunītheadiam, sive astronomiam continens, Latine veritē notatque adjacit E. Roer," *JAS Bengal* 13, 1844, 53-66.
- Rongmuthy, D. S. [1936/37]. "The Ancient Garo Calendar," *JARS* 4, 1936-37, 55-56.
- Ross, Alan S. C. [1938]. *The "Numerical-Signs" of the Mohenjodaro Scripts*, *MASt* 57, Delhi 1938.
- Roy, Brajendra Kishore. [1937]. "The Scope and Achievements of Hindu Astrology," *The Cultural Heritage of India*, Calcutta 1937, vol. 3, pp. 476-481.
- Roy, D. M. [1926/27]. "The Culture of Mathematics Among the Jainas of Southern India in the Ninth Century A.D.," *ABORI* 8, 1926-27, 145-147.
- Rozenfeld, B. A. See A. P. fuikēvič and B. A. Rozenfeld [1960].
- Runka, Julius. [1917]. "Zur ältesten arabischen Algebra und Rechenkunst," *SHAW, Phil-hist.* Kl. 8, 2, 1917, 1-125.
- V. S. and P. V. V. [1943]. "Hints on Water Divining," *JTSML* 3, 1943, 40-42.
- Saha, Meghnad. [1946]. "Calendar Through the Ages and its Reform," *B.C. Law Volume*, pt. 2, Poona 1946, pp. 84-103.
- \_\_\_\_\_. [1953]. "Different Methods of Date-reckoning in Ancient and Medieval India, and the Origin of the Saka Era," *JRASB/L* 19, 1953, 1-24.
- Saidan, A. S. [1965]. "The Development of Hindu-Arabic Arithmetic," *Islam* C 39, 1965, 209-221.
- Saletore, Bhasker Anand. [1938]. *Medieval Jainism*, Bombay [1938].
- Sanchez Perez, Jose Augusto. [1949]. *La aritmética en Roma, en India y en Arabia*, Madrid 1949.
- Sandesara, Bhogilal J. [1953]. *Literary Circle of Mahāmāyā Vastupāla and its Contribution to Sanskrit Literature*, SFS 33, Bombay 1953.
- Sanjana, K. J. [1909]. "On Question 156," *JIMS* 1, 1909, 241-242.
- \_\_\_\_\_. [1910]. "Remarks by the Proposer," *JIMS* 2, 1910, 164.
- \_\_\_\_\_. [1929/30a]. "Question 1501," *JIMS/NO* 18, 1929-30, 18-22.
- \_\_\_\_\_. [1929/30b]. "A Brief Analysis of Bhaskara's Bijagaita with Historical and Critical Notes," *JIMS/NO* 18, 1929-30, 176-188.
- Sankar, K. G. [1930/31]. "Some Problems of Indian Chronology," *ABORI* 12, 1930-31, 301-361.
- \_\_\_\_\_. [1932/33]. "The Date of the Eleventh Paripadal," *OJMS* 23, 1932-33, 80-84.
- \_\_\_\_\_. [1935]. "The Astronomical Data of the Paripadal," *JOR Madras* 9, 1935, 148-155.
- Sankaran, V. [1921/22]. "Mathematics in India—Then and Now," *JIMS* 13, 1921, 219-224 and 14, 1922, 65-67.
- Sarasvati, T. A. [1958/59]. "Sredhiksetras or Diagrammatical Representations of Mathematical Series," *JOR Madras* 28, 1958-59, 74-85.
- \_\_\_\_\_. [1961/62]. "The Mathematics in the First Four Mahābhikāras of the Triloka-prajñapti," *JGRI* 18, 1961-62, 27-51.
- \_\_\_\_\_. [1963]. "The Development of Mathematical Series in India after Bhāskara II," *BNISI* 21, 1963, 320-345.
- Saraswati, Sarasi Kumar. [1952]. "A Bronze Image of Sūrya from Bengal in a Private Collection," *YASB* 18, 1952, 144-145.
- Sarkar, A. K. [1951]. "The Coins and Weights in Ancient India," *IHO* 7, 1951, 689-702.
- Sarkar, Benoy Kumar. [1918]. *Hindu Achievements in Exact Sciences*, London, 1918.
- Sarkār, Yaśodīnanda. [1878]. *The Elements of Plane Geometry in 48 Propositions, from the Sanskrit Text of Ārya Bhatta*, Calcutta 1878.
- Sarma, Ghanakanta. [1943]. "Pitambar Siddhanta Bagish," *JARS* 10, 1943, 67-72.
- Sarma, K. Madhava Krishna. [1940a]. "The Rājameṅgāṅka of Bhoja," *Brahmavidyā* 4, 1940, 95-105.
- \_\_\_\_\_. [1940b]. "The Dates of the Jyotispakāśa and the Jyotimibandha," *Brahmavidyā* 4, 1940, 106-107.
- \_\_\_\_\_. [1941a]. "Kriyākairavacandrikā of Kauśika Varāha," *Brahmavidyā* 5, 1941, 34.
- \_\_\_\_\_. [1941b]. "Some New Light on Sripati's Father and Place," *Brahmavidyā* 5, 1941, 34.
- \_\_\_\_\_. [1941c]. "The Sūryasiddhāntavyākhyā of Bhūti- viṣṇu," *Brahmavidyā* 5, 1941, 77-83.
- \_\_\_\_\_. [1941d]. "The Jyotirvidyābharana and the Nine Jewels," *PO* 5, 1941, 205-209.
- \_\_\_\_\_. [1942]. "The Āryabhatīyavyākhyā of Raghunātharāja—A Rare and Hitherto Unknown Work," *Brahmavidyā* 6, 1942, 217-227.
- \_\_\_\_\_. [1943a]. "Some Rare Works in the Anup Sanskrit Library," *ABORI* 24, 1943, 227-230.
- \_\_\_\_\_. [1943b]. "Kavindrākṣya as a Hindi Scholar," *Brahmavidyā* 7, 1943, 33-36.
- \_\_\_\_\_. [1943c]. "Some Horoscopes in the Anup Sanskrit Library," *JTSML* 3, 1943, 3-5.
- \_\_\_\_\_. [1943/44]. "The Samhita Literature of Astrology," *NIA* 6, 1943-44, 90.

- [1945a]. "Virasībhāgavāka," *Brahmavidyā* 9, 1945, 7-12.
- [1945b]. "Hosiṅga Rāma alias Mudgala," *Brahmavidyā* 9, 1945, 86-93.
- [1945c]. "Vidyānītha," *Brahmavidyā* 9, 1945, 152-157.
- [1945d]. "Dīkṣita Maṅgīrāma," *IHQ* 21, 1945, 63-64.
- [1946]. "The Bhāskara Bhāṣya of Śūrya Paṅḍita," *PO* 11, 1946, 54-66.
- [1949]. "Mahārāja Raisingji as a Scholar and Patron," *Bhāratīya Vidyā* 10, 1949, 170-181.
- [1950]. "Siddhānta-saṁhita-sūtra-samuccaya of Śūrya Paṅḍita," *Siddha Bhārati*, pt. 2, *VIS* 2, Hoshiarpur 1950, pp. 222-225.
- [1960]. "Sītārāma Parvaṅkar," *P. K. Gode Commemoration Volume*, *POS* 93, Poona 1960, pt. 3, pp. 151-156.
- Sarma, K. Venkateswara. See T. S. K. Sastri and K. V. Sarma [1958] and [1959/61].
- [1955/54]. "Grahacāranibandhana of Haridatta," *JOR Madras* 23, 1955-54, suppl. Reprinted Madras 1954.
- [1954]. "The Rāṅgolaśaṅkṛānti of Acyuta," *Brahmavidyā* 18, 1954, 306-335. Reprinted as *ALS P* 29, Madras 1955.
- [1956/57a]. "Gārgya-Kerala Nilakāṅṭha Somayājini: The Bhāṣyakāra of the Aryabhaṭīya (1443-1545)," *JOR Madras* 26, 1956-57, 24-39.
- [1956/57b]. "The Goladīpikā of Parameśvara," *Brahmavidyā* 20, 1956, 119-186; and 21, 1957, 87-144. Reprinted as *ALS P* 32, Madras 1957.
- [1958a]. "Iyeshādeva and his Identification as the Author of the Yuktibhāṣā," *Brahmavidyā* 22, 1958, 35-40.
- [1958b]. "The Date of Mādhava, a Little Known Indian Astronomer," *OJMS* 49, 1958, 183-186.
- [1958/59]. "The Grahanaṣṭaka of Parameśvara. A Short Manual on Eclipses: Edition and Translation," *JOR Madras* 28, 1958-59, 47-60.
- [1963]. "Dṛggaṇita of Parameśvara," *VII* 1, 1963, suppl. Reprinted as *VIS* 30, Hoshiarpur 1963.
- [1965]. "The Grahanaṣṭaka of Parameśvara," *VII* 3, 1965, suppl. Reprinted as *VIS* 34, Hoshiarpur 1965.
- [1966]. "The Grahanaṣṭakādīpikā of Parameśvara," *VII* 4, 1966, suppl. Reprinted as *VIS* 35, Hoshiarpur 1966.
- Sarma, Somasekhara. [1942/43]. "The Gāṅga Era," *IC* 9, 1942-43, 141-148.
- Sarton, George. [1927/48]. *Introduction to the History of Science*, 3 vols., Baltimore 1927-48.
- [1937]. "A Hindu Decimal Ruler of the Third Millennium," *Isis* 26, 1937, 304-305.
- Sastri, Bapu Deva. [1858]. "Bhāskara's Knowledge of the Differential Calculus," *JAS Bengal* 27, 1858, 213-216.
- [1867]. "A Letter from Prof. B. D. Sastri with Reference to a Letter of Major R. R. M. Ellis, on an Astronomical Calculation, Identifying a Partial Eclipse of the Sun. Recorded on a Grant of Land by Janamajaya," *PRASB*, 1867, 172-175.
- [1893]. "A Brief Account of Bhāskara, and of the Works Written, and Discoveries Made by Him," *JAS Bengal* 62, 1, 1893, 223-229.
- Sastri, M. B. Sankaranarayana. [1941]. "Indeterminate Equations," *JTSMI* 2, 1941, 1-8.
- Sastri, P. S. [1958]. "The Antiquity of the Veda," *R. B. Trivedi Commemoration Volume*, Madras 1958, pp. 50-55.
- Sastri, Rajendra Nath. [1962]. "Vaidika yuge Iyotiser Anulāna," *OH* 10, 1962, 65-72.
- [1963]. "Adhīmāsa O Kṣayamāsa," *OH* 11, 1963, 25-30.
- [1964]. "Phalita Iyotish," *OH* 12, 1964, 39-52.
- [1965a]. "Grahagaṇa Prakāśana Karmaphaler Sūcaka," *OH* 13, 2, 1965, art. 6, pp. 75-80.
- [1965b]. "Dikchakravāle Grahadarśaner Upāya," *OH* 13, 2, 1965, art. 7, pp. 81-89.
- Sastri, T. S. Kuppanna. [1955/56]. "The Vāsiṅga Sun and Moon in Varāhamihira's Pañcasiddhāntikā," *JOR Madras* 25, 1955-56, 19-41.
- [1958/59]. "The Bijopanaya: Is it a Work of Bhāskara's?" *JOI Baroda* 8, 1958-59, 399-409.
- Sastri, T. S. K., and K. V. Sarma. [1958]. "The Saka Era of Varāhamihira—Salivahana Saka," *JIH* 36, 1958, 343-367.
- Sastri, T. S. K., and K. V. Sarma. [1959/61]. "Vākyakarana," *JOR Madras* 29, 1959-60, suppl.; and 30, 1960-61, suppl. Reprinted Madras 1962.
- Sastri, V. Subrahmanya. [1930/31]. "Aryan Parentage of Astronomical Systems of Chaldea, China, and India," *OJMS* 21, 1930-31, 197-205.
- Sastri, M. V. Vaidyanatha. [1940]. "Heliacal Rising of the Moon," *MS* 8, 1940, 80-81.
- Sastri, S. Subrahmanya. [1945]. "The Interpretation of the Double Dates Aṅḍu and Edir Aṅḍu in the Regnal Years of Certain Chōla, Pāṇḍya and Other Kings," *JVOI* 6, 1945, 11-22.
- Sayili, Aydın. [1960]. *The Observatory in Islam*, *Publ. Turkish Historical Soc.* 7, 38, Ankara 1960.
- Schaubach, Johann Konrad. [1811]. "De studiis astronomicis apud Indos origine et antiquitate commentatio ex commentariis Societatis Calcuttensis delineata," *CSRSGR* 1, 1811, cl. math., 32 pp.
- [1811/13]. "De Indorum modo, loca et motus planetarum definiendi commentatio," *CSRSGR* 2, 1811-13, cl. math., 1-28.
- [1812]. "Untersuchungen über die indische Astronomie," *AJ*, 1812, 112-115.
- [1813]. "Über die Chronologie der Indier, nach den Asiatic Researches," *MCBE* 27, 1813, 135-147 and 227-246.
- Scheffelowitz, I. [1929]. *Die Zeit als Schicksalsgottheit in der indischen und iranischen Religion*, *BISR* 4, Stuttgart 1929.
- [1931]. "Die bedeutungsvolle Zahl 108 im Hinduismus und Buddhismus," *Studia Indo-Iranica*, Leipzig 1931, pp. 85-88.
- [1933]. "Varāhamihira's Brhat-Saṁh. c. 58 und das Bhaviya-Purāṇa," *Festschrift Moritz Winternitz*, Leipzig 1933, pp. 51-55.
- Schmidt, Olaf H. [1944]. "The Computation of the Length of Daylight in Hindu Astronomy," *Isis* 35, 1944, 205-211.
- [1952]. "On the Computation of the Abargana," *Centaurus* 2, 1952, 140-180.
- Schram, Robert Gustav. [1889]. "Tables for the Approximate Conversion of Hindu Dates," *JA* 18, 1889, 290-299.
- [1908]. *Kalendariographische und chronologische Tafeln*, Leipzig 1908.
- Seal, Brajendranath. [1915]. *The Positive Sciences of the Ancient Hindus*, London 1915. Reprinted Delhi, 1958.
- [1935]. "Hindu and Greek Contributions to Mathematical Sciences," *IUPHS* 8, 1935, 62-70.
- Sedillot, Louis P. E. A. [1845/49]. *Matériaux pour servir à l'histoire comparée des sciences mathématiques chez les Grecs et les Orientaux*, 2 vols., Paris 1845-1849.
- [1863]. *Courtes observations sur quelques points de l'histoire de l'astronomie et des mathématiques chez les Orientaux*, Paris 1863.
- [1875]. "Grande exécution d'automate," *BB* 8, 1875, 457-468.
- Sen, Amulya Chandra. [1932]. "Some Cosmological Ideas of the Jains," *IHQ* 8, 1932, 43-48.
- Sen, Nilmadhav. [1952]. "An Astronomical Basis for Fixing the Age of Kālidāsa (Criticism)," *JRASB/L* 18, 1952, 5-6.
- Sen, Sures Chandra. [1937]. "On the Meteorological Concepts of the Ancient Hindus," *JDL/UC* 29, 1937, art. 9, pp. 1-12.
- Sen, S. N. [1963a]. "Transmission of Scientific Ideas between India and Foreign Countries in Ancient and Medieval Times," *BNISI* 21, 1963, 8-30.
- [1963b]. "Āryabhaṭa's Mathematics," *BNISI* 21, 1963, 297-319.
- [1966]. *A Bibliography of Sanskrit Works on*

- Astronomy and Mathematics, Pt. 1: Manuscripts, Texts, Translations and Studies*, New Delhi [1966].
- Sengupta, Prabhodh Candra. [1918/19]. "Origin of the Indian Cyclic Method for the Solution of  $Nx^2+1=y^2$ ," *BCMS* 10, 1918-19, 75-80. Reprinted in *JDS/UC* 2, 1920, 69-76.
- [1920/21]. "Aryabhata's Method of Determining the Mean Motions of Planets," *BCMS* 12, 1920-21, 185-188. Reprinted in *JDS/UC* 4, 1922, 237-242.
- [1927a]. "Time by Altitude in Indian Astronomy," *BCMS* 18, 1927, 25-28.
- [1927b]. "The Aryabhatiyam," *JDL/UC* 16, 1927, art. 6, pp. 1-56.
- [1929]. "Aryabhata, the Father of Indian Epicyclic Astronomy," *JDL/UC* 18, 1929, art. 3, pp. 1-56.
- [1930]. "Aryabhata's Lost Work," *BCMS* 22, 1930, 115-120.
- [1931a]. "Brahmagupta on Interpolation," *BCMS* 23, 1931, 125-128.
- [1931b]. "Greek and Hindu Methods in Spherical Astronomy," *JDL/UC* 21, 1931, art. 4, pp. 1-25.
- [1931c]. "History of the Infinitesimal Calculus in Ancient Medieval India," *JDMV* 40, 1931, 225-227.
- [1932a]. "Hindu Luni-Solar Astronomy," *BCMS* 24, 1932, 1-18.
- [1932b]. "Infinitesimal Calculus in Indian Mathematics—its Origin and Development," *JDL/UC* 22, 1932, art. 5, pp. 1-17.
- [1934]. "Age of the Brāhmaṇas," *IHO* 10, 1934, 533-540.
- [1937a]. "Hindu Astronomy," *The Cultural Heritage of India*, Calcutta 1937, vol. 3, pp. 341-377.
- [1937b]. "Some Astronomical References from the Mahābhārata and Their Significance," *JRASB/L* 3, 1937, 101-119. Expanded version "Date of the Bhārata Battle: Evidence from the Mahābhārata" in P. C. Sengupta [1947], pp. 1-33.
- [1938a]. "Bhārata-Battle Traditions," *JRASB/L* 4, 1938, 393-413. Expanded version "Date of the Bhārata-Battle: Bhārata-Battle Traditions" in P. C. Sengupta [1947], pp. 34-59.
- [1938b]. "Solstice Days in Vedic Literature," *JRASB/L* 4, 1938, 415-434. Expanded version "Solstice Days in Vedic Literature and Yajurveda Antiquity" in P. C. Sengupta [1947], pp. 155-174.
- [1938c]. "Madhu-Vidyā or the Science of Spring," *JRASB/L* 4, 1938, 435-443. Expanded version "Madhu-Vidyā or the Science of Spring" in P. C. Sengupta [1947], pp. 60-71.
- [1938d]. "When Indra became Maghavan," *JRASB/L* 4, 1938, 445-453. Reprinted in P. C. Sengupta [1947], pp. 72-81.
- [1940/41]. "Kaniska's Era," *IC* 7, 1940-41, 457-462.
- [1941a]. "The Solar Eclipse in the R̥gveda and the Date of Atri," *JRASB/L* 7, 1941, 91-103. Expanded version in P. C. Sengupta [1947], pp. 101-131.
- [1941b]. "Time Indications in the Baudhāyana Śrauta Sūtra," *JRASB/L* 7, 1941, 207-214. Reprinted in P. C. Sengupta [1947], pp. 198-207.
- [1942]. "The Gupta Era," *JRASB/L* 8, 1942, 41-56. Reprinted in P. C. Sengupta [1947], pp. 244-262.
- [1944]. "Hindu Astronomy," *SC* 9, 1944, 522-526.
- [1945]. "Astronomical Time-Indications in Kālidāsa," *JRASB/L* 11, 1945, 14-23. Reprinted as "Time-Indications in Kālidāsa," in P. C. Sengupta [1947], pp. 263-278.
- [1947]. *Ancient Indian Chronology*, Calcutta 1947.
- [1950]. "Researches in Ancient Indian Chronology," *JRASB/L* 16, 1950, 1-12.
- [1950/53]. "Date of the Bhārata War—A Rejoinder," *JGJRI* 8, 1950-51, 203-214; and 10, 1952-53, 21-38.
- [1952]. "A Note on Dr. Sen's Criticism of a Chapter of the Work, 'Ancient Indian Chronology,'" *JRASB/L* 18, 1952, 7.
- [1954]. "A Note on Bhīṣmāṣṭami or the Anniversary of Bhīṣma's Expiry," *JASB/L* 20, 1954, 39-41.
- [1956]. "The Historicity of the Mahābhārata on the Basis of Astronomical Data," *JASB/L* 22, 1956, 75-84.
- (Sephariāl). [1889]. "Ancient Astronomy of the Hindus," *Lucifer* 4, 1889, 27-31. Reprinted in *Brahmavidyā* 15, 1951, 49-58.
- Serbatskoī, F. I. [1962]. "Naučnye dostiženija drevnei Indii," *Izbrannye trudy russkikh indologov-filologov*, Moskva 1962, pp. 254-270.
- Sewell, Robert. [1881]. *Chronological Tables for Southern India from the Sixth Century A.D.*, Madras 1881.
- [1898]. *Eclipses of the Moon in India*, London 1898.
- [1912]. *Indian Chronography*, London 1912.
- [1915]. "A Correction in the Indian Calendar," *JRAS*, 1915, 335-336.
- [1915/16]. "The Cycle of Jupiter, and the Names of the Samvatsaras Applied to Hindu Solar Years," *EI* 13, 1915-16, 61-103.
- [1917/18a]. "The True Longitude of the Sun in Hindu Astronomy," *EI* 14, 1917-18, 1-67.
- [1917/18b]. "The True Longitude of the Sun in Hindu Astronomy: The Siddhānta-Siroṃaṇi," *EI* 14, 1917-18, 241-264.
- [1919/20]. "The Siddhānta-Siroṃaṇi," *EI* 15, 1919-20, 159-245. Reprinted in R. Sewell [1924].
- [1921/22]. "The First Ārya-siddhānta," *EI* 16, 1921-22, 100-221. Reprinted in R. Sewell [1924].
- [1923/24a]. "The First Āryasiddhānta: Mean System," *EI* 17, 1923-24, 17-104. Reprinted in R. Sewell [1924].
- [1923/24b]. "The Brahmasiddhānta of Brahmagupta (A.D. 628)," *EI* 17, 1923-24, 123-187. Reprinted in R. Sewell [1924].
- [1923/24c]. "The Brahmasiddhānta of Brahmagupta (A.D. 628): Mean System," *EI* 17, 1923-24, 205-290. Reprinted in R. Sewell [1924].
- [1924]. *The Siddhāntas and the Indian Calendar*, Calcutta 1924.
- Sewell, R., and S. B. Dikshit. [1896]. *The Indian Calendar*, London 1896.
- Shah, Harilal Amritlal. [1935/49]. "Vedic Gods," *ABORI* 17, 1935-36, 97-176; 29, 1948, 227-270; and 30, 1949, 43-88. See also *PAIOC* 8, 1935, 41-58.
- Shah, Umakant Premanand. [1954/55]. "Vikramāditya-Saga," *JOI Baroda* 4, 1954-55, 69-84 and 218-239.
- [1957/58]. "Geographical and Ethnic Data from the Kāiyapa Samhitā," *JOI Baroda* 7, 1957-58, 276-299.
- Shamasastri, R. (= Shamasastri). [1908]. *Gaṇita Ayana. The Vedic Era*, Mysore 1908.
- [1912]. "The Vedic Calendar," *JA* 41, 1912, 26-32; 45-71; 77-84; and 117-124.
- [1913]. "The Aṅgula of Six Yavas," *JRAS*, 1913, 153-155.
- [1921/22]. "Origin of the Week," *ABORI* 4, 1921-22, 1-31.
- [1921/23]. "Vishnu's Three Strides: the Measure of Vedic Chronology," *JBRAS* 26, 1921-23, 40-56.
- [1923/24]. "Dice-Play on the First Day of the White Half of the Month, Kartika," *OJMS* 14, 1923-24, 117-119.
- [1924/25]. "Vyushī or the New Year's Day," *OJMS* 15, 1924-25, 76-83.
- [1924/28]. "A Brief Translation of Mahāvīra's 'Suryaprajñapti' or 'The Knowledge of the Sun,'" *OJMS* 15, 1924-25, 138-147; 16, 1925-26, 201-212; and 18, 1927-28, 32-45; 129-140; 196-209; and 274-287.
- [1929/30]. "The Aśvins," *OJMS* 20, 1929-30, 80-88.
- [1935]. "Light on the Vedāṅga-Īyotiṣa," *S. Kuppuswami Sastri Commemoration Volume*, Madras [1935], pp. 143-149. See also *PAIOC* 8, 1935, 692-697.
- [1937]. "The Vedic Cycle and Era of Thirty-three Years," *PAIOC* 9, 1937.
- [1938]. *Drapsa. The Vedic Cycle of Eclipses*, Mysore



- 1938.
- [1940]. *Eclipse-Cult in the Vedas, Bible, and Koran. A Supplement to the "Drapsa."* Mysore 1940.
- [1941a]. "Test of the Vedic Eclipse-cycle," *A Volume of Studies in Indology, POS 75*, Poona 1941, pp. 428-437.
- [1941b]. "Rohita: A Sure Test of the Vedic Eclipse-Cycle," *PO 5*, 1941, 162-185.
- [1942a]. "Indra and Abalyā," *ABORI 23*, 1942, 480-481.
- [1942b]. "Solstices and Equinoxes in the Vedas," *CR 85*, 1942, 189-197.
- [1942c]. "Vedic Iconography," *JISOA 10*, 1942, 74-95.
- [1942d]. "The Pasca-Janat," *PO 7*, 1942, 27-42.
- [1942e]. "The Rbbus and the Four Soma Cups," *PO 7*, 1942, 177-180.
- [1942/43a]. "Agni in the Vedas," *NIA 5*, 1942-43, 90-93.
- [1942/43b]. "The Indian Epics and the Planets," *NIA 5*, 1942-43, 135-143.
- [1942/43c]. "Vayu and Vriakapi," *NIA 5*, 1942-43, 215-216.
- [1943/44a]. "Kalpa or the World-Cycle," *IGIRI 1*, 1943-44, 7-20.
- [1943/44b]. "Kapila Eclipse," *IGIRI 1*, 1943-44, 303-308.
- [1944]. "The Birth of the Pañcajanas," *PO 9*, 1944, 14.
- Sharma, Dasharatha. [1954]. "A Contemporary Record of Sivaji's Birth," *JBORS 20*, 1934, 184-185.
- [1957]. "Kālakācārya a Chief of the Kālaka People," *IHO 33*, 1957, 359-361.
- Sharma, G. N. [1965]. *A Bibliography of Mediaeval Rajasthan (Social and Cultural)*, Agra [1965].
- Shastri, Ajay Mitra. [1961]. "The Date of Varāhamihira," *PIHC 24*, 1961, 57-58.
- [1962a]. "Bhāṣya: His Date, Life and Writings," *IHO 38*, 1962, 247-259.
- [1962b]. "A Study of the Ratna-Parikṣā Section," *OT 6*, 1, 1962, 1-17.
- [1962/63a]. "Varāhamihira's Reference to the Ājivikas," *JOI Baroda 12*, 1962-63, 44-50.
- [1962/63b]. "A Study of the Prāsāda-Lakṣaṇādhyāya of the Bhāṣya of Varāhamihira," *JOI Baroda 12*, 1962-63, 130-143.
- [1963]. "Contribution towards the Reconstruction of the Samāsa-Samhitā of Varāhamihira," *Bhāratīya Vidyā 23*, 1963, 22-39.
- [1964]. "The Date of Kalyanavarman: Author of Saravali," *JIH 42*, 1964, 915-920.
- [1964/65]. "A Note on Bhāṣya of LXXV. 2," *JOI Baroda 14*, 1964-65, 123-124.
- [1965a]. "Sārīvalī ke racayitā Kalyāṇavarmā kā kālā," *VSM*, 1965, 85-92.
- [1965b]. "Varāhamihira's Place in the History of Vāstuvidyā," *Dr. Mirashi Felicitation Volume*, Nagpur 1965, pp. 318-335.
- [1965/66]. "Fresh Light on the Life of Varāhamihira," *JOI Baroda 15*, 1965-66, 374-377.
- Shastri, Manoranjan. [1954]. "Mahāmahopādhyāya Rājaguru Dīmodara Mītra," *JUG 5*, 1954, 63-70.
- Shastri, M., and P. Caudhuri. [1964]. *Smṛtīyogīśāstrasaṅgraha*, Gauhati 1964.
- Shende, N. J. [1965]. "Āditya and Ādityas," *Dr. Mirashi Felicitation Volume*, Nagpur 1965, pp. 56-86.
- Shil-Ponde. [1944]. *Hindu Astrology*, New York [ca. 1944].
- Shortrede, Robert [1842]. "On an Ancient Magic Square, Cut in a Temple at Gwalior," *JAS Bengal 11*, 1842, 292-293.
- Shukla, Kripa Shankar. [1945]. "The Evection and the Deficit of the Equation of the Centre of the Moon in Hindu Astronomy," *PBMS, NS 7*, 1945, 9-28.
- [1950]. "On Śrīdhara's Rational Solution of  $Nx^2+1=y^2$ ," *Ganita 1*, 2, 1950, 1-12.
- [1954a]. "Ācārya Jayadeva, the Mathematician," *Ganita 5*, 1954, 1-20.
- [1954b]. "On Three Stanzas from the Pañca-siddhāntikā," *Ganita 5*, 1954, 129-136.
- [1954c]. "A Note on the Rāja-mṛgāṅka of Bhoja Published by the Adyar Library," *Ganita 5*, 1954, 149-151.
- Sidersky, D. [1932]. "Une éclipse de soleil au temps d'Açoka," *JA 220*, 1932, 295-297.
- Simon, Max. [1911]. "Zur indischen Trigonometrie," *AMP 3*, 18, 1911, 202.
- [1913]. "Zu Brahmaguptas diophantischen Gleichungen zweiten Grades," *AMP 3*, 20, 1913, 280-281.
- Singh, Avadesh Narayan. See B. Datta and A. N. Singh [1935/38]; and G. Loria and A. N. Singh [1937].
- [1927]. "On the Indian Method of Root Extraction," *BCMS 18*, 1927, 123-140.
- [1933a]. "On the Evolution of the Word Numerals in India," *JUPHS 6*, 1933.
- [1933b]. "On the Evolution of the Alphabetic Numerals in India," *JUPHS 6*, 1933.
- [1936a]. "A Review of Hindu Mathematics up to the 12th Century," *Archion 18*, 1936, 45-62.
- [1936b]. "The History of Magic Squares in India," *Comptes rendus du congrès international des mathématiciens*, Oslo 1936, vol. 2, pp. 275-276.
- [1936c]. "On the Arithmetic of Sords among the Ancient Hindus," *Mathematica 12*, 1936, 102-115.
- [1936d]. "On the Use of Serials in Hindu Mathematics," *Oriens 1*, 1936, 606-628.
- [1937/38]. "Hindu Mathematics," *SC 3*, 1937-38, 521-527 and 579-585.
- [1939a]. "Hindu Superiority in Mathematics," *BMAUA 10*, 1939.
- [1939b]. "Hindu Trigonometry," *PBMS, NS 1*, 1939, 77-92.
- [1942]. "Mathematics of the Dhavala," *Sankhyanagamah 4*, 1942.
- [1944]. "The Origin of Geometry in India," *Proc. of 2000 Vikrama Celebration*, Kanpur 1944.
- [1947]. "Ādharma āṅkapaṇālikā utpatti," *Kuśī Vidyapīṭh Silver Jubilee Volume*, Benares 1947, pp. 105-109.
- [1949]. "History of Mathematics in India from Jain Sources," *Jaina Ant 15*, 2, 1949.
- Singh, Sabal. [1950]. "Time of Śrīdhara," *ABORI 31*, 1950, 267-272.
- Singh, Tribeni Prasad. [1953]. "The Astronomical Origin of Hindu Mythology," *JBS 39*, 1953, 293-305.
- Sinha, Shukti. [1942]. "Prācīna Bhāratīya Gaṇita," *NPP 47*, 1942, 187-204.
- Sircar, Dinesh Chandra. [1950]. "Fractions in an Early Inscription," *JUG 1*, 1950, 133-136.
- [1952]. "The Astrologer at the Village and the Court," *IHO 28*, 1952, 342-349.
- [1959]. "Capital of the Later Aulikaras," *IHO 35*, 1959, 73-75.
- [1963]. "The Account of the Yavanas in the Yuga-Purāna," *JRAS*, 1963, 7-20.
- [1965/66]. "Cosmography and Geography in Early Indian Literature," *ISPP 7*, 1965-66, 233-334 and 353-407.
- Sivaramamurti, C. [1958]. "Astrologia," *EUA 2*, Roma 1958, cc. 134-138.
- Smith, David Eugene. [1908]. "The Ganita-Sāra-Sangraha of Mahāvīrācārya," *Atti del IV Congresso Internazionale del Matematici*, Roma 1908, vol. 3, pp. 428-431.
- [1908/09]. "The Ganita-Sāra-Sangraha of Mahāvīrācārya," *BM 3*, 9, 1908-09, 106-110.
- [1913]. "The Geometry of the Hindus," *Isis 1*, 1913, 197-204.
- Smith, D. E., and J. Ginsburg. [1918]. "Rabbi ben Ezra and the Hindu-Arabic Problem," *AMM 25*, 1918, 99-108.

- Smith, D. E., and L. Karpinski. [1911]. *The Hindu-Arabic Numerals*, Boston and London 1911.
- Smith, Vincent A. [1889/93]. "Graeco-Roman Influence on the Civilization of Ancient India," *JAS Bengal* 58, 1, 1889, 107-198; 61, 1, 1892, 50-76; and 62, 1, 1893, 84-87.
- Sohoni, S. V. [1960]. "A Medallion at Deogarh," *NNMRP* 2, 1960, 183-186.
- Somayaji, D. (= Somayajulu). [1934]. "A Brief Sketch of Hindu Trigonometry," *MS* 2, 1934, 12-21.
- . [1935a]. "The Corrections of 'Variation' and 'Evection' in Hindu Astronomy," *MS* 3, 1935, 12-19.
- . [1935b]. "Drikarma Correction in Hindu Astronomy," *MS* 3, 1935, 60-65.
- . [1950]. "Bhaskara's Calculations of the Gnomon's Shadow," *MS* 18, 1950, 1-8.
- Soonawala, M. F. [1940]. "Maharaja Sawai Jai Singh II (1686-1743)," *SC* 9, 1944, 412-418.
- Souciot, Etienne. [1729]. *Observations mathématiques, astronomiques, géographiques, chronologiques, et physiques*, vol. 1, Paris 1729, pp. 6-11.
- Spencer, H. S. [1905]. *The Aryan Eclipse Cycle*, Poona 1905.
- Speyer, J. S. [1906]. "A Remarkable Vedic Theory about Sunrise and Sunset," *JRAS*, 1906, 723-727.
- Spottiswoode, William. [1860]. "Note on the Supposed Discovery of the Principle of the Differential Calculus by an Indian Astronomer," *JRAS* 17, 1860, 221-222.
- . [1863]. "On the Sūrya Siddhānta, and the Hindū Method of Calculating Eclipses," *JRAS* 20, 1863, 345-370.
- Srikantaya, S. [1932/33]. "Heavenly Mansions of the Hindus," *OJMS* 23, 1932-33, 85-101; 262-274; 393-407; and 534-562.
- Srinivasiengar, C. N. [1967]. *The History of Ancient Indian Mathematics*, Calcutta 1967.
- Srivastava, Balram. [1964]. "Balances in Ancient India," *VJ* 2, 1964, 131-134.
- Srivastava, Usha. [1955]. "An Indeterminate Problem in Śrīdharaśāstrī's Mathematics," *UB* 2, 1955, 43-56.
- Srivastava, V. C. [1965/64]. "The Original Nature and Significance of Savitṛ in Rīgvedic Religion," *JAHRS* 29, 1965-64, 48-56.
- . [1964/65]. "The Asvins in the Rīgveda," *JAHRS* 30, 1964-65, 51-62.
- Stahl, M. [1827]. "Rapport sur le Kala sankalita, recueil de mémoires du lieutenant-colonel John Warren," *JA* 1, 11, 1827, 356-367.
- Stein, O. [1936]. "The Numerals in the Niya Inscriptions," *BSOAS* 8, 1936, 765-779.
- Steinschneider, Moritz. [1870/71]. "Zur Geschichte der Uebersetzungen aus dem Indischen in's Arabische und ihres Einflusses auf die arabische Literatur," *ZDMG* 24, 1870, 325-392; and 25, 1871, 378-428.
- Stevenson, J. [1844/47]. "Some Remarks on the Relation that subsists between the Jain and Brahmanical systems of Geography," *JBRAS* 2, 1844-47, 411-415.
- Stone, A. P. [1958]. "Astronomical Instruments at Calcutta, Delhi and Jaipur," *AHS* 11, 1958, 159-162.
- Strachey, Edward. [1812]. *Some Observations on the Originality, Extent, and Importance of the Mathematical Science of the Hindus*, [Calcutta 1812?].
- . [1816]. "On the Early History of Algebra," *AR* 12, 1816, 159-185.
- Stuart, Samuel. [1905]. "The Indian Tirvalore Tables," *JBAA* 13, 1905, 76-80.
- Stuhr, Peter Feddersen. [1931]. *Untersuchungen über die Ursprünglichkeit und Alterthümlichkeit der Sternkunde unter den Chinesen und Indiern und über den Einfluss der Griechen auf den Gang ihrer Ausbildung*, Berlin 1931.
- Subba Rao, G. V. [1957/58]. "Rāmāyana: First History and Scientific Record by Man," *IOI Baroda* 7, 1957-58, 90-102.
- Subba Rao, H. N. [1930/31a]. "Antiquity of the Vedas," *OJMS* 21, 1930-31, 280-285.
- . [1930/31b]. "Maha Yuga," *OJMS* 21, 1930-31, 284-286.
- Subrahmanyaśāstrī, L. [1937]. "Pañcāṅgaśuddhipaddhati," *PAIOC* 9, 1937, 1359-1364.
- Suter, Heinrich. [1904]. "Über die Vielecksformel in Bhāskara's Lilāvati," *Verhandlungen des dritten internationalen Mathematiker-Kongresses in Heidelberg*, [Heidelberg] 1904, pp. 556-558.
- . [1908/09]. "Eine indische Methode der Berechnung der Kugeloberfläche," *BM* 3, 9, 1908-09, 196-199.
- Tamaskar, G. D. [1941]. "Some Observations on Kauṭilya's Measures of Time," *A Volume of Studies in Indology*, *POS* 75, Poona 1941, pp. 492-505.
- Tambe, L. K. [1950]. *Brahmalikhita*, Poona 1950.
- Temple, R. C. [1887]. "An Astrological Sanad Granted by Govindrav Gaikwad," *JA* 16, 1887, 317-320.
- . [1891]. "Notes on the Burmese System of Arithmetic," *JA* 20, 1891, 53-69.
- Tennant, F. P. [1859]. "Reply to Mr. Pratt's letter to the Asiatic Journal on the Indian Arc of Meridian," *JAS Bengal* 28, 1859, 17-22.
- Terquem, O. [1846]. "Sur le quadrilatère inscriptible dont toutes les parties sont rationnelles, d'après la méthode indienne," *NAM* 5, 1846, 636.
- Thakur, Upendra. [1962]. "Sanskrit Learning in Mithilā under the Kharjavalā Dynasty," *JBS* 48, 1962, sect. II, pp. 90-104.
- Thampuran, Ramavarma Maru. [ ? ]. "Vṛttaparidhiyūṭe," *Mangalodayam* 20, 7, 252-256.
- Thibaut, George Frederick. [1874/77]. "The Sūlvāsūtra of Baudhāyana, with the Commentary by Dvārakānāthayajvan," *The Pandit* 9, 1874-75, 292-298; and 10, 1875-76, 17-22; 44-50; 72-74; 139-146; 166-170; 186-194; and 209-218; *NS* 1, 1876-77, 316-322; 556-578; 626-642; 692-706; and 761-770.
- . [1875]. "On the Sūlvāsūtras," *JAS Bengal* 44, 1, 1875, 227-275.
- . [1877]. "Contributions to the explanation of the Jyotiṣha-Vedāṅga," *JAS Bengal* 46, 1, 1877, 411-437.
- . [1880]. "On the Sūryaprajñapti," *JAS Bengal* 49, 1, 1880, 107-127 and 181-206.
- . [1882]. "Katyayana Śyāmbharīśāstra, with the Commentary of Rāma, son of Sūryadāsa," *The Pandit*, *NS* 4, 1882, 94-103; 328-339; 382-389; and 487-491.
- . [1884]. "Notes from Varāha Mihira's Pañcāsiddhāntikā," *JAS Bengal* 53, 1, 1884, 259-293.
- . [1885]. "The Number of Stars Constituting the Several Nakṣatras According to Brahmagupta and Vriddha-Garga," *JA* 14, 1885, 43-45.
- . [1894]. "On the Hypothesis of the Babylonian Origin of the so-called Lunar Zodiac," *JAS Bengal* 63, 1894, 144-165.
- . [1895]. "On Some Recent Attempts to Determine the Antiquity of Vedic Civilization," *JA* 24, 1895, 85-100.
- . [1899]. *Astronomie, Astrologie und Mathematik*, *Grundriss* 3, 9, Strassbourg 1899.
- . [1907]. "Indian Astronomy," *IT* 1, 1907, 81-96; 193-211; 313-334; and 422-433.
- Thieme, Paul. [1937]. "Hemantasiṅgha and Abhorātre," *Jhā Commemoration Volume*, Poona 1937, pp. 415-419.
- Thiruvankatacharya, V. [1950]. "Ayanama and Indian Chronology. The Age of Varahamihira, Kalidasa, Etc. An Astronomical Proof," *JIH* 28, 1950, 103-110.
- . [1952/54]. "The Andhra Saka," *JAHRS* 22, 1952-54, 161-182.
- . [1958]. *Popular Astronomy*, Madras 1958.
- Thomas, Edward. [1855a]. "On the Epoch of the Gupta Dynasty," *JAS Bengal* 24, 1855, 371-396.
- . [1855b]. "Ancient Indian Numerals," *JAS Bengal* 24, 1855, 551-571.
- . [1863]. "Note on Indian Numerals," *JA* 6, 2, 1863, 379-393.
- . [1864/65]. "On Ancient Indian Weights," *JAS Bengal* 33, 1864, 251-266; and 34, 1, 1865, 14-27 and 51-70.

- [1874]. *Ancient Indian Weights, Marsden's Numismatica Orientalia* 1, London 1874.
- Tilak, Bal Gangadhar. [1893a]. *The Orion*, Poona [1893]: 4th ed., Poona 1935.
- [1893b]. "A Summary of the Principal Facts and Arguments in the Orion," *Transactions of the Ninth International Congress of Orientalists*, London 1893, pp. 376-383.
- [1917]. "The Chaldean and Indian Vedas," *Commemorative Essays*, Poona 1917, pp. 29-42. Reprinted in B. G. Tilak [1925].
- [1925]. *Vedic Chronology and Vedanga Jyotisha*, Poona 1925.
- [—]. [—]. *Arctic Home of the Vedas*, 2nd reprint, Poona 1956.
- Tirthaji Mahārāja, Bhārati Kṛṣṇa, Sankarācārya of Govardhana Matha, Puri. [1965]. *Vedic Mathematics or Sixteen Simple Mathematical Formulae from the Vedas*, *Hindū Vidyāvidyālaya Nepālī Rājya Sanskrita Granthamālā* 10, Vārāṇasī 1965.
- Tokekar, K. G. [1948]. *Be Your Own Astrologer*, Bombay 1948.
- Toomer, G. I. [1963/64a]. "A Note on Tamil Astronomical Tables," *Centaurus* 9, 1963-64, 11-15.
- [1963/64b]. "A Further Note on Tamil Astronomical Tables," *Centaurus* 9, 1963-64, 254-256.
- Tripathi, Maya Prasad. [1958/59]. "Survey and Cartography in the Sulvasūtras," *JGRI* 16, 1958-59, 469-485.
- [1962]. "Geomorphological Knowledge of Ancient Indians," *IHO* 38, 1962, 168-182.
- [1962/64]. "Survey and Cartography in Ancient India," *JOI Baroda* 12, 1962-63; and 13, 1963-64, 165-194.
- [1963/64]. "Climatology and Meteorology in Ancient India," *Bhārati* 7, 1963-64, 1-27.
- Trivedi, D. S. [1941]. "Five Thousand Years Ago—the Mahābhārata War," *A Volume of Studies in Indology*, *POS* 75, Poona 1941, pp. 515-525.
- [1959/60]. "Viṣṇudhvaṅga," *ABORI* 40, 1959, 241-261; and 41, 1960, 139-154.
- Tucci, Giuseppe. [1929]. "A Visit to an Astronomical Temple in India," *JRAS*, 1929, 247-258.
- Tytler, John. [1837]. "Analysis and Specimens of a Persian Work on Mathematics and Astronomy," *JRAS* 4, 1837, 254-272.
- Unakar, M. V. [1933]. "Meteorology in the Ṛgveda," *JBRRAS*, NS 9, 1933, 53-78; and 10, 1934, 38-57.
- Underhill, Muriel Marion. [1921]. *The Hindu Religious Year*, Calcutta 1921.
- Upadhye, A. N. [1933]. "Varāhamihira and Buzūjmehr," *IHO* 9, 1933, 984-986.
- [1936/57]. "Kings and Dynasties Mentioned in the Tiloyapanṇatti," *JAS Bombay*, NS 31/32, 1936-57, 274-276.
- [1960]. "Vamālakācārya, A Forgotten Authority on Astrology," *P. K. Gode Commemorative Volume*, *POS* 93, Poona 1960, pt. 3, pp. 203-208.
- [1965]. "Works and Authors Referred to in the *Kuvalayamālā* of Uddyotanaśūri," *VII* 3, 1965, 117-119.
- Ursekar, H. S. [1958]. "The Moon in the Ṛgveda," *JAS Bombay*, NS 33, 1958, 80-96.
- [1962]. "Some Mathematical Achievements of Ancient India," *JUB*, NS 31, 2 (*Arts* 37), 1962, 72-80.
- Uvanović, Daniel. [1936]. "The Indian Prelude to European Mathematics," *Osiris* 1, 1936, 652-657.
- Vader, Vishnu Hari. [1926]. "Further Researches into the Antiquity of the Vedas," *PAIOC* 4, 1926.
- [1929]. "Further Researches into the Antiquity of the Vedas," *IHO* 5, 1929, 243-248.
- [1932]. "The Twin Gods Aśvinau," *IHO* 8, 1932, 272-278.
- [1945]. "Rta or the Zodiacal Belt," *PO* 10, 1945, 101-107.
- [1957a]. "Are the Zodiacal Signs Referred to in the Ṛgveda?," *PAIOC* 19, 1957, 11-12.
- [1957b]. "The Gates of Heaven," *PAIOC* 19, 1957, 16.
- [1957c]. "Ursa Major or Saptarṣi in the Vedas," *PAIOC* 19, 1957, 16-17.
- [1957d]. "Meteors, Comets, Shooting Stars, etc., in the Vedic Literature," *PAIOC* 19, 1957, 18-19.
- [1957e]. "Nahusa or the Constellation *Drughana* (Draconis)," *PAIOC* 19, 1957, 20.
- [1959a]. "Are Lunar Mansions Mentioned in the Ṛgveda?," *PAIOC* 20, 1959, 17-18.
- [1959b]. "Rohiṇī-śakata-bheda: Is It Referred to in the Ṛgveda?," *PAIOC* 20, 1959, 18-19.
- [1959c]. "Were the Nebulae, Star Clusters, etc., Known to the Vedic Aryans during the Vedic Age? Yes," *PAIOC* 20, 1959, 19-20.
- [1959d]. "The *Dakṣayajña* and the Birth of the Planet Mars (aṅgāraka)," *PAIOC* 20, 1959, 20-21.
- [1959e]. "Was Star Canopus (Agastya) Observed by the Ancient Vedic Aryans while They Lived in the Circumpolar Regions? Or, The Legend of Agastya and Lopāmudrā," *PAIOC* 20, 1959, 21.
- Vaidya, C. V. [1927/28]. "Winternitz and Daftari on Dixit's Date of the Saṅgapatna Brāhmaṇa," *ABORI* 9, 1927-28, 267-271.
- Vaidya, R. V. [1964]. *Astronomical Light on Vedic Culture*, Bombay 1964.
- Vaidyanathaswamy, R. [1937]. "Mathematics in Modern India," *The Cultural Heritage of India*, Calcutta 1937, vol. 3, pp. 402-409.
- Vallauri, Mario. [1923]. "L'India e la storia delle scienze," *Arch SS* 4, 1923, 209-223.
- van der Waerden, Bartel L. See E. S. Kennedy and B. L. van der Waerden. [1963].
- [1950/—]. *Ontwakende Wetenschap*, Groningen 1950; English translation, *Science Awakening*, Groningen 1954; German translation, *Erwachende Wissenschaft*, Basel and Stuttgart 1956. *Erwachende Wissenschaft II. Die Anfänge der Astronomie*, Groningen [ND].
- [1952]. "Die Bewegung der Sonne nach griechischen und indischen Tafeln," *SBAW*, Math.-naturwiss. Kl. 1952, 219-232.
- [1955]. "Diophantische Gleichungen und Planetenperioden in der indischen Astronomie," *VNGZ* 100, 1955, 155-170.
- [1956a]. "Babylonische Planetenrechnung in Ägypten und Indien," *BO* 13, 1956, 108-110.
- [1956b]. "Tamil Astronomy," *Centaurus* 4, 1956, 221-234.
- [1958]. "The Astronomical Papyrus Ryland 27," *Centaurus* 5, 1958, 177-191.
- [1961]. "Ausgleichspunkt, 'Methode der Perser' und indische Planetenrechnung," *AHES* 1, 1961, 107-121.
- [1965]. "Vergleich der mittleren Bewegungen in der babylonischen, griechischen und indischen Astronomie," *Centaurus* 11, 1965, 1-18.
- van Wijk, W. E. See S. Konow and W. E. van Wijk. [1924].
- [1922/26]. "On Hindu Chronology," *AO* 1, 1922, 206-223; 2, 1923, 55-62 and 255-249; 4, 1925, 55-80; and 5, 1926, 1-27.
- [1926]. "On Dates in the Kaniska Era," *AO* 5, 1926, 168-175.
- [1938]. *Decimal Tables for the Reduction of Hindu Dates from the Data of the Sūrya-Siddhānta*, The Hague 1938.
- Varma, G. R. [1963/64]. "Sūrya-Vishnu Worship in Andhra," *JAHRS* 29, 1963-64, 69-72.
- Vazquez Quiroga, Vicente. [1859]. *Essai sur les systèmes métriques et monétaires des anciens peuples depuis les premiers temps historiques jusqu'à la fin du Khalifat d'Orient*, 3 vols., Paris 1859.
- Venkatachalam, Kota. [1949/52]. "Indian Eras," *JAHRS* 20, 1949-50, 39-82; and 21, 1950-52, 1-40.

- [1953]. *Plot in Indian Chronology*. Vijayawada 1953.
- [1954]. "Varahamihira and his Saka Kala," *PIHC* 17, 1954, 130. See also *JAHRS* 21, 1950-52, 46-53.
- Venkataraman, A. See C. T. Rajagopal and A. Venkataraman [1959].
- [1948]. "Some Interesting Proofs from 'Yukti-Bhasha,'" *MS* 16, 1948, 1-7.
- Venkatasubbiah, A. [1918]. *Some Saka Dates in Inscriptions*. Mysore 1918.
- [1933]. "Mean Samkrāntis," *JA* 62, 1933, 171-175.
- Venkateswara, S. V. [1930]. "Trita," *PAIOC* 6, 1930, 547-550.
- Verma, Bhagwati Sūrya. [1954]. "A Unique Image of Sūrya," *JBS* 40, 1954, 343-346.
- Vermeire, R. P. M. [1925]. "L'astronomie indienne," *ROS* 8, 1925, 309-342.
- Vijayaraghavan, T. [1941]. "On Jaina Magic Squares," *MS* 9, 1941, 97-102.
- Viswanathan, T. H. See T. Chandrasekharan and T. H. Viswanathan [1960/61].
- Vogel, Claus. [1959]. "On the Anaximenes Sunset Mountain," *Jñānamukhīvalī*. New Delhi 1959, pp. 228-233.
- Vogt, Heinrich. [1906]. "Der pythagoreische Lehrsatz in der ältesten Geometrie der Inder," *JSGVC* 84, 1906, Abt. 5, 3-4.
- [1906/07]. "Haben die alten Inder den Pythagoreischen Lehrsatz und das Irrationale gekannt?" *BM* 3, 7, 1906-07, 6-23.
- Volkovoi, O. F., and A. I. Volodarskii. [1966]. "Sridkhara, Patiganita," *Fiziko-matematičeskie Nauki v Stranakh Vostoka*, Moskva 1966, pp. 160-181.
- Volodarskii, A. I. See O. F. Volkovoi and A. I. Volodarskii [1966].
- [1966a]. "O matematičeskom traktate Sridkhary 'Patiganita,'" *Fiziko-matematičeskie Nauki v Stranakh Vostoka*, Moskva 1966, pp. 141-129.
- [1966b]. "Primočianija k tractatu Sridkhary 'Patiganita,'" *Fiziko-matematičeskie Nauki v Stranakh Vostoka*, Moskva 1966, pp. 182-246.
- von Bressendorf. [1921]. *Die Grundzüge der Hindu Astrologie*. München 1921.
- von Humboldt, Alexander. See A. Weber [1868a].
- von Negelein, Julius. [1926a]. "Zum System der frühen indischen Astrologie," *Beiträge zur Literaturwissenschaft und Geistesgeschichte Indiens (Festschrift Hermann Jacobi)*, Bonn 1926, pp. 440-448.
- [1926b]. "Zum kosmologischen System in der ältesten indischen Literatur," *OLZ* 29, 1926, 905-907.
- [1927]. "Die geheimen Himmelsmächte und ihr Gefolge," *Aus Indiens Kultur*, Erlangen 1927, pp. 47-53.
- [1928a]. "Die Wahrzeichen des Himmels in der indischen Mantik," *ARel* 26, 1928, 241-295.
- [1928b]. "Die ältesten Meister der indischen Astrologie und die Grundidee ihrer Lehrbücher," *ZDMG* 82, 1928, 1-22.
- [1928c]. "Die Begriffe rechts und links in der indischen Mantik," *ZfI* 6, 1928, 28-44.
- [1929]. "Das Sternbild des 'Grossen Bären' in Sibirien und Indien," *ARel* 27, 1929, 186-187.
- von Schlagintweit, H. [1871]. "Die Wasseruhr und die Klangschelbe in Indien," *SBAW* 1, 1871, Math.-phys. Kl. 128-138.
- von Schlegel, August Wilhelm. [1834]. "Mode of Expressing Numerals in the Sanskrit and Tibetan Language," *JAS Bengal* 3, 1834, 1.
- Vyas, S. N. [1952/53]. "Belief in Omens in the Rāmāyana Age," *IOI Baroda* 2, 1952-53, 1-8.
- Waddell, L. A. [1911]. "Ancient Indian Anatomical Drawings from Tibet," *JRAS*, 1911, 207-208.
- Walther, Christopher Theodosius. [1738]. "Doctrina temporum Indica ex libris Indica et Brahmanum institutione," in G. S. Bayer [1738], pp. 143-200.
- Wamstad, Jeanne. See E. S. Kennedy, S. Engle, and J. Wamstad [1965].
- Warren, John. [1825]. *Kala Sankalita*, Madras 1825.
- Wayman, Alex. [1962]. "The Buddha's Birthdate, Employing New Tables of Planetary Longitudes," *JAOS* 82, 1962, 374-376.
- [1963]. "The Stages of Life According to Varāhamihira," *JAOS* 82, 1963, 360-361.
- [1964]. "Surrejoinder," *JAOS* 84, 1964, 175-177.
- [1964/65]. "Climactic Times in Indian Mythology and Religion," *HRel* 4, 1964-65, 295-318.
- [1967/68]. "Significance of Dreams in India and Tibet," *HRel* 7, 1967-68, 1-12.
- Weber, A. [1850/53]. "Über den Taittiriya-Veda, astronomische Data aus beiden Yajus und eine Stelle des Taittiriya-Brāhmaṇa über die Mondhäuser," *IS* 1, 1850, 68-100 and 2, 1853, 390-392.
- [1853]. "Zur Geschichte der indischen Astrologie," *IS* 2, 1853, 236-287 and 412-418.
- [1858]. "Zwei vedische Texte über Omnia und Portenta," *AAWB*, Phil.-hist. Kl., 1858, 313-413.
- [1859]. "Über ein indisches Würfel-Orakel," *MPAWB* 1859, 158-180.
- [1860/61]. "Die vedischen Nachrichten von den naxatra (Mondstationen)," *AAWB*, Phil.-hist. Abh., 1860, 283-332 and 1861, 267-400.
- [1862]. "Über den Vedakalender, namens Jyotisham," *AAWB*, Phil.-hist. Kl., 1862, 1-130.
- [1865a]. "Zur Frage über die nakshatra," *IS* 9, 1865, 424-459.
- [1865b]. "Über die Aufzählung der vier Zeitmasse bei Garga," *IS* 9, 1865, 460-472.
- [1868a]. "Zur Frage über die nakshatra (nebst zwei Briefen Alexander v. Humboldt's)," *IS* 10, 1868, 213-253.
- [1868b]. "Über den auf der Königl. Bibl. zu Berlin befindlichen Codex der Sūryaprajñapti (ms. or. oct. 155)," *IS* 10, 1868, 254-316.
- [1868c]. "Ein Atharvaparīṣhṭa über grahayuddha (Streit der Planeten)," *IS* 10, 1868, 317-320.
- [1868d]. "Ueber das Jyotirvidābharanam," *ZDMG* 22, 1868, 708-730.
- [1868e]. "Ueber ein indisches Würfel-Orakel," *Indische Streifen*, vol. I, Berlin 1868, pp. 274-307.
- [1870]. "Zum Jyotirvidābharanam," *ZDMG* 24, 1870, 393-402.
- [1894]. "Vedische Beiträge," *SAWB*, 1894, 775-812.
- Weissenborn, H. [1879]. "Zur Geschichte der Mathematik I: Das Trapez bei Euklid, Heron und Brahmagupta," *AGM* 2, 1879, 167-184.
- Whish, C. M. [1827a]. "On the Alphabetical Notation of the Hindus," *TLSM* 1, 1827, 54-62; trans. into French, *JA* 2, 16, 1835, 116-130.
- [1827b]. "On the Origin and Antiquity of the Hindu Zodiac," *TLSM* 1, 1827, 65-77.
- [1830]. "On the Hindu Quadrature of the Circle and the Infinite Series of the Proportion of the Circumference to the Diameter in the Four Śāstras, the Tantra Saṅgraham, Yucti Bhāṭṭā, Carana Padhati, and Sadratnamāla," *TRAS* 3, 1830, 509-523.
- Whitney, William Dwight. [1860]. "Additional Note on Āryabhaṭṭa and his Writings," *JAOS* 6, 1860, 560-564.
- [1863]. "On the Views of Biot and Weber Respecting the Relations of the Hindu and Chinese Systems of Asterisms," *JAOS* 8, 1863, 1-94.
- [1865]. "On the Jyotisha Observation of the Place of the Colures, and the Data derivable from it," *JRAS*, 1865, 316-331.
- [1866]. "Reply to the Strictures of Prof. Weber upon an Essay Respecting the Asterismal System of the Hindus, Arabs, and Chinese," *JAOS* 8, 1866, 382-398.
- [1874]. "On the Chinese Siew as Constellations," *PAOS* 10, 1874, lxxxii-lxxxv.
- [1885]. "On Prof. Ludwig's Views Respecting Total Eclipses of the Sun as Noticed in the Rig-Veda," *PAOS* 13, 1885, lxi-lxxv.

- . [1894]. "On a Recent Attempt, by Jacobi and Tilak, to Determine on Astronomical Evidence the Date of the Earliest Vedic Period as 4000 B.C.," *PAOS* 16, 1894, lxxxix-civ. Reprinted *JA* 24, 1895, 361-369.
- Wiedemann, Eilhard. [1912]. "Über den indischen Kreis," *MGMNT* 11, 1912, 252-255.
- Wiet, Gaston. [1936]. "Une famille de fabricants d'astrolabes," *BIFAO* 36, 1936, 97-99.
- Willford, Francis. [1797]. "On the Chronology of the Hindus," *AR* 5, 1797, 241-295.
- Wilkinson, Lancelot. [1834]. "On the Use of the Siddhantas in the Work of Native Education," *JAS Bengal* 3, 1834, 504-519.
- . [1837]. "Discovery of the Rekhā Ganita, a Translation of the Elements of Euclid into Sanskrit by Samrat Jagannātha, under the orders of Rājā Śivāī Jaya Sinha of Jaipur," *JAS Bengal* 6, 1837, 958-948.
- Williams, John Lloyd. [1793]. "Further Particulars Respecting the Observatory at Benares," *PTRSI* 88, 1793, pt. 1, 45-49.
- Wilson, Patrick. [1966]. *Science in South Asia, Past and Present*. Foreign Area Materials Center: Occasional Publication No. 3, New York, 1966.
- Windisch, E. [1894]. "Das Räthsel vom Jahre," *ZDMG* 48, 1894, 353-357.
- Winter, H. J. J., and A. Mirza. [1952]. "Concerning the Persian Version of *Līlāvati*," *JRASB/S* 18, 1952, 1-10.
- Winternitz, Moriz. [1922]. *Geschichte der indischen Literatur*, vol. 3, Leipzig 1922. Translated by Subhadra Jhā, Delhi 1967, pp. 641-665.
- Woepcke, F. [1854]. "Sur le mot Kardaga et sur une méthode indienne pour calculer les sinus," *NAM* 13, 1854, 386-394.
- . [1859]. *Sur l'introduction de l'arithmétique indienne en Occident*, Rome 1859.
- . [1863]. "Mémoire sur la propagation des chiffres indiens," *JA* 6, 1, 1863, 27-79; 234-290; and 442-529.
- Yabuuti, Kiyosi. [1963]. "The Chiochih-li," *History of Chinese Science and Technology in the Middle Ages*, [Kyoto?] 1963, pp. 493-538.
- Yousuf, Mirza Mohammad. [1962]. "Influence of Indian Sciences on Muslim Cultures," *Islam C* 36, 1962, 102-118.
- Zemba, Megumu. [1956]. "On Astronomy and Calendar of the Buddhist Books," *JIBS* 4, 1956, 18-27 (in Japanese).
- Zeuthen, H. G. [1904a]. "Sur l'arithmétique géométrique des Grecs et des Indiens," *BM* 3, 5, 1904, 97-112.
- . [1904b]. "Théorème de Pythagore, origine de la géométrie scientifique," *Comptes rendus du 11<sup>e</sup> Congrès Internationale de Philosophie*, Genève 1904.

## LISTS OF CATALOGUES OF SANSKRIT MANUSCRIPTS AND BOOKS

- Aberystwyth: List by V. Raghavan of MSS in the National Library of Wales, Aberystwyth.
- ABSP: K. A. Subramania Iyer et al., *A Catalogue of Manuscripts in the Akhila Bharatiya Sanskrit Parishad Lucknow*, Lucknow 1963.
- Adyar Cat.: *A Catalogue of the Sanskrit Manuscripts in the Adyar Library*, 2 vols., Adyar 1926-1928.
- Adyar Index: V. Krishnamacharya, *Alphabetical Index of Sanskrit Manuscripts in the Adyar Library*, ALS 45, Madras 1944.
- Adyar List: *A Preliminary List of the Sanskrit and Prākṛit Manuscripts in the Adyar Library*, Madras [1910].
- Ahmadnagar: *Catalogue of Old Manuscripts in Sanskrit in the Collection of the Sanatan Dharma Sabha, Ahmadnagar*, Ahmadnagar 1962.
- AHRS: "Andhra Historical Research Society, Kalaprapurna Dr. C. Narayanarao's Oriental Manuscripts Library," *JAHRS* 19, 1948-49, app., pp. 1-4.
- Ajaigarh: List of MSS in Ajaigarh State Library in poss. of V. Raghavan. Typed.
- Alwar: P. Peterson, *Catalogue of the Sanskrit Manuscripts in the Library of His Highness the Maharaja of Ulwar, Bombay* 1892.
- Amritsar: K. Singh, *A Catalogue of Persian and Sanskrit Manuscripts*, Amritsar 1962 (in the Sikh History Research Department, Khalsa College, Amritsar).
- Anandāśrama: List of MSS in the Anandāśrama, Poona, in poss. of V. Raghavan. Handwritten.
- Anup: C. Kunhan Raja and K. Madhava Krishna Sarma, *Catalogue of the Anup Sanskrit Library*, fasc. 4 and 5, Bikaner 1948 (in the Mahārāja's Library, Bikaner).
- AOS: E. Strout, *Catalogue of the Library of the American Oriental Society*, New Haven 1950, pp. 183-184 (also in Poleman).
- AS Bengal: H. P. Shāstri and P. C. Sen Gupta, *A Descriptive Catalogue of the Sanskrit Manuscripts in the Collections of the Royal Asiatic Society of Bengal*, vol. 10, 2 pts., Calcutta 1945 and 1948. See also C. Chakravarti, "Sanskrit Manuscripts in the Asiatic Society," *ISPP* 1, 1959-60, 663-672.
- AS Bengal Jaina: K. Nyāyabhāṣana, *An Alphabetical List of Jaina MSS. Belonging to Government in the Oriental Library of the Asiatic Society of Bengal*, Calcutta 1908.
- AS Bombay: H. D. Velankar, *A Descriptive Catalogue of Sanskrit and Prākṛit Manuscripts in the Library of the Bombay Branch of the Royal Asiatic Society*, vol. 1, Bombay-London 1926.
- AS Bombay (Indrajī): *A Classified List of Sanskrit Manuscripts in the Library*, No. 1, Bombay 1903.
- Assam (1930): H. Goswami, *Descriptive Catalogue of Assamese Manuscripts*, Calcutta 1930, pp. 187-256 (most of these manuscripts are in the Kāmarūpa Anusandhana Samiti).
- Assam (1935/6): S. C. Goswami, "Some Sanskrit Manuscripts Found in Kamrup," *JARS* 3, 1935-36, 118-123.
- Baroda: R. Nanbiyar, *An Alphabetical List of Manuscripts in the Oriental Institute, Baroda*, vol. 2, GOS 114, Baroda 1950.
- Benares (1869): "Rājākīya-vārāṇasi-vidyāmandira-sarasvatī bhavana-vartī-pustakānām śūcī-patram," *The Paṇḍit* 4, 1869 ("Jyautisāśūcīpatram," Suppl. pp. xxiv-xxxii) (now in Sanskrit College, Benares).
- Benares (1870-1880): In N-W P V (1880), "Appendix. A Classified List of MSS. Purchased for the Library of Sanskrit College, Benares, from January, 1870, to April, 1880" (pp. 202-205 Jyotish).
- Benares (1878): *Śūcīpatram or Catalogue of Sanskrit Manuscripts in the Sanskrit College Library Benares Allahabad* [1878] (references are to the section entitled Jyautisāśūcīpatram).
- Benares (1897-1901): *List of Sanskrit, Jaina and Hindi Manuscripts purchased by order of Government and deposited in the Sanskrit College, Benares, during 1897, 1898, 1899, 1900, and 1901*, Allahabad 1902.
- Benares (1902): *List of Sanskrit, Jaina and Hindi Manuscripts Purchased by Order of Government and Deposited in the Sanskrit College, Benares During 1902*, Allahabad 1904.
- Benares (1903): *Saptamaṅgrahasūcīpatram, Aṭṭa (!) 1903 isariyavarsa saṅghīṣṭīni pustakāni*.
- Benares (1904): *List of Sanskrit, Jaina and Hindi Manuscripts Purchased by Order of Government and Deposited in Sanskrit College, Benares, During the Year 1904*, Allahabad 1905.
- Benares (1905): *List of Sanskrit and Hindi Manuscripts Purchased by Order of Government and Deposited in Sanskrit College, Benares, During the Year 1905*, Allahabad 1906.
- Benares (1906): *List of Sanskrit and Hindi Manuscripts Purchased by Order of Government and Deposited in Sanskrit College, Benares, During the Year 1906*, Allahabad 1907.
- Benares (1909): *List of Sanskrit, Jain and Hindi Manuscripts Purchased by Order of Government and Deposited in Sanskrit College, Benares, During the Year 1909*, Allahabad 1910.
- Benares (1909-1910): *List of Sanskrit and Hindi Manuscripts Purchased by Order of Government and Deposited in Sanskrit College, Benares, During the Year 1909-1910*, Allahabad 1911.
- Benares (1910-1911): *List of Sanskrit and Hindi Manuscripts Purchased by Order of Government and Deposited in Sanskrit College, Benares, During the Year 1910-1911*, Allahabad 1912.
- Benares (1911-1912): *List of Sanskrit Jaina and Hindi Manuscripts Purchased by Order of Government and Deposited in Sanskrit College, Benares, During the Year 1911-1912*, Allahabad 1913.
- Benares (1912-1915): *List of Sanskrit and Hindi Manuscripts Purchased by Order of Government and Deposited in Sanskrit College, Benares, During the Year 1912-1915*, Allahabad 1913.
- Benares (1915-1914): *List of Sanskrit and Hindi Manuscripts Purchased by Order of Government and Deposited in Sanskrit College, Benares, During 1915-1914*, Allahabad 1915.
- Benares (1914-1915): *List of Sanskrit, Jain and Hindi Manuscripts Purchased by Order of Government and Deposited in Sanskrit College, Benares, During 1914-1915*, Allahabad 1915.
- Benares (1915-1916): *List of Sanskrit, Jain and Hindi Manuscripts Purchased by Order of Government and Deposited in Sanskrit College, Benares, During 1915-1916*, Allahabad 1917.
- Benares (1916-1917): *List of Sanskrit and Hindi Manuscripts Purchased by Order of Government and Deposited in Sanskrit College, Benares, During the Year 1916-1917*, Allahabad 1918.
- Benares (1917-1918): *List of Sanskrit and Hindi Manuscripts Purchased by Order of Government and Deposited in Sanskrit College, Benares, During the Year 1917-1918*, Allahabad 1919.
- Benares (1965): *A Descriptive Catalogue of the Sanskrit Manuscripts, acquired for and deposited in the Sanskrit University Library (Sarasvatī Bhavana), Varanasi, during the years 1791-1950*, vol. 9, Varanasi 1963.
- Bendall: C. Bendall, *A Journey of Literary and Archaeological Research in Nepal and Northern India during the Winter of 1884-5*, Cambridge 1886, p. 43 (MSS collected by Bendall: most deposited in Cambridge University Library).
- Berlin: A. Weber, *Die Handschriften-Verzeichnisse der Königl. Bibliothek. Erster Band. Verzeichniss der Sanskrit-Handschriften*, Berlin 1855.
- Berlin: A. Weber, *Verzeichniss der sanskrit und prākṛit-Handschriften der königl. Bibliothek zu Berlin. Zweiter Band, Erste Abtheilung*, Berlin 1886.

- Berlin: A. Weber, *Verzeichnis der sanskrit und präkrit-Handschriften der königlichen Bibliothek zu Berlin*, Zweiter Band, Dritte Abtheilung, Berlin 1891.
- Berne: C. Regamey, "Manuscripts sur feuilles de palmier. Les manuscrits indiens et indo-chinois de la section ethnographique du Musée Historique de Berne. Catalogue descriptif," *Jahrbuch des Bernischen Historischen Museums in Bern* 28, 1948, 1-23.
- Bharatpur: Catalogue of MSS. in the Bharatpur State Library in poss. of V. Raghavan. Handwritten (B = Bhāṣā, S = Saṃskṛta).
- Bhor: Catalogue of MSS. in Palace Library, Bhor State, in V. Raghavan's poss. Typed.
- Bhubaneswar: K. Mahapatra, *A Descriptive Catalogue of Sanskrit Manuscripts of Orissa in the Collection of the Orissa State Museum, Bhubaneswar*, vol. 1 (Smṛti), Bhubaneswar 1958.
- Bikaner: R. Mitra, *A Catalogue of Sanskrit Manuscripts in the Library of His Highness the Maharaja of Bikaner*, Calcutta 1880.
- BM: C. Bendall, *Catalogue of the Sanskrit Manuscripts in the British Museum*, London 1902.
- BM (extra): Catalogue of Sanskrit MSS. in the BM. Handwritten.
- BM: Ernst Haas, *Catalogue of Sanskrit and Pali Books in the British Museum*, London 1876; Cecil Bendall, *Catalogue of Sanskrit, Pali, and Prakrit Books in the British Museum (1876-1892)*, London 1892; L. D. Barnett, *A Supplementary Catalogue . . . 1892-1906*, London 1908; and L. D. Barnett, *A Supplementary Catalogue . . . 1906-1928*, London 1928.
- Bombay, Bhandarkar: R. G. Bhandarkar, *Lists of Sanskrit Manuscripts in Private Libraries in the Bombay Presidency*, Part 1, Bombay 1895.
- Bombay, Kielhorn: F. Kielhorn, *A Classified Alphabetical Catalogue of Sanskrit MSS. in the Southern Division of the Bombay Presidency*, fasc. 1, Bombay 1869 (section 12—Astronomy).
- Bombay U: G. V. Devasthali, *A Descriptive Catalogue of the Sanskrit and Prakrit Manuscripts (Bhagutsinghi Collection and H. M. Bhalkamkar Collection) in the Library of the University of Bombay*, Book 1, Bombay 1944.
- Bombay U Desai: H. D. Velankar, *A Descriptive Catalogue of the Sanskrit Manuscripts in the Ichhārām Suryārām Desai Collection in the Library of the University of Bombay*, Bombay 1955.
- Bonn: J. Gildemeister, *Catalogi chirographorum in Bibliotheca Academica Bonneni servatorum, fasciculus XIII sive catalogi librorum manu scriptorum orientalium fasciculus VII*, Bonn 1876.
- BORI 1866/68: *List*, Poona 1925, pp. 87-94 (see title cf. BORI 1895/1902). Also G. Bühler, "Two Lists of Sanskrit MSS. together with some remarks on my connexion with the Search for Sanskrit MSS.," *ZDMG* 42, 1888, 550-559 (Class VII—Astronomy on p. 558 now in BORI).
- BORI 1868/69: S. R. Bhandarkar, *A Catalogue of the Collections of Manuscripts Deposited in the Deccan College*, Bombay 1888, pp. 3-5.
- BORI 1869/70: Bhandarkar, Bombay 1888, pp. 6-12.
- BORI 1870/71: Bhandarkar, Bombay 1888, pp. 13-17.
- BORI 1871/72: Bhandarkar, Bombay 1888, pp. 18-40.
- BORI 1872/73: Bhandarkar, Bombay 1888, pp. 41-52.
- BORI 1873/74: F. Kielhorn, *Report on the Search for Sanskrit MSS. in the Bombay Presidency during the Year 1880-81*, Bombay 1881; Appendix. MSS. Collected in 1873-74. See also Bhandarkar, Bombay 1888, pp. 55-68.
- BORI 1874/75: Bhandarkar, Bombay 1888, pp. 69-72.
- BORI 1875/76: G. Bühler, *Detailed Report on a Tour in Search of Sanskrit MSS. Made in Kashmir, Rajputana, and Central India*, *JBRAS Extra No.*, Bombay 1877. See also Bhandarkar, Bombay 1888, pp. 73-125.
- BORI 1877/78: Bhandarkar, Bombay 1888, pp. 124-126.
- BORI 1879/80: Bhandarkar, Bombay 1888, pp. 127-148.
- BORI A 1879/80: Bhandarkar, Bombay 1888, pp. 149-165.
- BORI 1880/81: F. Kielhorn, *Report on the Search for Sanskrit MSS. in the Bombay Presidency during the Year 1880-81*, Bombay 1881. See also Bhandarkar, Bombay 1888, pp. 164-194.
- BORI 1881/82: Bhandarkar, Bombay 1888, pp. 195-211.
- BORI A 1881/82: Bhandarkar, Bombay 1888, pp. 212-242.
- BORI 1882/83: R. G. Bhandarkar, *Report on the Search for Sanskrit MSS. in the Bombay Presidency during the Year 1882/83*, Bombay 1884. See also Bhandarkar, Bombay 1888, pp. 245-305 (Introduction reprinted in R. G. Bhandarkar [1927/33] vol. 2, pp. 1-57).
- BORI A 1882/83: Prof. Peterson's *Report on the Search for Sanskrit MSS. in the Bombay Circle, 1882-83*, *JBRAS Extra No.*, Bombay 1883. See also Bhandarkar, Bombay 1888, pp. 306-336.
- BORI 1883/84: R. G. Bhandarkar, *Report on the Search for Sanskrit Manuscripts in the Bombay Presidency during the Year 1883-84*, Bombay 1887. See also Bhandarkar, Bombay 1888, pp. 337-389 (Introduction reprinted in R. G. Bhandarkar [1927/33] vol. 2, pp. 58-291).
- BORI A 1883/84: P. Peterson, *A Second Report on Operations in Search of Sanskrit MSS. in the Bombay Circle, 1883-84*, *JBRAS Extra No.*, Bombay 1884. See also Bhandarkar, Bombay 1888, pp. 390-414.
- BORI 1884/86: P. Peterson, *A Third Report of Operations in Search of Sanskrit MSS. in the Bombay Circle, 1884-86*, *JBRAS Extra No.*, Bombay 1887.
- BORI 1884/87: R. G. Bhandarkar, *Report on the Search for Sanskrit Manuscripts in the Bombay Presidency during the Years 1884-85, 1885-86, and 1886-87*, Bombay 1894 (Introduction reprinted in R. G. Bhandarkar [1927/33], vol. 2, pp. 292-348).
- BORI 1886/92: P. Peterson, *A Fourth Report of Operations in Search of Sanskrit MSS. in the Bombay Circle, 1886-92*, *JBRAS Extra No.*, Bombay 1894.
- BORI 1887/91: R. G. Bhandarkar, *Report on the Search for Sanskrit Manuscripts in the Bombay Presidency during the Years 1887-88, 1888-89, 1889-90, and 1890-91*, Bombay 1897 (Introduction reprinted in R. G. Bhandarkar [1927/33] vol. 2, pp. 349-412).
- BORI 1891/95: A. V. Kathavate, *Report on the Search for Sanskrit Manuscripts in the Bombay Presidency during the Years 1891-92, 1892-93, 1893-94, and 1894-95*, Bombay 1901.
- BORI 1892/95: P. Peterson, *A Fifth Report of Operations in Search of Sanskrit MSS. in the Bombay Circle, 1892-95*, Bombay 1896.
- BORI 1895/98: P. Peterson, *A Sixth Report of Operations in Search of Sanskrit MSS. in the Bombay Circle, 1895-98*, Bombay 1899.
- BORI 1895/1902: *List of Manuscripts Collected for the Government Manuscripts Library by the Professors of Sanskrit at the Deccan and Elphinstone Colleges Since 1895 and 1899*, Poona 1925, pp. 1-35.
- BORI 1898/99: P. Peterson, *A Sixth Report of Operations in Search of Sanskrit MSS. in the Bombay Circle, 1895-98*, Bombay 1899; Appendix III—MSS. purchased 1898-99.
- BORI 1899/1915: *List*, Poona 1925, pp. 34-62.
- BORI 1902/07: *List*, Poona 1925, pp. 63-72.
- BORI 1907/15: *List*, Poona 1925, pp. 73-76.
- BORI 1916/18: *List*, Poona 1925, pp. 77-79.
- BORI 1919/24: *List*, Poona 1925, pp. 81-86.
- BORI Vishrambag 1: Bhandarkar, Bombay 1888, pp. 415-455.
- BORI Vishrambag 2: Bhandarkar, Bombay 1888, pp. 454-477.
- Breslau: G. Richter, *Verzeichnis der orientalischen Handschriften der Staats- und Universitäts-Bibliothek Breslau*, Leipzig 1935, pp. 55-56.
- Bruxelles: List by V. Raghavan of MSS. in the Cabinet des Manuscrits of the Bibliothèque Royale de Belgique.
- Buddha-Gaya: *The Buddha-Gaya Library (in A.D. 1922)*, Calcutta and Simla 1925.

- Bühler: G. Bühler, "Two Lists of Sanskrit MSS together with some remarks on my connexion with the Search for Sanskrit MSS.," ZDMG 42, 1888, 550-559 (Class N-Astronomy on pp. 549-550 and Class O-Palmistry on p. 550 now in IO; see BORI 1866/68).
- Burdwan: List of MSS. in Palace Library of the Mahārājādhirāja of Burdwan in poss. of V. Raghavan. Typed.
- Burma: E. Forchhammer, *Report on the Literary Work Performed on Behalf of Government During the Year 1879-80*, Rangoon 1882.
- Calcutta Sanskrit College: H. Sāstri and S. C. Gu, *A Descriptive Catalogue of Sanskrit Manuscripts in the Library of the Calcutta Sanskrit College*, vol. 9, Calcutta 1904.
- Calcutta Sanskrit College (II): "A Descriptive Catalogue of MSS. in the Sanskrit College Library, Calcutta. A. Smṛti" *OH* 4, 1956, 135-148; 5, 1957, suppl.; and 6, 1958, suppl.
- Calcutta University: A. M. Tarkatirtha, *A Brief Catalogue of Sanskrit Manuscripts in the Post-Graduate Department of Sanskrit*, Calcutta 1954.
- Cambay: BORI A 1882/83, Appendix I—Catalogue of the Palm-leaf MSS. in the Śāntināth's Bhaṅḍār, Cambay.
- Cambay I: Muni Puṅyavijaya, *Catalogue of Palm-leaf Manuscripts in the Śāntināth Jain Bhaṅḍār*, Cambay, pt. 1, GOS 135, Baroda 1961.
- Cambay II: Muni Puṅyavijaya, *Catalogue of Palm-leaf Manuscripts in the Śāntināth Jain Bhaṅḍār*, Cambay, pt. 2, GOS 149, Baroda 1966.
- Cambridge: T. Aufrecht, *A Catalogue of Sanskrit Manuscripts in the Library of Trinity College*, Cambridge, Cambridge-London 1869.
- Cambridge (King's): E. H. Palmer, "Catalogue of the Oriental Manuscripts in the Library of King's College, Cambridge," *JRAS* 1868, 105-131. (Given by E. E. Pote from Patna in 1788; he had them from A. Polier (b. 1741), who dates his acquisition of some of them A.H. 1181 (1767/8). Polier was in India for East India Co. until 1789.)
- Cambridge University: C. Bendall, *A Journey of Literary and Archaeological Research in Nepal and Northern India during the Winter of 1884-5*, Cambridge 1886, pp. 49-53 (MSS. purchased in Bombay and deposited in Cambridge University Library).
- Cambridge University (Buddhist): C. Bendall, *Catalogue of the Buddhist Sanskrit Manuscripts in the University Library*, Cambridge, Cambridge 1883.
- CC: T. Aufrecht, *Catalogus Catalogorum*, 3 vols., Leipzig 1891-1903. Reprinted Wiesbaden 1962.
- Central Asia: A. F. Rudolf Hoernle, "Three Further Collections of Ancient Manuscripts from Central Asia," *JAS Bengal* 66, 1, 1897, 215-260.
- Chamba: Catalogue of MSS. in State Library, Chamba, in poss. of V. Raghavan. Handwritten.
- Chambers: *Catalogue of the Highly Valuable and Important Collection of Sanskrit Manuscripts of the Late Sir Robert Chambers, Knight, Chief Justice of Bengal* (for an auction held at Sotheby's on April 13-16, 1842; MSS. now in Berlin).
- Colombo: L. de Zoysa, *Catalogue of Pali, Sinhalese, and Sanskrit Manuscripts in the Ceylon Government Oriental Library*, Colombo 1876.
- Colombo (2): I. d'Alwis, *A Descriptive Catalogue of Sanskrit, Pali, and Sinhalese Literary Works of Ceylon*, vol. 1, Colombo 1870.
- Congress: *Manuscripts from Indian Collections: Descriptive Catalogue*, New Delhi 1964 (Exhibition for the International Congress of Orientalists).
- Copenhagen: N. L. Westergaard, *Codices Indici Bibliothecae Regiae Havniensis*, Havniae 1846.
- CP, Hiralal: R. B. Hiralal, *Catalogue of Sanskrit and Prakrit Manuscripts in the Central Provinces and Berar*, Nagpur 1926.
- CP, Kichhoen, *A Catalogue of Sanskrit MSS. Existing in the Central Provinces*, Nagpur 1874.
- Darlington: List by V. Raghavan of MSS. in the Darlington Public Museum. Handwritten.
- DC: Catalogue of Sanskrit manuscripts in the Postgraduate and Research Institute, Deccan College, Poona. Handwritten (I have gone through MS 8260).
- DC: M. M. Patkar, *Catalogue of Sanskrit Manuscripts in the Deccan College*, vol. 3, DCMS 29, Poona 1966.
- DC (Gorhe): R. G. Harib, *A Descriptive Catalogue of Sanskrit MSS. of the Vinayak Mahadev Gorhe Collection*, Poona 1942 (Gorhe from Puntambe in Ahmadnagar Dist.).
- Dharampur: List of MSS. in Dharampur State Library in poss. of V. Raghavan. Typed.
- Dharwar: K. T. Pandurangī, *A Descriptive Catalogue of Sanskrit Manuscripts at Sri Vidyadhīsha Sanskrit Manuscripts Library, Dharwar*, vol. 1, Dharwar 1963.
- DMG: *Katalog der Bibliothek der Deutschen Morgenländischen Gesellschaft*, vol. 2, Leipzig 1881 (Vorderindien (by R. Pischel) pp. 2-11).
- Dublin: T. K. Abbott, *Catalogue of the Manuscripts in the Library of Trinity College, Dublin*, Dublin 1900, pp. 422-423.
- Edinburgh: List by V. Raghavan of MSS. in Edinburgh University Library. Handwritten.
- Emeneau: M. B. Emeneau, *A Union List of Printed Indic Texts and Translations in American Libraries*, AOS 7, New Haven 1935.
- Fitzwilliam Museum: M. R. James, *A Descriptive Catalogue of the Manuscripts in the Fitzwilliam Museum*, Cambridge 1895, pp. 417-418.
- Florence: T. Aufrecht, *Florentine Sanskrit Manuscripts*, Leipzig 1892 (in the Biblioteca Nazionale and the Istituto di Studi Superiori).
- Florence: P. E. Pavolini, *I manoscritti indiani della Biblioteca Nazionale Centrale di Firenze (non compresi nel Catalogo dell' Aufrecht)*, Firenze 1907.
- Gadwal: List of MSS. in Library of the Gadwal Samasthana, Gadwal, in poss. of V. Raghavan. Typed.
- Gadwal (II): List of MSS. belonging to Gunde Rao Vachaspati Shiromani, Gadwal, in poss. of V. Raghavan. Typed.
- Gauhati: S. Bhattacharya, "Sanskrit Manuscripts in the Department of Historical and Antiquarian Studies and Narayani Handique Research Institute at Gauhati, Assam," *JOR Madras* 19, 1950, 295-315 (jyotisa on p. 306).
- Gauhati II: P. C. Choudhury, *A Catalogue of Sanskrit Manuscripts at the D.H.A.S., Gauhati* 1961 (in the Department of Historical and Antiquarian Studies, Gauhati).
- Geneva: List by V. Raghavan of MSS. in University Library, Geneva.
- Glasgow: J. Young and P. H. Aitken, *A Catalogue of the Manuscripts in the Library of the Hunterian Museum in the University of Glasgow*, Glasgow 1908 (Oriental Manuscripts pp. 451-523).
- GOML Madras: M. Rangacharya and S. Kuppaswami Sastri, *A Triennial Catalogue of Manuscripts Collected during the Triennium 1910-11 to 1912-13 for the Government Oriental Manuscripts Library, Madras*, vol. 1 pt. 1, 3 vols., Madras 1913.
- GOML Madras: S. Kuppaswami Sastri, *Triennial Catalogue 1913-14 to 1915-16*, vol. 2 pt. 1, 3 vols., Madras 1917.
- GOML Madras: S. Kuppaswami Sastri, *Triennial Catalogue 1916-17 to 1918-19*, vol. 3 pt. 1, 3 vols., Madras 1922.
- GOML Madras: S. Kuppaswami Sastri, *Triennial Catalogue 1919-20 to 1921-22*, vol. 4 pt. 1, 3 vols., Madras 1928.
- GOML Madras: S. Kuppaswami Sastri, *Triennial Catalogue 1922-23 to 1924-25*, vol. 5 pt. 1, Madras 1932.
- GOML Madras: S. Kuppaswami Sastri, *Triennial Catalogue 1925-26 to 1927-28*, vol. 6 pt. 1, Madras 1935.
- GOML Madras: S. Kuppaswami Sastri and P. P. Subrahmanya Sastri, *Triennial Catalogue 1928-29 to 1930-31*, vol. 7 pt. 1, Madras 1937.
- GOML Madras: P. P. Subrahmanya Sastri, *Triennial Catalogue 1931-32 to 1933-34*, vol. 8-Sanskrit, Madras 1939.



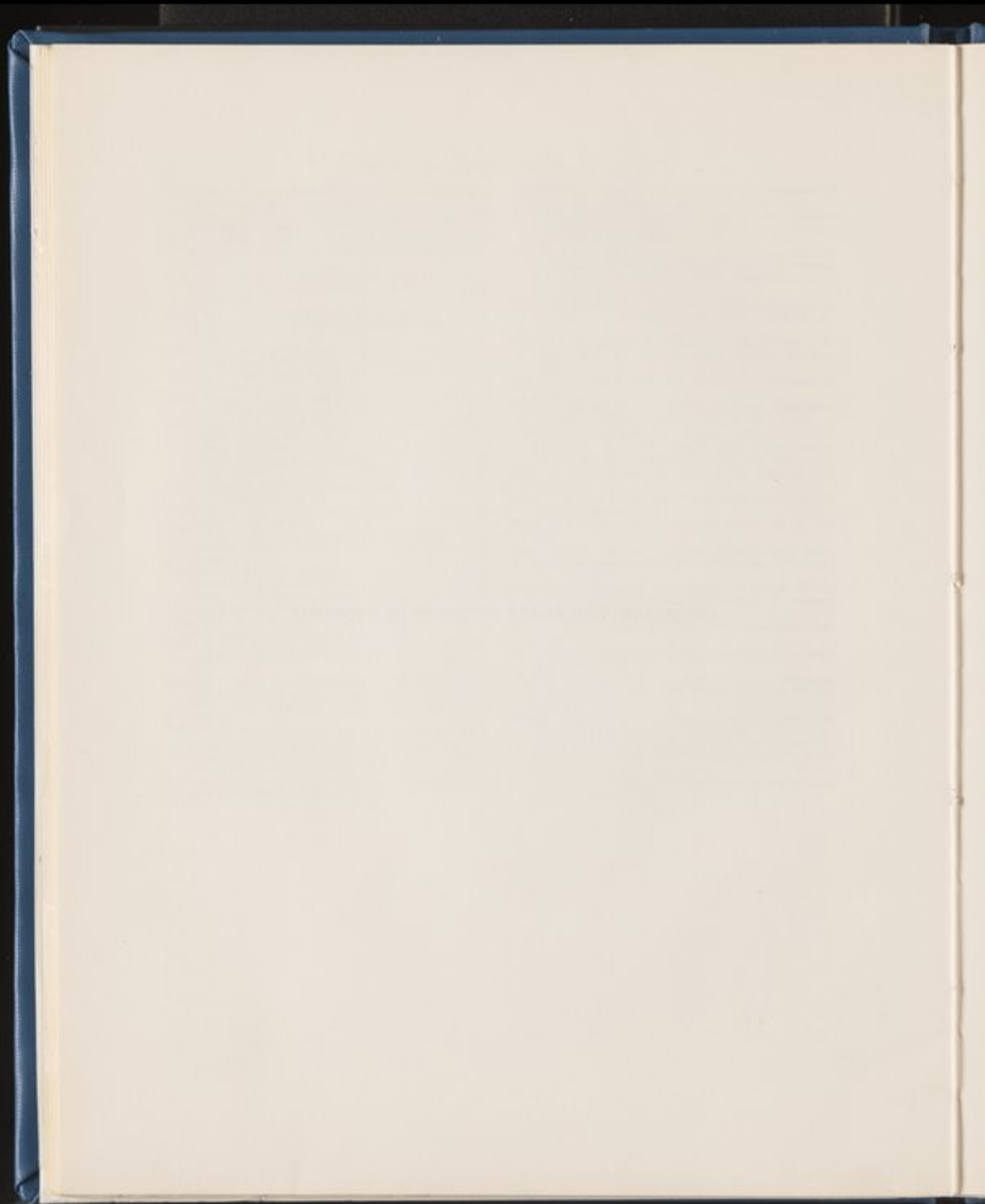
- GOML Madras: P. P. Subrahmanya Sastri and A. Sankaran, *Triennial Catalogue 1934-35 to 1936-37*, vol. 9-Sanskrit, Madras 1943.
- GOML Madras: T. Chandrasekharan, *Triennial Catalogue 1937-38 to 1939-40*, vol. 10-Sanskrit, 3 vols., Madras 1950-1958.
- GOML Madras: T. Chandrasekharan, *Triennial Catalogue 1940-41 to 1942-43*, vol. 11-Sanskrit, Madras 1958.
- GOML Madras: A. A. Ramanathan and R. K. Parthasarathi, *Triennial Catalogue 1943-44 to 1945-46*, vol. 12-Sanskrit, Madras 1967.
- GOML Madras: S. Kuppaswami Sastri, *A Descriptive Catalogue of the Sanskrit Manuscripts in the Government Oriental Manuscripts Library, Madras*, vol. 24, Madras 1918 (Jyautisa).
- GOML Madras: S. Kuppaswami Sastri, vol. 25, Madras 1924 (Supplemental).
- GOML Madras: S. Kuppaswami Sastri, vol. 26, Madras 1927 (Supplemental).
- GOML Madras: S. Kuppaswami Sastri and P. P. Subrahmanya Sastri, vol. 27, Madras 1937 (Supplemental).
- GOML Madras: S. Kuppaswami Sastri and P. P. Subrahmanya Sastri, vol. 28, Madras 1939 (Supplemental).
- GOML Madras: P. P. Subrahmanya Sastri and A. Sankaran, vol. 29, Madras 1942 (Supplemental).
- GOML Madras: A. Sankaran and Syed Muhammad Fazlullah, vol. 30, Madras 1947 (Supplemental).
- GOML Madras: T. Chandrasekharan, vol. 31, Madras 1951 (Supplemental).
- GOML Madras: T. Chandrasekharan, vol. 32, Madras 1958 (Supplemental).
- GOML Madras (Index): *Alphabetical Index of Manuscripts in the Government Oriental MSS. Library, Madras*, Madras, 1893.
- GOML Madras (Malayalam): P. P. Subrahmanya Sastri, *A Descriptive Catalogue of the Malayalam Manuscripts in the Government Oriental Manuscripts Library, Madras*, vol. 1, Madras 1940.
- Goṣḍal: *Śri Bhuvanēsvari Pīṭha, Goṣḍala-Saurāṅga, Hastikā-hita Granthasāhī, [Goṣḍal] 1962* (Jyotisa-section 15).
- Gotha: W. Pertsch, *Die orientalischen Handschriften der Herzoglichen Bibliothek zu Gotha*, Gotha, 1895, pp. 48-52.
- Göttingen: R. Fick, "Kielborns Handschriften-Sammlung," *AGWG, Phil.-Hist. Kl.* 1930, Heft 1, 65-94.
- Gough: A. E. Gough, *Papers Relating to the Collection and Preservation of the Records of Ancient Sanskrit Literature in India*, Calcutta 1878.
- GVS: Catalogue of Sanskrit manuscripts in the Gujarat Vidyā Sabhā, Ahmadabad (now kept at the B. J. Institute of Learning and Research). Handwritten. Partly covered by: P. Shah, *A Descriptive Catalogue of Sanskrit Manuscripts [Gujarat Vidyā Sabha Collection]*, 2 vols., Ahmedabad 1964.
- Hamburg: List of Oppert's Collection of MSS. by V. Raghavan in the Staatsuniversitätsbibliothek, Hamburg.
- Haug: *Verzeichnis der orientalischen Handschriften aus dem Nachlasse des Professor Dr. Martin Haug in München*, München 1876.
- Hiersemann: *Verzeichnis einer Sammlung von Palmblatt-Manuskripten: Veda- und Sanskrit-Literatur*, Katalog 370, Karl W. Hiersemann, Leipzig 1909.
- Hodgson: W. W. Hunter, *Catalogue of Sanskrit Manuscripts Collected in Nepal, and Presented to Various Libraries and Learned Societies by Brian Houghton Hodgson*, London 1881.
- Hultzsch: E. Hultzsch, "Ueber eine Sammlung indischer Handschriften und Inschriften," *ZDMG* 40, 1886, 1-80 (XV Jyotisa on pp. 20-22) (now at Oxford).
- Hultzsch 1: E. Hultzsch, *Reports on Sanskrit Manuscripts in Southern India*, no. 1, Madras 1895.
- Hultzsch 2: E. Hultzsch, *Reports on Sanskrit Manuscripts in Southern India*, no. 2, Madras 1896.
- Hultzsch 3: E. Hultzsch, *Reports on Sanskrit Manuscripts in Southern India*, no. 3, Madras 1905.
- III Oxford: A. B. Keith, *A Catalogue of the Sanskrit and Prākṛit MSS. in the Indian Institute Library, Oxford*, Oxford 1903.
- III Oxford Stein: G. L. M. Clouston, "Catalogue of the Stein Collection of Sanskrit MSS. from Kashmir," *JRAS*, 1912, 587-627 (deposited in Indian Institute Library).
- IO: J. Eggeling, *Catalogue of the Sanskrit Manuscripts in the Library of the India Office*, pt. 5, London 1896.
- IO: C. H. Tawney and F. W. Thomas, *Catalogue of Two Collections of Sanskrit Manuscripts Preserved in the India Office Library*, London 1903 (Jones and Additional; see IO (Jones)).
- IO: A. B. Keith, *Catalogue of the Sanskrit and Prākṛit Manuscripts in the Library of the India Office*, vol. 2, Oxford 1935.
- IO: Prana Natha and J. B. Chaudhuri, *Catalogue of the Library of the India Office*, vol. 2, pt. 1, Sanskrit Books, 4 vols., London 1958-57.
- IO (Gujarati and Rajasthani): J. F. Blumhardt and A. Master, *Catalogue of the Gujarati and Rajasthani Manuscripts in the India Office Library*, Oxford 1954.
- IO (Jones): Lord Teignmouth, *The Works of Sir William Jones. With the Life of the Author*, London 1807, vol. 13, pp. 399-426.
- IO (Marathi): J. F. Blumhardt and S. G. Kanhere, *Catalogue of the Marathi Manuscripts in the India Office Library*, Oxford 1950.
- Jacobi: H. Jacobi, "Liste der indischen Handschriften im Besitze des Prof. H. Jacobi in Münster i. W.," *ZDMG* 34, 1879, 693-697 (now in British Museum).
- Jaipur: C. Bendall, *A Journey of Literary and Archaeological Research in Nepal and Northern India during the Winter of 1884-5*, Cambridge 1886, p. 28 (MSS. in Library of Mahārāja of Jaipur).
- Jaipur (II): List of MSS. by Dr. Kunhan Raja of the Jaipur Pothikhana in poss. of V. Raghavan. Handwritten.
- Jammu and Kashmir: M. A. Stein, *Catalogue of the Sanskrit Manuscripts in the Raghunatha Temple Library of His Highness the Maharaja of Jammu and Kashmir*, Bombay 1894.
- Jammu and Kashmir (2): Ramchandra Kak and Harabhata Shastri, *A Descriptive Catalogue of Sanskrit Manuscripts in the Private Library of His Highness Shri Rajarajeshwar Maharajadhiraj Maharaja Shri Harisinghji Bahadur*, Poona 1927.
- Jesalmere: C. D. Dalal and L. B. Gandhi, *A Catalogue of Manuscripts in the Jain Bhandars at Jesalmere*, GOS 21, Baroda 1923.
- Jind: List of MSS. in the Jind State Public Library, Sangrur, in poss. of V. Raghavan. Typed.
- Kathmandu (1905): H. P. Sāstri, *A Catalogue of Palm-leaf and Selected Paper MSS. belonging to the Durbar Library, Nepal*, 2 vols., Calcutta 1905-15.
- Kathmandu (1907): Appendix to Sāstri, Not. 1907.
- Kathmandu (1960): *Nepālārājīkīyavirapantakāyasthapustakāśāśnī Brhatsūcīpatraṃ*, pt. 1, [Kathmandu] V.S. 2017 (A.D. 1960/1).
- Kathmandu (Rāna): C. Bendall, *A Journey of Literary and Archaeological Research in Nepal and Northern India during the Winter of 1884-5*, Cambridge 1886, p. 19 (MSS. in library of Rāna Mahārāja of Nepal).
- Katrak: J. C. Katrak, *Oriental Treasures*, [Bombay] 1941.
- Kavindrācārya (see also entry in CESS A 2): R. A. K. Sastry, *Kavindracharya List*, GOS 17, Baroda 1921. Cf. P. K. Gode [1943/44].
- Keonjhar: List of MSS. in Keonjhar State Library in poss. of V. Raghavan. Typed.
- Kerala: S. K. Pillai (vol. 1) and K. R. Pillai (vol. 2), *Alphabetical Index of the Sanskrit Manuscripts in the University Manuscripts Library, Trivandrum*, vol. 1 (A to NA), TSS

- 186, Trivandrum 1957; vol. 2 (TA to MA), TSS 215, Trivandrum 1965.
- Kotah: Catalogue of MSS. in the Kotah State Library in the poss. of V. Raghavan. Handwritten.
- LD1: *Catalogue of Sanskrit and Prakrit Manuscripts. Muniraja Sri Panyavijayaji's Collection*, pt. III. Page proofs, pp. 852-962 (LD Institute, Ahmadabad).
- LD1: Handwritten supplementary list prepared by Rameshchandra D. Malvania.
- (AKC) Anandaji Kalyānaji Collection.
- (DJSC) Dasada Jaina Saṅgha Collection.
- (DSC) Devaśūri Collection.
- (KC) Kirtimuni Collection.
- (KhC) Kheḍa Collection.
- (LDC) Lalbhai Dalpathbhai Collection.
- (MPC) Muniraja Sri Panyavijayaji Collection.
- (NC) Nagaraseṅha Collection.
- (SC) Śāntisāgara Collection.
- (SCC) Śāgaracandra Collection.
- (VC) Vidyārthin Collection.
- Leiden: List by V. Raghavan of MSS. in the Kern Institute, Leiden.
- Leipzig: T. Aufrecht, *Katalog der Handschriften der Universitäts-Bibliothek zu Leipzig, I, Die Sanskrit-Handschriften*, Leipzig 1901.
- Leningrad (1852): *Catalogue des manuscrits et xylographes orientaux de la Bibliothèque Impériale Publique de St. Pétersbourg*, St. Pétersbourg 1852 (XVI Manuscripts Sanscrits, pp. 628-634).
- Leningrad (1918): N. D. Mironov, *Katalog indijski rykopise Petrograd* 1918.
- Leumann: Ernst Leumann, "Liste von transcribirten Abschriften und Auszügen vorwiegend aus der Jaina-Literatur," ZDMG 45, 1891, 454-464; and 47, 1893, 308-315.
- Limbadī: Limbadī Jaina Jānabhandārāni Hastalikhita Prasthānam Śūcīpatra, Ahmadabad 1928.
- Lucknow: Kall Prasad, *Catalogue of Oriental Manuscripts in the Lucknow University Library*, Lucknow 1951, pp. 32-68 and 72-75.
- Lund: H. Edgren, *De codicibus nonnullis indicis, qui in bibliotheca Universitatis Lundensis asservantur*, Lund Univ. Årskrift 19, Lund 1883.
- Luzac: List by V. Raghavan of MSS. in Luzac's, London.
- Mackenzie: H. H. Wilson, *Mackenzie Collection*, 2 vols., Calcutta 1828 (Astronomy and Astrology in vol. 1, pp. 118-130).
- Mackenzie, Madras: W. Taylor, *Examination and Analysis of the Mackenzie Manuscripts Deposited in the Madras College Library*, Calcutta 1838.
- Madras BE: W. Taylor, *A Catalogue Raisonné of Oriental Manuscripts in the Library of the (Late) College, Fort Saint George, Now in Charge of the Board of Examiners*, 3 vols., Madras 1857-62.
- Madras BE (Iyer): T. S. Condaswami Iyer, *An Alphabetical Catalogue in the Vernacular and English Characters of the Oriental Manuscripts in the Library of the Board of Examiners [East India House]*, vol. 1, Madras 1861.
- Manchester: List by V. Raghavan of Sanskrit MSS. in the John Rylands Library, Manchester.
- Mithila: A. Banerji-Sastry, *A Descriptive Catalogue of Manuscripts in Mithila*, vol. 3 (Jyotishāstra), Patna 1937.
- Mitra, Not.: Rajendralal Mitra, *Notices of Sanskrit Manuscripts*, 11 vols., Calcutta 1871-1895.
- Mukhtāra: I. Mukhtāra, *Jainagranthapreśastisāgraha*, vol. 1, VGM 12, Delhi 1954; vol. 2, VGM 14, Delhi 1963.
- Müller: T. R. Gambler-Parry, *A Catalogue of the Sanskrit Manuscripts Purchased for the Administrators of the Max Müller Memorial Fund*, Oxford 1922 (now in Bodleian).
- Munich: T. Aufrecht, *Catalogus Codicum manu scriptorum Bibliothecae Regiae Monacensis I 5. Die Sanskrit-Handschriften der K. Hof- und Staatsbibliothek in München*, München 1909.
- Munich: J. Jolly, *Catalogus Codicum manu scriptorum Bibliothecae Regiae Monacensis I 6. Die Sanskrit-Handschriften Nr. 287-415 der K. Hof- und Staatsbibliothek in München*, München 1912.
- Mysore: Catalogue of the Sarasvatibhāḍḍāram Library of the Mahārāja of Mysore in Gough, pp. 166-189.
- Mysore (1911): *Catalogue of Sanskrit Manuscripts in the Government Oriental Library, Mysore*, pt. II, Mysore 1911 (pp. 103-118 XV Jyotishāstra).
- Mysore (1922): *Catalogue of Sanskrit Manuscripts in the Government Oriental Library, Mysore*, Mysore 1922.
- Mysore (1955): *A Supplemental Catalogue of Manuscripts Secured for The Oriental Research Institute, Mysore During 1941-1954*, Mysore 1955.
- Mysore GOL: *A Catalogue of Printed Sanskrit Works in the Government Oriental Library, Mysore (1891-1944)*, comp. by S. Sitarama Sastry, Mysore 1944.
- Mysore and Coorg: L. Rice, *Catalogue of Sanskrit Manuscripts in Mysore and Coorg*, Bangalore 1884.
- Nagpur: V. W. Karambelkar, *Catalogue of Sanskrit Manuscripts in the Nagpur University Library*, Nagpur, 1958.
- NCC: V. Raghavan et al., *New Catalogue Catalogorum*, vol. 1, Madras 1949; vol. 2, Madras 1966.
- Nepal: L. Petech, *Mediaeval History of Nepal, Series Orientale Roma* 10, Roma 1958.
- Nepal (Bendall): C. Bendall, "On European Collections of Sanskrit Manuscripts from Nepal: Their Antiquity and Bearing on Chronology, History and Literature," *Abh. Berliner Or. Cong.*, vol. 2, 1881, pp. 189-211.
- Nepal (Mitra): R. Mitra, *The Sanskrit Buddhist Literature of Nepal*, Calcutta 1882.
- NL Calcutta: *National Library, Catalogue of Sanskrit, Pali and Prakrit Books*, vols. 1-2, Calcutta 1951-1956.
- N-W P I (1874): *A Catalogue of Sanskrit Manuscripts in Private Libraries of the North-west Provinces*, pt. I, Benares 1874 (pp. 505-579 Astronomy and Astrology).
- N-W P II (1877): *A Catalogue of Sanskrit Manuscripts in Private Libraries of the North-Western Provinces*, pt. II, Allahabad 1877 (A pp. 77-83 Astronomy and Astrology; B pp. 137-165 Astrology).
- N-W P II (1878): *A Catalogue of Sanskrit Manuscripts in Private Libraries of the North-western Provinces*, pt. II, Allahabad 1878 (A pp. 73-78 Jyotish; B pp. 111-118 Jyotish).
- N-W P III (1878): *A Catalogue of Sanskrit Manuscripts in Private Libraries of the North-west Provinces*, pt. III, Allahabad 1878 (pp. 21-59 Dharmāśāstra, etc.).
- N-W P IV (1879): *A Catalogue of Sanskrit Manuscripts in the North-Western Provinces*, pt. IV, Allahabad 1879.
- N-W P V (1880): *A Catalogue of Sanskrit Manuscripts in the North-western Provinces*, pt. V, Allahabad 1880 (A pp. 2-7 Jyotish; B pp. 86-95 Jyotish).
- N-W P VI (1881): *A Catalogue of Sanskrit Manuscripts in the North-western Provinces*, pt. VI, Allahabad 1881 (pp. 62-63 Jyotisham).
- N-W P VII (1882): Dhundhirāj Śāstrī, *A Catalogue of Sanskrit Manuscripts in the North-western Provinces*, pt. VII, Allahabad 1882 (pp. 36-37 Jyotishāstra).
- N-W P VIII (1884): Sudhākara Dvivedī, *A Catalogue of Sanskrit Manuscripts in the North-western Provinces*, pt. VIII, Allahabad 1884 (pp. 54-59 Jyotishāstra).
- N-W P IX (1885): Sudhākara Dvivedī, *A Catalogue of Sanskrit Manuscripts in the North-western Provinces*, pt. IX, Allahabad 1885 (A pp. 45-53 Jyotishāstra; B pp. 56-57 Vāstu Śāstra; C pp. 60-61 Svāra Śāstra).
- N-W P X (1886): Sudhākara Dvivedī, *A Catalogue of Sanskrit Manuscripts in the North-western Provinces*, pt. X, Allahabad 1886 (A pp. 48-53 Jyotishāstra; B pp. 56-57 Vāstu Śāstra; C pp. 60-61 Svāra Śāstra).
- Oppert I: G. Oppert, *Lists of Sanskrit Manuscripts in Private Libraries of Southern India*, vol. 1, Madras 1880.
- Oppert II: G. Oppert, *Lists of Sanskrit Manuscripts in Private Libraries of Southern India*, vol. 2, Madras 1885.

- Osmania University: A. Sharma, K. Deshpande, D. G. Padhye, and S. Sharma, *A Catalogue of the Sanskrit Manuscripts in the Osmania University Library*, Hyderabad 1964.
- Oudh III (1873): C. Browning, Deviprasāda, and R. Mitra, *A Catalogue of Sanskrit MSS. Existing in Oudh*, fasc. 3, Calcutta 1873 (section 8).
- Oudh (Oct.-Dec. 1874): *A Catalogue*.
- Oudh IV (1874): J. C. Nesfield, Deviprasāda, and R. Mitra, *A Catalogue*, fasc. 4, Calcutta 1874.
- Oudh (Jan.-Mar. 1875): *A Catalogue*.
- Oudh (Apr.-June 1875): *A Catalogue*.
- Oudh (July-Sept. 1875): *A Catalogue*.
- Oudh V (1875): *A Catalogue*, fasc. 5, Calcutta 1875.
- Oudh VI (1875): *A Catalogue*, fasc. 6, Calcutta 1875.
- Oudh VII (1875): *A Catalogue*, fasc. 7, Calcutta 1875.
- Oudh VIII (1876): *A Catalogue*, fasc. 8, Calcutta 1876.
- Oudh (1876-1878): J. C. Nesfield, Deviprasāda, and R. Mitra, *List of Sanskrit Manuscripts Discovered in Oudh During the Year 1876*, Calcutta 1878.
- Oudh IX (1877): *A Catalogue*, fasc. 9, Calcutta 1877.
- Oudh (1877-1878): Deviprasāda, *List 1877*, Allahabad 1878.
- Oudh X (1878): *A Catalogue*, fasc. 10, Calcutta 1878.
- Oudh XI (1878): *A Catalogue*, fasc. 11, Calcutta 1878.
- Oudh (1879): Devi Prasāda, *List 1879*, Allahabad 1879.
- Oudh XII (1880): Devi Prasāda, *A Catalogue*, fasc. XII, Allahabad 1880.
- Oudh XIII (1881): Devi Prasāda, *A Catalogue*, fasc. XIII, Allahabad 1881.
- Oudh XIV (1881): Devi Prasāda, *A Catalogue 1881* [fasc. XIV], Allahabad 1882.
- Oudh XV (1882): Devi Prasāda, *A Catalogue 1882* [fasc. XV], Allahabad 1883.
- Oudh XVI (1883): Deviprasāda, *A Catalogue 1883* [fasc. XVI], Allahabad 1884.
- Oudh XVII (1884): Deviprasāda, *A Catalogue 1884* [fasc. XVII], Allahabad 1885.
- Oudh XVIII (1885): Deviprasāda, *A Catalogue 1885* [fasc. XVIII], Allahabad 1886.
- Oudh XIX (1887): Devi Prasāda, *A Catalogue 1887* [fasc. XIX], Allahabad 1888.
- Oudh XX (1888): Devi Prasāda, *A Catalogue 1888*, Allahabad 1890.
- Oudh XXI (1889): Devi Prasāda, *A Catalogue 1889*, Allahabad 1893.
- Oudh XXII (1890): Devi Prasāda, *A Catalogue 1890*, Allahabad 1893.
- Oxford: T. Aufrecht, *Catalogi Codicum Manuscriptorum Bibliothecae Bodleianae pars octava Codices Sanscriticos complectens*, Oxford 1864.
- Oxford: M. Winternitz and A. B. Keith, *Catalogue of Sanskrit Manuscripts in the Bodleian Library*, vol. 2, Oxford 1905.
- Oxford CS: Catalogue by V. Raghavan of manuscripts bought in Benares by the Prime Minister of Nepal, Chandra Shumshere, and presented to the Bodleian Library, Handwritten.
- Oxford Photos: T. R. Gambier-Parry, *A Catalogue of Photographs of Sanskrit MSS.*, Oxford 1930 (from Kathmandu).
- Paris BN: A. Cabaton, *Catalogue Sommaire des manuscrits sanscrits et pâlis, I<sup>er</sup> fascicule-manuscrits sanscrits*, Paris 1907.
- Paris BN: A. Cabaton, *Catalogue sommaire des manuscrits indiens indo-chinois et malayo-polynésiens*, Paris 1912.
- Paris BN (Add): List by V. Raghavan of additional manuscripts in the Bibliothèque Nationale, Paris.
- Paris BN (Cordier): J. Fillozat, "Liste des manuscrits de la collection Palmyr Cordier conservés à la Bibliothèque Nationale," *JA* 224, 1934, 155-175.
- Paris BN (Senart): J. Fillozat, "Chronique et notes bibliographiques: état des manuscrits de la collection Émile Senart," *JA* 228, 1936, 127-145.
- Paris Société Asiatique: J. Fillozat, "Catalogue des manuscrits sanscrits et tibétains de la Société Asiatique," *JA* 233, 1941-42, 1-81.
- Paris Sorbonne: List by V. Raghavan of the Sylvain Lévi Collection in the Sorbonne, Paris.
- Pattan: C. D. Dalal and L. B. Gandhi, *A Descriptive Catalogue of Manuscripts in the Jain Bhandars at Pattan*, vol. 1, GOS 76, Baroda 1937.
- Philadelphia L: M. A. Simsar, *Oriental Manuscripts of the John Frederick Lewis Collection in the Free Library of Philadelphia*, Philadelphia 1937, pp. 178-185 (also in Poleman).
- PL, Buhler: G. Buhler, *A Catalogue of Sanskrit Manuscripts Contained in the Private Libraries of Gujarat, Kāthiāvād, Kachch, Sindh, and Khāndelī*, 4 fasc., Bombay 1871-1873.
- Poleman: H. L. Poleman, *A Census of Indic Manuscripts in the United States and Canada*, AOS 12, New Haven 1938.
- Praiaiti (1): A. M. Shāh, *Praiaitisaigraha*, 2 pts., Ahmadabad 1936.
- Praiaiti (2): Jinavijaya Muni, *Jainapustakapraiaitisaigraha*, pt. 1, SJS 18, Bombay 1943.
- Probstain: List by V. Raghavan of MSS. belonging to Arthur Probstain, London, Handwritten.
- PrSB: K. L. Janeri, *Indische Handschriften*, Teil 1, Wiesbaden 1962; E. K. Sreekrishna Sarma, *Indische Handschriften*, Teil 3, Wiesbaden 1967 (MSS. from Preussischen Staatsbibliothek, now in the Westdeutschen Bibliothek, Marburg/Lahn (Marburg) and the Tübingen Universitätsbibliothek (Tübingen)).
- Pudukkottai: Catalogue of MSS. in Veda Sastra Patasala, Pudukkottai, in poss. of V. Raghavan, Handwritten.
- PUL: *Catalogue of Sanskrit Manuscripts in the Punjab University Library*, 2 vols., Lahore 1932-1941.
- Rajputana: S. R. Bhandarkar, *Report of a Second Tour in Search of Sanskrit Manuscripts Made in Rajputana and Central India in 1904-5 and 1905-6*, Bombay 1907.
- RAS: M. Winternitz, *A Catalogue of South Indian Sanskrit Manuscripts*, Asiatic Society Monographs, London 1902.
- RAS: *Catalogue of Printed Books Published before 1932 in the Library of the Royal Asiatic Society*, London 1940.
- RAS (Add): List by V. Raghavan of additional MSS. belonging to the Royal Asiatic Society, London, Handwritten.
- RAS (Hodgson): E. B. Cowell and J. Eggeling, "Catalogue of Buddhist Sanskrit Manuscripts in the possession of the Royal Asiatic Society (Hodgson Collection)," *JRAS*, 1876, 1-50.
- RAS (Tod): L. D. Barnett, "Catalogue of the Tod Collection of Indian Manuscripts in the Possession of the Royal Asiatic Society," *JRAS*, 1940, 129-178.
- RAS (Todd): "Titles of the Sanskrit MSS. in the Todd and Whish Collections of the Royal Asiatic Society," *JRAS*, 1890, 801-813 (Todd on 801-804).
- RAS (Whish): "Titles of the Sanskrit MSS. in the Todd and Whish Collections of the Royal Asiatic Society," *JRAS*, 1890, 801-813 (Whish on 805-813).
- RGS: *Rāṣṭriyagrānthaśūci: Saṃskṛtavihbhāga* 1958-1962, Calcutta 1965.
- Rome: P. Paulinus a S. Bartholomaeo, *Examen Historicocriticum Codicum Indicarum Bibliothecae Sacrae Congregationis De Propaganda Fide*, Roma 1792.
- RORI: *Rājasthāna Purātattvānveṣaṇa Mandirake Hastalikhita Granthamūki Śūci*, pt. 1, RPG 42, Jodhpur 1959. Recovered by: Muni Jinavijaya, *A Catalogue of Sanskrit and Prakrit Manuscripts in the Rajasthan Oriental Research Institute (Jodhpur Collection)*, pt. 1, RPG 71, Jodhpur 1963 (Cat. I).
- RORI: *Rājasthāna Prācyavidyā Pratishṭhāna, Jodhapura, Hastalikhita Granthasūci*, pt. 2, RPG 51, Jodhpur 1960. Recovered by: Muni Jinavijaya, *A Catalogue of Sanskrit and Prakrit Manuscripts in the Rajasthan Oriental Research Institute (Jodhpur Collection)*, RPG 81, Jodhpur 1965 (Cat. II).
- Sāstri, Not. 1900: Haraprasāda Cāstri, *Notices of Sanskrit MSS., Second Series*, vol. 1, Calcutta 1900.
- Sāstri, Not. 1904: Haraprasāda Cāstri, *Notices of Sanskrit MSS., Second Series*, vol. 2, Calcutta 1904.

- Sāstri, Not. 1907: Haraprasāda Čāstri, *Notices of Sanskrit MSS., Second Series*, vol. 5, Calcutta 1907.
- Sāstri, Rep. (1895-1900): MM. H. Shāstri, *Report on the Search of Sanskrit Manuscripts (1895-1900)*, Calcutta 1901.
- Sāstri, Rep. (1901-1906): MM. H. Shāstri, *Report on the Search for Sanskrit Manuscripts (1901-1902 to 1905-1906)*, Calcutta 1905.
- Sāstri, Rep. (1893-94): M. Seshagiri Sāstri, *Report on a Search for Sanskrit and Tamil Manuscripts for the Year 1893-94*, Madras 1899.
- Sāstri, Rep. (1896-97): M. Seshagiri Sāstri, *Report on a Search for Sanskrit and Tamil Manuscripts for the Year 1896-97*, Madras 1898.
- SATIUS: D. Pingree, *Sanskrit Astronomical Tables in the United States*, TAPS, NS 58, 3, Philadelphia 1968.
- Scotland: List by V. Raghavan of MSS. in the National Library of Scotland.
- SOAS: *School of Oriental and African Studies, University of London: Library Catalogue*, vol. 22, Boston 1963.
- SOL: *Catalogue of Sanskrit manuscripts in the Scindia Oriental Institute, Ujjain*, Typed. Partly covered by: *Catalogue of Oriental Manuscripts . . . Ujjain*, Gwalior 1936 (Cat I) and *Catalogue of Manuscripts Preserved in the Oriental Manuscripts Library, Ujjain*, pt. II, Gwalior 1941 (Cat II). Handwritten list of Subsequent Major Additions in the files of V. Raghavan (List).
- Stockholm: List by V. Raghavan of MSS. in the State Ethnography Museum, Stockholm.
- SVOI: "List of Rare Manuscripts in Sri Venkateswara Oriental Institute, Tirupati," *JVOI* 2, 1941, 155-170 (jyotiṣam on p. 158).
- Tanjore: P. P. S. Sāstri, *A Descriptive Catalogue of the Sanskrit Manuscripts in the Tanjore Mahārāja Serfoji's Sarasvatī Mahāl Library Tanjore*, vol. 16 (Nāṭya, Saṅgīta, Kāmaśāstra, Vaidya and Jyotiṣa), Srirangam 1933.
- Tanjore BL: A. C. Burnell, *A Classified Index to the Sanskrit MSS. in the Palace at Tanjore*, London 1880.
- Tibet: R. Śhākrītyāyana, "Sanskrit Palm-leaf MSS. in Tibet," *JBORS* 21, 1935, 21-43; 23, 1937, 1-57; and 24, 1938, 137-163.
- Tokyo: Don M. de Z. Wickremasinghe, "Catalogue of the late Professor Fr. Max Müller's Sanskrit Manuscripts," *JRAS*, 1902, 611-651 (these were purchased by the University of Tokyo).
- Tokyo U: S. Matsumi, *A Catalogue of the Sanskrit Manuscripts in the Tokyo University Library*, Tokyo 1965.
- Trichinopoly Krishna Iyer: C. Kunhan Raja, "A List of Manuscripts," *Brahmavidyā* 6, 1942, 178-215.
- Trivandrum Pub.: List of MSS. in Trivandrum Public Library in poss. of V. Raghavan. Typed.
- Tübingen: R. Roth, *Verzeichniss indischer Handschriften der Königlichen Universitäts-Bibliothek*, Tübingen 1865.
- Tübingen: R. Garbe, *Verzeichniss der indischen Handschriften der Königlichen Universitäts-Bibliothek (Zuwachs der Jahre 1865-1899)*, Tübingen 1899.
- Turfan: E. Waldschmidt, W. Clawiter, L. Holzmann, *Sanskrit-Handschriften aus den Turfanjunden*, Teil 1, *Verzeichnis der orientalischen Handschriften in Deutschland* 10, 1, Wiesbaden 1965.
- Udaipur (1883): Extracts from Manuscripts Belonging to H. H. the Mahārāja of Oodeypore, in BORI A 1882/83, pp. 73-111.
- Udaipur: M. L. Menaria, *A Catalogue of Manuscripts in the Library of H. H. the Mahārāja of Udaipur (Mewar)*, [Udaipur] 1943.
- Uppsala: List by V. Raghavan of MSS. in University of Uppsala.
- Utrecht: *Catalogus Codicum Manu Scriptorum Bibliothecae Universitatis Rheno-Trajectinae*, Utrecht 1887, p. 347.
- Vaṅgiya Sahitya Parishat: C. Chakravarti, *A Descriptive Catalogue of the Sanskrit Manuscripts in the Vaṅgiya Sahitya Parishat, Sahitya Parishat Series 85*, Calcutta 1935.
- Velankar: H. D. Velankar, *Jinaratnakola, GOS (Bombay) C 4*, Poona 1944.
- VVRI: V. Bandhu, *Catalogue of VVRI. Manuscript Collection*, VIS 10, Hoshiarpur 1959.
- Waray: G. S. Waray, "Waray Collection—Part I," *PO* 24, 1959, 6-22.
- Weber: A. F. R. Hoernle, "The Weber MSS.—Another collection of ancient manuscripts from Central Asia," *JAS Bengal* 62, 1, 1893, 1-40.
- Weber (A): *Katalogue der Bibliothek des verstorbenen Professors des Sanskrit an der Universität zu Berlin Dr. Albrecht Weber*, Gütersloh [1902], pp. 115-117.
- Wien: List by V. Raghavan of MSS. in the Nationalbibliothek, Wien.
- Wien (Univ.): List by V. Raghavan of MSS. in the Universitätsbibliothek, Wien.
- WHMRL: *Catalogue by V. Raghavan of Sanskrit manuscripts in the Wellcome Historical Medical Research Library*, London. Typed.
- Wright: D. Wright, ed., *History of Nepal. Translated from Parbatīya by Munshi Shew Shunker Singh and Pandit Sri Gunanand*, Cambridge 1877, repr. Calcutta 1958, pp. 201-208 (bought by Wright in Nepal; now in University Library, Cambridge).
- Zürich: List by V. Raghavan of MSS. in Ethnography Museum of the University, Zürich.

CENSUS OF THE EXACT SCIENCES IN SANSKRIT



**AKALAṆKA** (fl. seventh, eighth, or ninth century)

A Digambara Jain from Sravaṇa Belgōja under the Rāṣṭrakūṭas, Akalaṅka was primarily a logician. A summary of the various views which have been put forth concerning his parentage and date can be found in NCC, vol. 1, pp. 2-3. Among his works is a commentary (*Tattvārthavārtikālaṅkāra* or *Rājāvārtika*) on the *Tattvārthadhigamasūtra* of Umāsvāti (fl. first century A.D.). For manuscripts and editions, see Velankar p. 156 and NCC, vol. 1, p. 4.

**AKETASIMHA** (ca. 1250?)

An astrologer quoted in the *Jyotiṣatattvakaumudī*, a work written by the son of Śrinivāsa Miśra—perhaps the Śrinivāsa who flourished in Mysore in the second half of the thirteenth century. Aketasimha's name occurs at the end of a list which includes Śrīpati (fl. ca. 1040), Bhāskara (b. 1114), and Śrinivāsa himself.

**AGASTYA**

A work on divination from birds, *Pañcapakṣīsūtra*, is ascribed to Agastya. The manuscripts are:

Tanjore D 11489 (BL 11041). 8ff. Telugu.  
Tanjore D 11490 (BL 11042). 6ff. Telugu.  
Tanjore D 11491 (BL 12143 c). Grantha. Incomplete.  
Tanjore D 11492 (BL 11043). 9ff. Telugu. Incomplete.

It was edited as the *Pañcapakṣīprasa* by Śivarāma Pati, Cuttack 1906, with an Oriyā translation (BM 14053.b.39.[2.]). The *Pañcapakṣī* with bhāṣāṭīkā was also published at Bombay; there are two copies—B 1710 and B 1738—in the Mysore GOL. There exist Tamil versions (NCC, vol. 1, p. 17).

Another astrological text ascribed to Agastya is one of the many works bearing the title *Agastyasamhitā*; the manuscripts are:

Goṇḍal 1. 2ff. Sam. 1910 = A.D. 1855. Incomplete.  
Rādh 33. (See CC, vol. 1, p. 2).

The colophon at the first section of the *Varṣaphaṇī* in GOML Madras D 13491 reads: ity agastyasamhitāyāṃ pariveśakramāḥ. And an *Agastyapaṭala* is quoted in the *Kautukacintāmaṇī* of Rāma, as is Agastya by Śivarāja (fl. 1400-1480) in his *Jyotirribandha*.

**AGNIKĒSA** (= **AGNIVESA**?) (before ca. 750)

This author is quoted by Kalyāṇavarman (*Sārāvālī* 54, 11-12). He should be dated then before ca. 750 A.D. If the reading Agniveśa is correct, then he is the famous pupil of Ātreya and authority in Āyurveda.

**ĀNGIRAS** (see Bṛhaspati).

One of the traditional eighteen founders of jyotiṣśāstra, Āngiras is mentioned by Nārada (*Nāradasamhitā* 1, 2); see also *Kaśyapa* and *Parāśara* in S. Dvivedin [1892] 1. And he is used by Śivarāja in his *Jyotirribandha*. Therefore, a work ascribed to him must have existed by the fourteenth century or somewhat earlier. But the school of Āngiras was already

familiar to Rṣiputra. The *Āngirāsiddhānta* in Kavindrācārya 871 is probably fictitious. There is also a *Bṛhaspatyasamhitā* ascribed to Āngiras (Bṛhaspati, of course, is the son of Āngiras). Manuscripts:

Śrīgeri Maṭha 206 (a) (see NCC, vol. 2, p. 20).

And it is possible that Ibn al-Nadīm's A.n.k.w. (*Fihrist*, p. 271 Flügel) should be read A.n.k.r., representing Āngirāḥ or Āngirāḥ.

**ACALA MISRA** (fl. ca. 1790?)

Two works are ascribed to Acala: an *Acalasiddhāntasāṅgraha* in

Oudh IX (1877) VIII 1, 82 pp. Copied in A.D. 1796. Property of Sahatāvan Lāla of Sitāpur Zila,

and a *Jyotirvi(da?) śrīgūra* (= *Jyotirvicchṛṅgūra*?) in

PL, Buhler IV E 140. Property of Trībhuvaṇa Lālaḥ of Vaḍhavāṇa.

**ACYUTA** (before ca. 1650?)

A Kerala Brāhmaṇa of unknown date who authored a vast compilation known as the *Devakerala*; alternate titles are *Keralanāḍī*, *Candrakalanāḍī*, and *Candranāḍī*. The work is supposed to be based on one by Bhārgava. The following manuscripts are known:

GOML Madras R 853 (a). Ff. 3-81. Copied Monday 6 Āśvina Śaka 1812 = ca. 20 October 1890. Telugu. Purchased in 1913/14 from E. R. Kṛṣṇamācārya of Kalyāṇapuram, who obtained it from Daśaratharāma Sāstrin of Mylapore. (*Devakerala*)

GOML Madras R 3322. Ff. 1-154v. Copied in 1920/21 from a manuscript belonging to S. Ayyāśāstrigal, Nallapalli, Chennamangalam, Cochin. Grantha. Incomplete. (*Candranāḍī*)

Adyar (2 MSS.) = Adyar Index 2839 =

a) Adyar Cat 8 J 17. 267ff. Karṇāṭaki. Incomplete. (*Devakerala*)

b) Adyar Cat 22 K 1. 822ff. Grantha. Incomplete. (ends with Kamalāṃśavṛṣabbhalagna) (*Devakerala*)

Adyar = Adyar Index 1516 = Adyar Cat. 8 J 21. 291ff. Telugu. Incomplete (ends with Kāntāṃśavṛṣcikalagna) (*Keralanāḍī*)

GOML Madras D 13775. 195 pp. Telugu. Incomplete. (*Devakerala*)

GOML Madras D 13776. 335 pp. Telugu. Incomplete (continues GOML Madras D 13775). (*Devakerala*)

GOML Madras D 13777. 19 pp. Telugu. Incomplete (first Khaṇḍa only). (*Devakerala*)

GOML Madras D 13778. 78 pp. Telugu. Incomplete. (*Devakerala*)

GOML Madras D 13779. 60 pp. Telugu. Incomplete. (*Devakerala*)

GOML Madras. R 4056. Ff. 8-133. Grantha and Tamil. Incomplete. Presented in 1921/22 by Veṅkudikṣitar

Avarṅa] of Naṅgavaram, Kulittalai taluk, Madura. (*Devakerala*)

Kerala 7574 (= 2470). 3000 granthas. Telugu. Incomplete. (*Devakerala*)

Kerala 7575 (= 2483 A). 1400 granthas. Telugu. Incomplete. (*Devakerala*)

Mysore (1922) B 59. 163ff. (*Devakerala*)

Mysore (1922) B 60. 248ff. (*Candranāḍi*)

Mysore (1922) B 61. 246ff. (*Candranāḍi*)

Mysore (1922) B 62-63. 258ff. (*Devakerala*)

Oppert I 1229. Property of Vaṅkipuram Śrinivāsācāryār of Tiruvallūr, Chingleput, Madras (*Candranāḍi*)

Oppert I 3558. 200 pp. Property of Narasiṅhapuram Rāghavācāryār of Kumbhaghonaṃ, Tanjore (*Candranāḍi*)

Oppert II 5189. Property of Piccudikṣitar of Akhilāṅdapuram, Tanjore (*Candranāḍi*)

PUL II 3560. 50ff. Grantha. Incomplete. (*Devakerala*)

The *Devakerala* has been edited in two volumes by T. S. Ranganatha Josyar, *Madras GOS* 93, 140, 153, Madras 1952-56. The first volume contains the text according to GOML Madras R 853 (a) collated with R 4056; the second volume, issued in two parts, contains that according to GOML Madras D 13775 and D 13776. The first volume definitely ascribes the work to Acyuta. The first verses are:

vāsudevaṃ paraṃ brahma nārūyaṇaṃ anāmayam/  
lakṣmināthaṃ namaskṛtya vakṣye 'haṃ devakeralam//  
kerala viṣaye kaścid acyuto nāma bhūsurah/  
brhaspatiṃ samuddiṣya saṃcakre tapa uttamam//

And the last is:

deśe 'nekasurālayaiḥ parivṛte vidvadbhir āsevite  
jātaḥ keralake ca tatra tapasā saṃpūjya śaktiṃ parāṃ/  
cakre candrakaleti viśrutam idaṃ tv aṃśair namāyair  
yutaṃ  
śrīmān acyutasaṃjñīto dvijavaro jyotirvidāṃ prītaḥ//

The second volume, however, is ascribed to one Veṅkaṭeśa by the opening verse:

abhivandya mataṅgākhyam śrīmadveṅkaṭanāyakaṃ/  
kāśyapo veṅkaṭeśo 'haṃ phalaṃ vakṣyāmi bhūbhū-  
jām//

This makes one suspect that, despite the number of manuscripts and the edition which call the second volume the work of Acyuta, it is in fact a continuation by another hand (Veṅkaṭeśa's) of Acyuta's *Devakerala*. This Veṅkaṭeśa is perhaps Veṅkaṭeśa Bhūgola (q.v.), who belonged to the Kāśyapagotra; he flourished in the middle of the seventeenth century.

**ACYUTA** (fl. 1505/1534)

Acyuta of the Gautamagotra, known as Bhaṭṭa and Mihirācārya, was the son of Sāgara or Sāgaracandra (not the commentator on Naracandra), and the grandson of Vāmana. The location of his manuscripts indi-

cates that he was a Bengālī. He is the author of two works:

1. *Bhūsvatīratnadīpikā* = *Bhūsvatīratnamūlā* = *Bhūsvatīkārtharatnamūlā*. A commentary on the *Bhūsvatī* of Satānanda (fl. 1099).

Manuscripts:

IO 2918 (234 b). 43ff. Bengālī. From H. T. Colebrooke. Śūcīpatra 18. (*Ratnamūlā*) (See CC, vol. 1, p. 5, and vol. 2, p. 1)

The second verse is:

vedāntāgamakāvyaśāstranigamavyākhyānadikṣāguru-  
jyotiḥśāstravikāśanaikamihiro 'bhūt sāgarākhyo dvijaḥ/  
śīsyaprārthanayā tadyatanayaḥ saṃvikṣya horārthakaṃ  
tene bhūsvatīkārtharatnaracitāṃ mālāṃ hi bhaṭṭācyu-  
taḥ//

The last is:

śrīmatprabhupravararāghavapādāyugma-  
padmapajivanaparotsukabhṛṅgarūpi/  
śrībhūsvatīgāṇaśāstrasubodhaṭikāṃ  
abhyākarot kavivaro 'cyutabhaṭṭasimhaḥ//

The text contains computations for Śaka 1427 and 1456 (= A.D. 1505/06 and 1534/35).

2. *Bhūvārthamañjarī*. A commentary on the *Jātaka-paddhati* of Śrīpati (fl. 1040). Manuscripts:

Sāstri, Not. (1907) 101. 44 ff. Written in Śaka 1571 = A.D. 1649/50.

AS Bengal 7511 (G 3950). 63ff. Bengālī. Incomplete.

The second to fourth verses are:

śrīmadvāmanabhaṭṭaśekharamaṇeḥ satkarmavārām  
nidheḥ  
sūnuḥ sāgaracandramāḥ samajani prakhyātakīrticcha-  
taḥ//

no doṣākaratām upaiti na jaḍo nāñke vyaṃ lakṣyate  
pūrṇaś cārukālābhīra atra kamalāsnehaṃ dadhan nā-  
bhutam//

vyākhyātā kāvyasindhor adhīnavakavitāpadminināṃ  
vikāśe

bhūsvān uccair nabhasvān bhānabhau (?) prakṛtānāṃ  
kṛtānām/

nyāye vyāsakṛtau kṛti kṛtadhīyām uccair vidhāne vidhir  
bhaktaḥ śrīraḅhunāthapādāyugale śrīsāgarah saddvi-  
jah//

bhāvābhāvavicārajātakavīhītena X X X tatsūnur  
jñāni śrīpatiṭikāṃ kurute bhaṭṭācyutaḥ śrīmān/  
śrīpativākyataror acyutavīhītilāṅkṛtā navināpi  
bhāvārthamañjarīyaṃ dayitā bhāvārthavido bhavitā//

The colophon to the sixth adhyāya reads:

itthaṃ gautamagotraṇa śrīyutācyutaśarmaṇā  
kṛtaṃ śrīpatipaddhatyaṃ saṣṭhādhyāyābhivarṇanam

**ACYUTA PIṢĀRAṬI** (ca. 1550-7 July 1621)

Acyuta, born at Kuṅḍapura (Trkkaṅṅiyūr) in Kerala, was a member of the Piṣāraṭi community, a section of



the Ampalavasi community which is traditionally employed in looking after the external affairs of temples. He studied astronomy under Jyēsthadeva (*q.v.*); his patron was Ravivarman, King of Prakāśa (Veṭṭattunād) (1595-1607). He was a scholar in grammar (his famous pupil, Nārāyaṇa Bhaṭṭatīri [1560-ca. 1646], refers to him in his *Prakriyāsarvasva*), poetics, and medicine as well as in astronomy and astrology.

Acyuta is referred to by Vāsudeva (ca. 1600) in his *Bhṛṅgasandeha*:

tasmāt pratyakprahitanayanāḥ kuṇḍagehādhivisaṃ  
sarvajñaṃ taṃ praṇama girīṣaṃ bhaktimān acyutaṃ  
ca/  
ekas tāvad vahati śīrasi jyotiṣāṃ ekam indum  
jyotiśakraṃ nikhilam aparo dhārayaty antaraṅge//

An obituary verse was written by Nārāyaṇa Bhaṭṭatīri:

bhṛtār jyotiṣatantra paryavasitā tithyarkṣayos te  
kathā  
dhārṣṭyaikapraṇāṣi vaidyasarāṇe naṣṭo 'sy alaṅkāra  
bho/  
he śabdāgama nirdayaṃ vibudhatālubdhair nipīḍiyase  
vidyātma svarasarpad atra bhavatām ādhārabbhūr  
acyutaḥ//

And an old Granthavari in a manuscript at Baroda has (K. V. Sarma [1958] 38): jyēsthadevanṅe śīṣyaṃ  
ṛkkaṅṅiyūru acyutapīṣārāṭi/iddehaṃ sphuṭanīrṇayaṃ  
goladīpikā mutalāya grantha <ñāṅku> kartāvā-  
kunu/ See S. V. Iyer [1952/53]; K. K. Raja  
[1958] 122-125; and K. K. Raja [1963] 158-162.

Acyuta's jyotiṣa works include the following:

1. *Karaṇottama*. A work on astronomy in 5 chapters and about 100 verses written before 1596; it deals with the computation of the mean and true longitudes of the planets, with eclipses, and with the vyatipātas of the sun and moon. The manuscripts are:

Kerala 3054 (660 C). 150 granthas. Copied by Suṣṭhu Keralāśarman, son of Nārāyaṇa, in A.D. 1596. Malayālam.

Baroda 10884 (h). 7ff. Malayālam.

GOML Madras R 663 (a). Ff. 1-16. Purchased in 1912/13 through Śeṣāyī Ayyaṅgar of Kottaiyur, near Kumbakonam. Grantha. Incomplete. With vivaraṇa.

GOML Madras R 663 (b). Ff. 16v-19v.

Kerala 3055 (1165 B). 150 granthas. Malayālam.

Kerala 3056 (L. 848 C). 150 granthas. Malayālam.

Kerala 3057 (L. 848 D). 550 granthas. Malayālam.

With vivaraṇa.

Kerala 3058 (C. 809 B). 550 granthas. Malayālam.

With vivaraṇa.

Kerala 3059 (C. 964 D). 550 granthas. Malayālam.

With vivaraṇa.

Kerala 3060 (T. 552). 550 granthas. With vivaraṇa.

Probably a copy of Kerala 3058.

Trippunithura 1, 1047. (see NCC, vol. 1, p. 58).

This work was edited with Acyuta's vivaraṇa by K. Raghavan Pillai in TSS 213, Trivandrum 1964. It begins:

gurūṇām caraṇāmbhojaparāgaparamāṇavah/  
manomukuram asmākaṃ puniyuranuvāsaram//  
praṇipatyā paraṃ jyotiṅgaṇapatyaparābbhidham/  
guruṅoktam avismartuṃ karaṇottamayūmy aham//

The manuscripts used are: Kerala 3055, 3057, 3058, 3059, and 3060.

2. *Karaṇottamavivaraṇa*. A commentary on his own *Karaṇottama*. Manuscripts:

GOML Madras R 663 (a). Ff. 1-16.

Kerala 3057-3060.

This work was edited with the *Karaṇottama*. The last verse is:

vaiṣṇavenācyutākhyena praṇītaṃ vivṛtaṃ kṛtam/  
karaṇottamam ālokyā paritūṣyantu sūrayaḥ

3. *Uparāgakriyākrama*. A treatise in four chapters on lunar and solar eclipses. Completed in 1593. There exists a commentary on it in Malayālam. Manuscripts:

GOML Madras Malayālam 216. 47 pp. With Kerala-  
bhāṣā.

Kerala 2515 (404 A). 150 granthas. Malayālam.

Kerala 2516 (CM. 531 A). 150 granthas. Malayālam.

Kerala 2524 (404 B). 600 granthas. Malayālam. With  
Keralabhāṣā.

Kerala 2525 (CM. 173 G). 600 granthas. Malayālam.

With Keralabhāṣā.

Kerala 2526 (CM. 531 B). 600 granthas. Malayālam.

With Keralabhāṣā.

Kerala 2527 (CM. 628 B). 600 granthas. Malayālam.

With Keralabhāṣā.

Kerala 2528 (CM. 541 C). 450 granthas. Malayālam.

With Keralabhāṣā.

The first verse is:

mārtāṅḍākhyam paraṃ jyotiṅ natvāsmābhīr vilikhyate/  
hitīya mandabuddhīnām uparāgakriyākramah//

The last is:

proktaḥ pravayaso dhyānāt jyēsthadevasya sadguroḥ/  
vicyutāśayadoṣeṇety acyutena kriyākramah//

4. *Sphuṭanīrṇaya*. A work in 6 chapters on the number of the constellations, mean and true positions of the planets, and the celestial sphere. Acyuta wrote this work under Ravivarman, and quotes from it in *Rāśīgolasphuṭanīti* 47-48. There exists an anonymous vivṛti. Manuscripts:

GOML Madras R 3799 (b). Ff. 13-29v. Copied in  
1921/22 from a manuscript of Ittīri Vāriyar,

Karakkāṭṭu-Vāriyam, Karakkāṭṭudeśam, Kavalappara  
post, Shoranore. With vivṛti.

Kerala—(L. 848 B)

Kerala—(C. 946 B)  
Kerala—(C. 809 C)  
Kerala—(C. 1945 B).

The text begins:

brahmāṇaṃ mihiraṃ vaśiṣṭhapuṭīṣau gargaṃ munin  
lomaśaṃ  
śrīpatyāryabhaṭṭau varāhamihiraṃ lallaṃ ca muñjāla-  
kaṃ/  
govindaṃ parameśvaraṃ satanayaṃ śrīnilakaṇṭhaṃ  
gurūn  
vande golavidaś ca mādhamukhān vālmikimukhyān  
kavin//

The six chapters are:

1. bhasaṅkhyākathana
2. madhyamāyana
3. mandasphuṭāyana
4. bhāgolasphuṭāyana
5. bhūgolasphuṭāyana
6. bhūgolasphuṭāyana.

5. *Chūyūṣṭaka*. A short text in 8 verses (on eclipses?).  
Manuscripts:

Kerala—(4116 A).

The colophon reads: acyuta piśāraṭi uṅṭākkiya  
chāyūṣṭakam.

6. *Uparūgavimśati*. This work in 20 verses on  
eclipses was probably written by Acyuta. Manuscripts:  
Trippunithura Palace Library 1075. With Keralabhūṣā.  
It was published in *RSS* 2, 1954, with the Malayālam  
commentary.

7. *Rāsīgolasphuṭānti*. A work in 50 verses on the  
reduction of the Moon's longitude in its own orbit to  
ecliptic longitude. In it Acyuta quotes his own  
*Sphuṭāntirāya* (47-48) and *Uparūgakriyākrama* (49);  
the latter reference indicates that the *Rāsīgolasphu-  
ṭānti* was written after 1593. Manuscripts:

GOML Madras Malayālam D 339. Pp. 90-95.

The text was edited and translated from this manuscript  
by K. V. Sarma [1955]. The concluding verse reads:

rāsīgolasphuṭāntir acyutenaivam iritā/  
krāntivṛttagatīś caivam āneyā golavittamañ//

8. *Venūrohavyākhyā*. A Malayālam commentary on  
the *Venūroha* of Mādha of Saṅgamagrāma (ca.  
1340-1425), written at the request of Netranārāyaṇa, a  
spiritual head of the Nampūtiri Brāhmaṇas. Edited by  
K. V. Sarma, *RSS* 3, Trippunithura 1956.

9. *Horāsāroccaya*. An adaptation in 7 chapters of  
Śrīpati's *Jātaka-paddhati*. The relationship of it to a  
Malayālam commentary on the *Jātaka-paddhati* entitled  
*Horāntantram Paribhāṣa* remains uncertain. There is an  
anonymous Malayālam commentary on the *Horāsāro-  
ccaya* in Kerala—(8327 C). Manuscripts:

Kerala—(8327 B).

The opening verse is:

bhaktiā gurūṇaṃ caraṇāravindaṃ natvācyuto daivavi-  
dāṃ hitāya/  
sāroccayaṃ śrīpatinirmitasya horārthantrasya vadāmy  
āśeṣam//

The chapters are:

1. bhāvanāyana.
2. dr̥ṣṭisādhanā
3. dikkālādibalajñāna
4. iṣṭakaṣṭaphalajñāna
5. āyurdāya
6. ariṣṭaphala
7. daśānirūpaṇa

*ACYUTA* (fl. ca. 1800)

One of the 18 collaborators in writing the *Navagra-  
hapadākaṇi* (a set of astronomical tables) for Śarabhoji  
II, Rājā of Tanjore from 1798 to 1833; the others  
were: Ananta, Kṛṣṇa, Govinda, Tryambaka, Mṛtyuñ-  
jaya, Rāmacandra, Vāsudeva, Veṅkaṭa, Veṅkaṭanātha  
of Kamsapura, Veṅkaṭanātha of Tañjapura, Veṅkaṭa-  
nātha of Vallā, Veṅkaṭarāma, Saṅkara, Śeṣa, Śeṣa  
Ṭoṇapa, Saptarṣi Śāstrin, and Subrahmaṇya. The unique  
manuscript bears the following numbers:

- Tanjore D 11705 (BL 15703). 12ff. (Gurumanda).  
Tanjore D 11706 (BL 15704). (Ravi).  
Tanjore D 11707 (BL 15705). (Ravi and Candra).  
Tanjore D 11708 (BL 15706). (Candra).  
Tanjore D 11709 (BL 15707). (Candravikṣepa).  
Tanjore D 11710 (BL 15708). (Kujādi).  
Tanjore D 11711 (BL 15709). (Kuja<manda>śighre).  
Tanjore D 11712 (BL 15710). (Budha<manda>-  
śighre).  
Tanjore D 11713 (BL 15711). (Guruśighre).  
Tanjore D 11714 (BL 15712). (Gurumanda).  
Tanjore D 11715 (BL 15713). (Śukra<manda>-  
śighre).  
Tanjore D 11716 (BL 15714). (Śani<manda>śighre).  
Tanjore D 11717 (BL 15715). (Saṅkramapadaka).

The concluding verses of Tanjore D 11705 read:

iyotirvit kṛṣṇanāmā narapatihitakṛt kiṃ ca saptarṣiśāstri  
kālañño veṅkaṭākhya gaṇitabhumato vāsudevo 'py  
anantaḥ/  
subrahmaṇyaś ca mṛtyuñjayaganakavaraḥ saṅkaro rāma-  
candraḥ  
śeṣo govindanāmā tad anu gaṇitavit ṭoṇapaḥ śeṣanāmā//  
veṅkaṭanāthaḥ kamsapurastho vallastho 'nyas tañjapu-  
rasthaḥ/  
veṅkaṭarāmo jyautiṣiko 'nyo 'py acyutanāmā tryambaka-  
saṅjñāḥ//  
etair vibudhair aṣṭādaśabhiḥ śāstroktam ekavākyatayā/  
amaragurupadākam etac charabhamahinetur āññayā  
kṛtam//

**ACYUTĀNANDA JHĀ** (fl. 1939)

Author of a *Calanakulanaprasānottaravivarāṇa* (ed. HSS 94, Benares 1939) and editor of many astrological texts (see the index volume).

**ACYUTĀNANDA SARMA**

The (Bengali?) author of a *Jātakaumudī* (= *Jātaka-kaumudī?*). Manuscripts:

Benares (1906) 1557. 30ff. = Benares (1965) 35502. 30ff. Bengali. Incomplete.

**AJITADEVA SŪRI** (fl. 1570/1641)

A Jaina author, pupil of Maheśvara Sūri (fl. 1516) and member of the Pallivālagaccha and the Mārtaṇḍa-prakāśakagaccha. Ajitadeva Sūri wrote a *Pinḍaviśuddhīdīpikā* in 1570 and a *Paryūṣaṇkalpaṭīkā* in 1641. His jyotiṣa work is the *Lokasāraṇtra*, composed in Prākṛit. Manuscripts:

AS Bombay 260. F. 231 (one folio only). Incomplete. From Bhāu Dāji.

The verses on f. 231 are numbered 28-46. The colophon reads: iti śrīpallivālagacchamārtaṇḍaparakāśakagacchām-bhojadinamañinām śrīmaheśvarasūriśiromañinām paḍe śrīajitadevasūriviracitaṃ lokasāraṇtraṃ samāptam.

**AJERĀJA (= AJAYARĀJA)**

Author of a *Sānudrikabhāṣācaupai* or *Sānudrika-śāstrabhāṣāsakavitā* in Hindī. Manuscripts:

LDI (MPC) P/2014. 10ff. Copied in Sam. 1860 = A.D. 1805. (*Sānudrikasāstrabhāṣāsakavitā*).

LDI (MPC) P/8389. 16ff. (*Sānudrikabhāṣācaupai*).

**ANAYĀCĀRYA**

Author of a Telugu commentary on the *Muhūrtadarpaṇa* of Vidyāmādhava (fl. ca. 1350). This has been twice published: [Madras?] 1872, and Madras 1878.

**ANNĀV AIYAṄĠĀR** (fl. 1833/74)

Of the Ātreya-gotra, Annāv Aiyāṅḡār was the son of Appannārya and came from Kāmsapura (Kañjanūru) near Tanjore; he prepared a pañcāṅga every year for Śivāji, the Rājā of Tanjore from 1833 to 1855. The existing pañcāṅgas, though at least the first is said to have been computed (by means of the vākyas) by order of Śiva son of Śarabha and king of Tañjānagarī, all postdate Śivāji's death.

1. *Kālayuktīpañcāṅga*. For the Kāliyuktīvarṣa Śaka 1780 (= A.D. 1858/59). Manuscripts:

GOML Madras D 13442. 56 pp. Grantha.

GOML Madras D 13443. 61 pp. Grantha and Tamil. Incomplete.

The second and third verses are:

śrīmattāñjānagaryāṃ viracitavīrteḥ śāsataś colasīmām tattādr̥gbhoṣalīyānvayajaladhividoḥ kelidhāmno guṇ-ānām/

śakrasribhūrisampaccharabhasutaśivakṣmāpater ājñayedaṃ  
pañcāṅgam niśkalaṅkaṃ jagati vijayatām etad ā candra-  
tāram/

śrīmatkāmsapure vasan dvijavaras triskandhapāraṅgataḥ  
śrībodhāyanasūtravān vimaladhīrātreyagotrodhbhavaḥ/  
appannāryasutas trikūlamatimān aṅṅāv ayaṅḡār idaṃ  
pañcāṅgam prativatsaram vitanute vākyaparakreṇa  
sah/

2. *Akṣayapañcāṅga*. For 1866/67. Manuscripts:

Adyar List = Adyar Cat. 22 A 3. 84ff. Grantha.

3. *Pramodūtapañcāṅga*. For 1870/71. Manuscripts:

Adyar List = Adyar Cat. 28 I 53. 70ff. Grantha.

4. *Āṅgirasapañcāṅga*. For 1872/73. Manuscripts:

Adyar List = Adyar Cat. 28 I 53. 80ff. Grantha.

5. *Śrīmukhapañcāṅga*. For 1873/74. Manuscripts:

Adyar List = Adyar Cat. 28 I 53. 64ff. Grantha.

**ANNAIYĀ**

Author of a commentary in Karṇāṭakī on the *Muhūrtacintāmaṇi* of Rāma (fl. 1600). Manuscripts:

BORI 255 of Vishrambag 1. 187ff. Copied in Śaka 1739 = A.D. 1817.

**'AṬA' ALLĀH RUSHDĪ IBN AHMAD I NĀDIR** (fl. 1634/35)

The son of Ahmad i mi'mār i Lāhawri and elder brother of Luṭf Allāh and Nūr Allāh. 'Aṭa' Allāh made a Persian translation of the *Bījaganīta* of Bhāskara (b. 1114), entitled *Bīj ganit* or *Tarjamaḥ i Bīj ganit*, which he dedicated to the emperor Shāh Jahān (1628-1659) in A.H. 1044 = A.D. 1634/35. He also wrote a *Khulūṣah i rūz* on arithmetic, algebra, and mensuration. For the manuscripts of the *Tarjamaḥ i Bīj ganit* see C. A. Storey, *Persian Literature*, vol. 2, pt. 1, London 1958, p. 5; for those of the *Khulūṣah i rūz*, see *ibid.* pp. 15-16. An English translation of the *Tarjamaḥ i Bīj ganit* by E. Strachey with notes by S. Davis was published in London, 1813.

**ATRI**

The ṛṣi Atri is associated with a solar eclipse in *R̥gveda* 5.40; see also *Kauṣītakībrāhmaṇa* 24.3.4. Various problems connected with this eclipse are discussed by A. Ludwig [1885]; A. Bergaigne [1885]; W. D. Whitney [1885]; C. R. Lanman [1893]; F. K. Ginzel [1894]; A. Ludwig [1894]; S. B. Dikshit [1896] 62-63; P. C. Sengupta [1941a]; L. V. Gurjar [1947] 151; and V. G. Rahurkar [1957]. He is traditionally regarded as one of the eighteen founders of jyotiṣśāstra. One or several works ascribed to Atri existed by the sixth century, as he is quoted by Varāhamihira (*Brhatsamhitā* 46.1 and *Brhad'yogyayūtrā* 29.3); the former of these quotations makes him even

more ancient, as it states that he was used by Garga. See P. V. Kane [1948/49] 5. Many later authors quote from Atri; but the *Atrisiddhānta* mentioned in Kavindrācārya 857 is undoubtedly wishful thinking. There remains one work.

1. *Ātreyaśaṃhitā* or *Kālavijñāna* in 10 Khaṇḍas. Manuscripts:

VVRI 3805. 20ff. Malayālam.

PUL II App. p. 36 (see NCC, vol. 2, p. 67).

Ātreya is quoted in the *Kālaprakāśikā* of Nṛsiṃha.

#### ANANTA

The otherwise unknown author of a work entitled *Kālakṛtyaviveka*. Manuscripts:

SSP Calcutta III H 36 (see NCC, vol. 1, p. 122).

Jammu and Kashmir 2512. 33ff. Incomplete.

#### ANANTA

The otherwise unknown author of the *Savalārthavivāraṇā* preserved in a manuscript in the collection of the Indian Museum, Calcutta. Manuscript:

IM Calcutta 1182 (see NCC, vol. 1, p. 123).

#### ANANTA

Author of a *Siddhāntabodhayantra*. Manuscripts:

Benares (1963) 35086. 2ff. Copied in Śaka 1451 = A.D. 1529.

#### ANANTA GŪRJARA

Author of a *Bhūvanakośa*. Manuscripts:

BORI 712 of 1883/84. 11ff. From Mahārāṣṭra.

#### ANANTA PAṆḌITA

Author of a *Bhāvaphala*, which is perhaps part of the *Janipaddhati* of Ananta (fl. ca. 1575). Manuscripts:

CP, Kielhorn XXIII 100. 55ff. Śaka 1739 = A.D. 1817. Property of Lakṣmaṇa Śāstri of Sāgar.

#### ANANTA PADMANĀBHA

Author of a *Laghujyotiṣāraṇava*, published at Mysore in Karṇāṭakī script; a copy—B 3156—is at the Mysore GOL.

#### ANANTA BAKĀRISTA

Author of a *Nakṣatrasatrahautra*. Manuscript:

Munich 196 (Sanskrit 79 = Haug 98). 14ff.

The last verse is:

śrutisūtrānusāreṇa satrahautranirūpaṇam/  
akārittham anantena bakāristena tuṣyati//

Is he identical with Ananta (fl. ca. 1600)?

#### ANANTA (fl. 1525)

The son of Śrīkānta, Ananta wrote in Śaka 1447 (= A.D. 1525) a set of tables entitled *Anantasudhārasasāraṇī* based on the elements of the *Sūryasiddhānta*; its purpose was to facilitate the making of pañcāṅgas. See S. Dvivedin [1892] 63-64; S. B. Dikṣit [1896] 272-273. Commentaries were written on the *Anantasudhārasa* (= *Sudhārasa*) by Rāma (fl. ca. 1600) the son of Ballāla, by Dhunḍhirāja (fl. 1622), and by Śiva (before 1711); see also the anonymous *Anantasudhārasodāharaṇa* and *Grahaṇodaya*. Manuscripts:

Anup 4410. 6ff. Formerly owned by Maṇirāma Dikṣita. Benares (1878) 72 = Benares (1963) 35524. 17ff. Benares (1963) 35420. 13ff. Incomplete.

The opening verse of the *Anantasudhārasasāraṇī* is:

dhunḍhivināyākacaranadvandvaṃ mudam ādadhan nat-  
vā/  
sūkyānantarasākhyam tanute śrīkāntajo 'nantaḥ//

#### ANANTA (fl. 1534)

The son of Keśava (fl. 1496) of Nandigrāma in Gujarat, Ananta wrote a ṭīkā on the *Laghujātaka* of Varāhamihira in Śaka 1456 (= A.D. 1534). See S. B. Dikṣit [1896] 267. Manuscripts:

Bombay U. 487. 7ff.

He also wrote a *Kālanirṇayavodha*. Manuscripts:

Bikaner 856 = Anup 1698. 87ff. Copied in Śaka 1498 = A.D. 1576. Formerly owned by Gaṇeśa Paṇḍita.

The next to the last verse reads:

nandigrāmanivāsanaikagaṇavān śrīkeśavo daivavin  
nānāśāstravicāraṇe paṭumatih khyātah praśasty ādi-  
bhiḥ/  
tājjas taccaraṇaravindabhajane 'nantaḥ kaniyān imaṃ  
cakre kālavinirṇayaṃ sphuṭataraṃ granthaṃ mude  
tavidām//

Is his the *Kālanirṇaya* of Anantabhaṭṭa cited by Śaṅkaramāra (fl. 1540/1600) in his *Dvaitanirṇaya* (NCC, vol. 1, p. 135)? It is also unclear what relation either might have to the *Kālanirṇaya* which is a part of the *Vidhānapārijāta* of Anantabhaṭṭa and which appears separately in the following manuscript:

DC 305. ff. 1-112 and 114. From the Dikṣit (A) Collection.

#### ANANTA (fl. ca. 1575)

The son of Cintāmaṇi of the Gārgyagotra and father of Nilakaṇṭha (fl. 1587) and Rāma (fl. 1600/13), Ananta resided at Dharmapura on the Godāvāri in Vidarbha. He wrote a ṭīkā on the *Kāmadhenu* of Mahādeva (fl. 1357) according to the *Muhūrtacintāmaṇi* (15.9) of his son Rāma. The same source informs us that he authored a *Janipaddhati* (= *Jātakapaddhati*) apparently based on Śrīpati's (fl. 1040); cf. the

*Bhāvaphala* of Ananta Paṇḍita. See S. Dvivedin [1892] 64; S. B. Dikshit [1896] 274-275; and M. M. Patkar [1938] 164-165.

**ANANTA** (fl. ca. 1600)

Ananta, the son of Āpadeva, is apparently the grandson of the Mahārāṣṭrian saint Ekanātha (1528?-1600) and the grandfather of Anantadeva (fl. ca. 1675), the author of the *Smṛtikaustubha*. Ananta wrote a *Nakṣatrasattreṣṭiprayoga* or *Nakṣatresthinirūpaṇa*. Manuscripts:

BORI 415 of 1883/84. 8ff. From Mahārāṣṭra. Incomplete (Kṛtikeṣi only).

BORI 6 of A1883/84. 12ff. (Ananta Bhaṭṭa).

N-W P VII (1882) 41. 18ff. Property of Paṇḍita Vāsudeva Sāstri of Benares. (*Nakṣatrasattreṣṭiprayoga* of Anantadeva).

Is Ananta identical with Ananta Bakārīsta?

**ANANTA** (fl. ca. 1650?)

The son of Puruṣottama Bhaṭṭa, Ananta wrote a *Saṃhitādīpikā*; his father may be identical with the Puruṣottama who commented on the *Makaranda* in 1631. Manuscripts:

Alwar 1984.

CP, Hiralal 6109. Belonging to the Bhonsalā Rājās of Nāgpur.

CP, Kielhorn XXIII 172. 11ff. Belonging to Jānoji Mahārāja of Nāgpur (the same manuscript as CP, Hiralal 6109?).

**ANANTA** (fl. ca. 1800)

One of the eighteen collaborators in writing the *Navagrahapadakāni* for Śarabhoji II, Rājā of Tanjore (1798-1833); see Acyuta (fl. ca. 1800).

**ANANTAKUMĀRA BHATṬĀCĀRYA** (fl. 1927/29)

Author of a *Praśnakalpataru*, published with a Bengālī translation at Barisal in 1927 (NL Calcutta 180. Ke. 92. 21), and of a *Nimittaphalaviṣṭāna*, published with a Bengālī translation at Barisal in 1929 (NL Calcutta 180. Kd. 92. 8).

**ANANTADEVA** (fl. 1222)

The elder son of Gaṇapati of the Śāṅḍilyagotra, the son of Śrīpati, the younger brother of Bhāskara (b. 1114), Anantadeva was an astrologer at the court of Siṅghaṇa, the Yādava ruler of Devagiri beginning in 1209/10. In an inscription recording his establishment of a temple to Dvārājā at Bahā in Khāndeś on 1 Caitra Śaka 1144 (= 14 March 1222) he mentions his commentaries on the *Chandaścittiyuttarādhyāya*, the twentieth chapter of the *Brāhmasphuṣasiddhānta* of Brahmagupta (fl. 628/65), and on the *Bṛhajjātaka* of Varāhamihira (fl. ca. 550). See Kielhorn [1894/95] and S. B. Dikshit [1896] 254.

The relevant verses of the inscription are:

āsīd asīmamahānīyamahā maharṣiḥ  
 śāṅḍilya ity akhilabhūvalayāvataṃsaḥ/  
 yad dhomadhūmapaṭalena kalindakanyā-  
 sambhedakāntir abhavad divi devanadyāḥ//2//  
 ambhojabūr iva babhūva maheśvarākhyo  
 vaṃśe viśūlatapasāḥ prathitasya tasya/  
 jñāni manorathasutah śrūtisadma satya-  
 lokāśrayo vibudharījaśirodḥṛtāṅghriḥ//3//  
 yaḥ śekharākhyam karanam grahānām  
 praṣṭham praśiṭhāvīdīdīpakam ca/  
 cakre phalagratham api sphuṭārtham  
 laghum ca jikām laghujātakasya//4//  
 tasmād aśeṣanījavamśaviśeṣako 'bhūt  
 saujanyabhūh sakalasūdhudhuraḥ dadhānah/  
 vāṇvīlāsavasatīḥ śrutipārādṛṣvā  
 śrīśrīpatīḥ kṛtīnīṣevitapādapadmah//5//  
 tasyāganyaguṇāṅṅavo gaṇapatīḥ punyātmanām agrāṅḥ  
 sūnuh sūnṛtavākkavivrajavibhur vidyānidhir vidyate/  
 śiṣyājñānatamāmsi yasya nudato jātā jagadvyūpinī  
 kīrtiḥ kṛtsnakalākāpanīlayasyendoh prabhevojiva-  
 lā//6//  
 sadvidyadvijayvṛndavanditapadadvandvāt tato 'jyāta  
 jīyāyāḥkīrtir anantadeva itī yas triskandhaśāstrāśrayaḥ/  
 ramyaḥ brahmavinirmītam vyavṛṇṇta chandaścīter  
 uttaram  
 horām ca pravaram varāhamihirācāryapraṇītam pṛth-  
 um//7//

tasyaiva (i.e., śiṃhasya) daivajñānāṅṅraṇītvam rāj-  
 āḥ prapadyāmum anantadevaḥ/  
 akārayat sa trijagajjananyāḥ prāsādam āśūditatpra-  
 sādah//17//  
 sāhāyām arthena vidhāya dharme tasyānujanmecha  
 maheśvarākhyah/  
 imām prasannām anavadyapadyām vinirmame nirmala-  
 dhīḥ prasastim//18//  
 śeṣo yāvad vahati vasudhām eṣa śīrṣair aśeṣair  
 yāvad velāvalayam akhilam nābdhāyo laṅghayanti/  
 tāras tārapatir api raver maṅḍalam yāvad etat  
 tāvad devyā bhavatu bhavanam bhūṣaṇam bhūtalas-  
 ya//19//  
 ṣaṭkone sadalāsātādīhike sahasre  
 varṣāpām śakapṛthivīpatēḥ prayāte/  
 caitrādyapratīpadi citrabhānuvarṣe  
 prāsādo 'raci ruciro 'yam ambikāyah//20//

**ANANTADEVA** (fl. ca. 1675)

The son of Āpadeva, the son of Ananta (fl. ca. 1600), the son of Āpadeva, the son of the Mahārāṣṭrian saint Ekanātha (1528?-1600), Anantadeva wrote a vast compilation called the *Smṛtikaustubha*. Information about this work will be found in P. V. Kane [1930/62], vol. 1, pp. 447-453. It was written for Bāja Bahāduracandra, the Candra rājā of Almora and Nainital from 1638 to 1678. A section of the *Smṛtikaustubha* is the *Tithikaustubha*. See NCC, vol. 1, pp. 127-128. Manuscripts of the *Tithikaustubha* are:

DC 859. 44ff. Copied in Śaka 1686 = A.D. 1764. From the Dikṣit (A) Collection.

Oppert II 8031. Property of Raghubbhaṭṭa of Bhaṭṭaṅga-svāmīvaṭṭāra, Tanjore District.

The *Smṛtikaustubha* was published in Bombay 1909.

#### ANANTADHANA (fl. 1528)

Anantadhana, the son of Khaḍgadhana, wrote a Bengālī commentary entitled *Svarodayabhāṣāvīryūsa* on the *Svarodaya* which is cast in the form of a dialogue between Śvara (Śiva) and Pārvatī; one of his examples is for Śaka 1450 = A.D. 1528. Manuscripts:

IO Bengālī 1042. 44ff.

IO Bengālī 1510f. 23ff.

For both of these manuscripts see the end of the article on IO 3122.

#### ANANTANĀRĀYAṆA ŚĀSTRIN

Author of a Telugu paraphrase of the *Kālacakra*, published Madras, 1882.

#### ANANTABHAṬṬA (fl. 1625/31)

The son of Nāgadeva and Bhāgīrathī and a follower of the Kāyvasākhā of the Śuklayajurveda, Anantabhaṭṭa lived in Benares. Among his works is a *Grahaṣaṭṭādhāna*. See NCC, vol. 1, pp. 134-135, and CC, vol. 1, pp. 13-14.

#### ANANTABHAṬṬOPĀDHYĀYA (before 1384)

A son of Mahādeva, Anantabhaṭṭopādhyāya wrote a *Tithinirṇaya* before 1384; it was epitomized by Rāmacandra in ca. 1450. See NCC, vol. 1, p. 136. Manuscripts:

AS Bengal 2656. Copied in 1384.

PL, Bühler III E 119. 24ff. Copied in Sam. 1547 = A.D. 1490. Property of Maṅgalaśaṅkara of Ahmadābād.

(Mistakenly called a vyākhyā on the *Tithipradīpaka* of Bhaṭṭojī Dikṣita, who flourished about a century after the manuscript was copied.)

Jammu and Kashmir 2519. 95ff. Copied in Sam. 1574 = A.D. 1517.

Baroda 10611. 72ff. Copied in Sam. 1583 = A.D. 1526.

Anup 1702 = Bikaner 1027A. 54ff. Copied by Śaṅkara-bhaṭṭa Ākolakara in Śaka 1544 = A.D. 1622.

PL, Bühler III E 112. 57ff. Copied in Sam. 1704 = A.D. 1647. Property of Śrīdhara Bhaṭṭa of Soṇḍurnī.

Bühler notes two other copies.

AS Bengal 2657.

Bikaner 1027B. 32ff.

The colophon reads: iti śrīmadanantabhaṭṭopādhyāya-viracitas tithinirṇayaḥ samāptaḥ.

#### ANANTARĀMA DVIVEDIN

Author of a *Prāśnasaṅgraha*. Manuscripts:

Bombay U. Desai 1484. 8ff.

#### ANANTARĀMA VIDYĀVĀGĪSA (fl. ca. 1810)

A son of Rāmacaraṇa Nyāyālaṅkāra, Anantarāma Vidyāvāgīsa wrote a *Tithitattvavyavasthāśaṅkṣepa*. See NCC, vol. 1, p. 138, and S. C. Banerji [1957] 192.

#### ANANTĀCĀRYA MHĀLAGĪ (fl. 1876)

A resident of Solāpūra and a pupil of Āpā Joṣī Bhāṅḍāraka Vaṭhekara (died Śaka 1788 = A.D. 1866). Anantācārya wrote an *Āpūbhāṣī* on jātaka, and an *Anantaphaladarpaṇa* in Śaka 1798 = 1876. See S. B. Dikṣit [1896] 488.

#### CATURVĀṬUKA ANANTĀRYA (alias BAKA)

Guru of Tenāli Gopānācārya, Anantārya wrote a *Kālavibhāga* which is cited in the *Vaikhānasasaṅgrahaśmṛtīmīmāṃsā* of Śiṅgarācārya, the son of Jagganārya. See NCC, vol. 1, p. 145. The relevant lines of Śiṅgarācārya (GOML Madras R 1608 (b)) are:

caturvāṭukapūrvam tv anantārya iti śrutah  
bakākhyena punar nūmnā ūryah kālavibhāgakṛt  
kṛtam tena mahāgrantham dṛṣṭam dipakanāma ca

The colophon of Gopānācārya's *Vaikhānasasūtrānukramaṇikā* (GOML Madras R 3461 and R 3473 (a)) begins:

śrīmaccaturvāṭikānantācāryakṛpāpātraśrīmattenāligopānācāryānāmādhayaviracita . . . Thus it is clear that he was a follower of Vaikhānasāgama, and probably a Telugu.

#### ANAVAMADARSIN SAṄGHARĀJA (fl. 1241)

The Mahāsthavira of the Hastavanagalya Mahāvihāra in southern Ceylon under Parākramabāhu II (1236-1271). Anavamadarśin Saṅgharāja wrote a long astrological compendium in three prakaraṇas and thirty adhyāyas entitled the *Daivajñānakāmadhenu* in which he cites Varāhamihira (fl. ca. 550), Ātreya, and Bhojarāja (fl. ca. 995-1056), among others. This was published from one manuscript by Śilaskandha, Sthavira of the Śaṭṭabimbārāma Vihāra in Doḍanduwa, Ceylon, in BSS 97, 104, 116, Benares 1906. The adhyāyas are:

#### I caritaprakaraṇa

1. sāmānyavidhī
2. ādityacarita
3. candracarita
4. bhaumacarita
5. budhacarita
6. jīvacarita
7. śukracarita
8. śanalīscaracarita
9. rāhucarita
10. śaṅkīrcacarita

#### II ādeśaprakaraṇa

11. sāmānyādeśavidhī
12. āyurdāyādeśa
13. daśāvipākādeśa

14. aṣṭavargādeśa
15. yogaguṇādeśa
16. aṅgalakṣaṇādeśa
17. dohotpātādeśa
18. svapnādeśa
19. tiryagcariṭādeśa
20. saṅkirṇādeśa

## III maṅgalyavidhānaprakaraṇa

21. sāmānyavidhi
22. doṣasuddhividhāna
23. garbhadaśāvidhāna
24. kaumāradaśāvidhāna
25. śikṣāvidhāna
26. yauvanadaśāvidhāna
27. upabhogaśāvidhāna
28. upakṣayaśāvidhāna
29. viradaśāvidhāna
30. saṅkirṇadaśāvidhāna

The second verse of the first adhyāya is:

anugatajinaśiṣṭir brahmavaṃśaikadrṣṭir munir anava-  
madarṣi pāradarṣi kalānām/  
praṇayati sakalām sadgranthasūrārthadogdhrim vibu-  
dhajananiṣevyām daivavītkāmadhenum//

## ANDUBARIUS

The *Chronicon Paschale*, a Byzantine chronicle of the early seventh century (ed. L. Dindorff, 2 vols., Bonn 1832), recounts the following legend (vol. 1, p. 64): "In the time of the building of the tower (of Babel), an Indian appeared of the race of Arphaxad, a wise astronomer named Andubarius, who first wrote astronomy for the Indians." The complete lack of a historical basis for this story is proved—if proof is necessary—by the fact that the nu in Andubarius must be a misreading of a miniscule beta: the name is Semitic, corresponding to the Arabic 'Abd al-Bārī' ("the slave of the Creator").

## ANIRUDDHA JHĀ

Author of a *Samvatsarakṛti*; probably from Mithilā. See NCC, vol. 1, p. 151.

## ANIRUDDHA DVIVEDA

The pupil of Datta, Aniruddha Dviveda wrote a *Jātakendu* in at least eleven chapters. Manuscripts:

AS Bengal 7036 (G 397). 10ff. Incomplete.

The second verse is:

śrīdvivedāniruddhena dattaśiṣyena dhīmatā/  
tanyate bālabodhāya jātakendur manoharāh//

The titles of the first 10 chapters are:

1. iṣṭakālādhyāya
2. dvādaśabhāvādhyāya
3. dīnīrṇayādhyāya

4. ṣaḍbalādhyāya
5. rātriguṇādhyāya
6. śatrumitrādhyāya
7. grahasvarūpādhyāya
8. saṃjñādhyāya
9. garbhādhānādhyāya
10. praśnādhyāya.

## ANIRUDDHA (b. 1463; fl. 1494/95)

The son of Bhāvadāsa of Benares, the son of Mahāsarman of Yamanapura, Aniruddha was born in Sam. 1520 (= A.D. 1463) and wrote a *tīkā* on Satānanda's (1099) *Bhūsvatī* at the age of thirty-one; he finished it on Saturday, the first tithi of the kṛṣṇapakṣa of Aśvayuj in Śaka 1417 (= 19 September 1495). The examples are for Śaka 1416, Sam. 1551 (= A.D. 1494), the year of the birth of his son Hira. See BORI 1883/84, p. 82. Manuscripts:

BORI 198 of 1883/84, 22ff. From Gujarat.

Verses 2-4 read:

śiśu vaidyādhirājāḥ khalu yamanapure śrīmahāsar-  
manāmā  
tatputro bhāvadāsaḥ sakalaguṇanidhīḥ sambabhūvāgra-  
janmā/  
yaḥ pūrvābhyāsasaṅgād api sakalapadam dharmam  
agryaṃ carivā  
śāntiprānte prayāto haricaranamanāḥ pattane saṅ-  
karasya//  
aniruddhas tasya suto gurujanacaranāravindakṛtasevaḥ/  
kurute budhopayuktām saṃkṣiptām bhāsvatīrikām//  
śrīhīrasya tanūjasya janmakālāgatān iha/  
dhruvakāharganodbhūtān udāharatī sa sphuṭam//

The last two verses are:

svaraśāśīkrasamete śakanṛpakāle 'svayugbahulapakse/  
pratipadyata śāntivāre 'niruddhaviduṣā samāptā (tīkā//  
khanayanatithivatsarake mahatī kule janma me bhavad  
viduṣām/  
śaṣṭiguṇavarṣeṇa mayā vimalā śiśubodhini racitā//

## ANILAKUMĀRA (b. 1925)

Author of a compilation called *Yantakādarpāṇa* based on the *Muhūrtacintāmaṇi* of Rāma (fl. 1600), the *Muhūrtavallabha* of Nārāyaṇa (fl. 1572), and the *Suddhīdīpikā* of Śvīnivāsa. It was published in Bengālī script with a Bengālī anuvāda at Huglī 1959 (RGS p. 5).

## ANŪPASIMĪHA (fl. 1674/98)

The son of Karṇasimha and the Mahārāja of Bikāner from 1674 to 1698, Anūpasimha was both an assiduous collector of manuscripts (his collection forms the core of the Anup Sanskrit Library at Bikāner) and a patron of many scholars, including Maṅgirāma Dīkṣita, Vidyānātha, and the Josirāya (apparently Virāsimha Gaṇaka) who wrote on *vyōtīṣa*. To Anūpasimha himself is falsely attributed an *Anūpakaraṇa*. Manuscripts:

Anup 4411. 17ff.

The real author was the Josirāya.

**ANNAJI (= ANVAJI)**

Alleged author of a *ṭikā* on the *Jaiminīsūtra*. Manuscripts:

N-W P I (1874) 8=N-W P I (1874) 79. 160ff. Property of Jagannātha Jotiṣi (= Sukla) of Benares.

**APŪCHA JHĀ** (fl. ca. 1850/1900)

A resident of the village Koilakha in Mithilā, Apūcha Jhā wrote the following works on jyotiṣa:

1. *Jātaka-paddhatyudāharana*, a commentary on the *Jātaka-paddhati* of Keśava (fl. ca. 1500). Published at Benares 1925 (IO San. D. 420).

2. *Nirṇayarka*. Jyotiṣa? Ed. Harinandana Sarman, Cawnpore Sam. 1970 (= A.D. 1913). (IO 3437).

3. *Makarandakarana*, a commentary (?) on the *Makaranda* of Makaranda (fl. 1478). Manuscripts:

Mithila 245. 7ff.

4. *Laghujanmapaddhati*. See NCC, vol. 1, p. 191.

5. *Luptābdanirṇaya*. See NCC, vol. 1, p. 191.

**APPAYA DIKṢITA**

Author of a commentary, called variously *vivṛti*, *vṛtti*, or *vyākhyā*, on the *Pañcasvarā* of Prajāpatidāsa (fl. before 1642). Manuscripts:

RORI Cat. II 5640=RORI 5640. 14ff. Copied in Sam. 1811=A.D. 1754.

AS Bengal 7146 (G 621)=Mitra, Not. 1478. 12ff. Mithila 162. 9ff.

N-W P V (1880) B 25. 11ff. Property of Rāmacandra and Udayānanda of Alwar.

N-W P V (1880) B 26. 11ff. Property of Rāmacandra and Udayānanda of Alwar. (Is this the same as N-W P V (1880) B 25?)

N-W P IX (1885) C 5. 12ff. Property of Bābū Śāstri Tailaṅga of Benares.

Oxford CS d. 776 (i). 21ff.

PUL II 3607. 6ff. (āyurdāya only)

**APPAYA SŪRI**

Author of a commentary on the *Jātaka-candrikā* of Veṅkaṭeśa entitled *Sarodāgama*. Manuscripts:

Adyar List=Adyar Cat. 26 A 29. 67ff. Grantha. (Aṣṭanarasimha)

Adyar Index 2196=Adyar Cat. 29 A 14. 27ff. Telugu. (Timmayya Sūri in Adyar Cat.)

GOML Madras R 2533 (i). Ff. 36-52. (Appa Sūri) Kerala 5755 (5756). 600 granthas. Grantha. (Appaya Sūri)

Kerala 5756 (1385 A). 550 granthas. Grantha. Incomplete. (Appaya Sūri)

As well as the variants Timmayya and Appa found in the manuscripts listed above, NCC, vol. 1, p. 201 believes his real name may be Nṛhari and NCC, vol. 2, p. 290 calls him Appāsūri alias Nṛhari or Nṛsiṃha.

**APPAYA** (fl. 1491)

The son of Perubhaṭṭa of the Marla vamsa, Appaya wrote a *Graha-candrikā-gaṇita* in which is mentioned the year Saka 1413 (= A.D. 1491). Manuscripts:

GOML Madras (Telugu) R 337 (d). Ff. 67-76. Copied in 1916/17 from a manuscript belonging to Tejomūrtula Veṅkaṭappa Siddhāntigāru of Tuni in the Godāvāri District. With Āndhraṭṭikā.

This work has 7 chapters:

1. madhyagrahādhikāra
2. sphuṭagrahādhikāra
3. vakravakratyāgodayāstamayādhikāra
4. pātādhyāya
5. laṅgādhikāra
6. candragrahaṇādhikāra
7. sūryagrahaṇādhikāra

The first verse is:

śrīmarlavamsakalāsūmbudhikaustubhena  
śrīperubhaṭṭatanayena virājītena/  
sū dīyatām abhimatāppayadhimateyam  
bodhāya sarvadharaṇisurapaṇḍitānām//

**ABŪ AL-FAYD FAYDĪ** (fl. 1587)

The son of Mubārak of Nagor, the son of Khizr of Sind, Faydī translated the *Lilāvati* of Bhāskara (b. 1114) into Persian at the request of the emperor Akbar (1556-1605) in A.H. 995=A.D. 1587; the title of the translation is *Lilāvati* or *Tarjamah i Lilāvati*. The manuscripts are listed by C. A. Storey, *Persian Literature*, vol. 2, pt. 1, London 1958, pp. 4-5. There are two editions: Calcutta 1827 and [NP] A.H. 1271=A.D. 1854/55.

**ABBAYA KAVI** (fl. 1807)

Author of a *Gaṇitāmṛta* following the Saurapakṣa, in which he mentions Saka 1729 (= A.D. 1807). Manuscripts:

GOML Madras D 15882. 18 pp. Telugu. With Āndhravyākhyā. (First adhyāya only)

GOML Madras R 393 (a). Ff. 1-10v. Telugu. Purchased in 1911/12 from C. Viśvanātha Śāstrigal of Vizianagaram.

This work contains 5 chapters.

1. madhyagrahādhyaṅya
2. sphuṭagrahādhyaṅya
3. pātādhyāya
4. candragrahaṇādhyaṅya
5. sūryagrahaṇādhyaṅya



The first verse is:

vāgīśācyutaśaṅkarendradīnakṛcchitāṃsubhāumendujān  
gīrvāṇādhīpāpūjyāsukradīnakṛtpuṭreśaputrāmarān/  
natvāhaṃ gaṇitāmṛtam raghupatīṃ śrisaurasāmyasphu-  
tam  
vakṣyāmy abhayasatkavīndravibudhas triskandhavitpri-  
taye//

#### ABHAYAKUSALA

Author of a *Vivāhavidhivādacaupāi* in Gujarāṭī. Manuscripts:

LDI (MPC) P/8354. 2ff.

#### ABHAYACANDRA (before 1500)

A Svetāmbara Jaina of the Kharataragaccha and the pupil of Ānandarāya, Abhayacandra wrote an astrological treatise in Prakṛt entitled *Ullanṭhavādīmukhaki-laka*, in 123 gāthās. Manuscripts:

AS Bombay 299. 11ff. Copied by Karmasāgara Gaṇi in Jhājaripura in Saṃ. 1557 varṣe kārtika sudi 10 dīne sanivāsare = Saturday, 31 October 1500. From Bhāu Dāji.

The last two verses are:

kharataragacchadivāyarasugurū ānandarāyasisēṇa/  
ujjhāya abhayacande lihiyam ihaṃ jōhasaṃ grantham//  
ullanṭhavādīmukhakilam idaṃ hi śāstram  
jyotirvidāṃ hrdayakośavikāsanam ca/  
nillethanāṃ (?) kumatīnāṃ madacittadhāma  
śvetāmbareṇa racitaṃ nijasaukhyahetoḥ//

#### ABHAYACANDRA (fl. ca. 1325)

The teacher of the Karṇāṭa scholar Keśavarāṇi (fl. 1359), the Jaina Abhayacandra wrote, among other things, a vyākhyāna on the *Trilokasāra* of Nemicandra (fl. ca. 975). See Velankar, p. 162 and NCC, vol. 1, p. 205. Manuscripts:

BORI 599 of 1875/76. 184ff. Copied in Saṃ. 1904 = A.D. 1847. From Jaipur (called the *Trilokasāra* of Abhayanandin with the vṛtti of Mādhavacandra). Mudvidri 164 = Moodbidri II p. 135 a.

#### ABHIMANYU RĀJAN

The (Rājasthānī?) author of an astrological text entitled *Praśnaprakāśa*. Manuscripts:

Anup 4877 = Bikaner 704. 23ff.  
CP, Hiralal 3173. Property of the Chaube family of Garhā in Jabalpur District.  
Lahore 10 (see NCC, vol. 1, p. 230; CC, vol. 1, pp. 25 and 772).  
LDI 7368 (5307). 12ff. Copied by Caraṇasādhu in ca. 1600.

#### AMARA SĀDHU

Author of a *Vivāhapaṭala*. There exists a commentary (*Bālāvabodha*) on this in Gujarāṭī. Manuscripts:

LDI (LDC) 2525. 16ff. (with *Bālāvabodha*).

#### AMARANĀTHA VIPRA (fl. 1824)

Author of a pañcāṅga entitled *Abdapañcamī* (= *Abdapañjī*) for the year Śaka 1746 (= A.D. 1824). Manuscripts:

Dacca 118c (see NCC, vol. 1, pp. 203 and 248).

#### AMARASĀṆKARA BHATṬĀCĀRYA (fl. 1962)

Author of a *Cūpiyatrikōṇamīti* published in Bengālī script in Calcutta 1962 (RGS p. 128).

#### AMARASĪMHA (fl. 1597/1620)

The Rājā of Mewar from 19 January 1597 to 26 January 1620, Amarasīmha I patronized the son of Mathurā (Mathurātmaja, q.v.), who wrote an *Amarabhūṣaṇa* and an *Iṣṭaghaṭikāsodhana* which are sometimes attributed to Amarasīmha himself.

#### AMAREJYA (= AMAREḌYA?) (= AMAREŚA?)

Author of a *Yogayātrā*. Manuscripts:

Mysore and Coorg 315. Property of Mahādeva Jōyisa of Sringerī.

#### AMAREḌYA (= AMAREŚA?) (= AMAREJYA?)

The son of Gosvāmīn and pupil of Candrabhūṣaṇa, Amareḍya wrote a bhāṣya on the *Sūryasiddhānta* in Karṇāṭki. Manuscripts:

GOML Madras D 13512. Ff. 1-135v. Telugu and Nandināgarī.

OI Baroda 13379 (c). Ff. 169-197. Nandināgarī. (Amarēndī?).

The first verse is:

gosvāmīsūnūr amareḍya iti prasiddho daivajñāvaidyavi-  
duṣāṃ tilakaṃ praṇamya/  
śricandrabhūṣaṇagurūṃ karavāṇi sūryasiddhāntam  
iḍyam aham adbhubodhanārtham//

#### AMAREŚA (= AMAREḌYA?) (= AMAREJYA?)

Author of a commentary (vyākhyāna) in Karṇāṭki on the *Karaṇaparakāśa* of Brahmadeva (fl. 1093). Manuscripts:

IO 6304 (Mackenzie II 36). 58ff. Nandināgarī.

The colophon of this manuscript reads: iti śrībrahma-  
devavīracite karaṇaparakāśe amareśavīracite karṇā-  
bhūṣāvvyākhyāne. . . .

#### AMALASŪRI

See Malayendu Sūri (fl. ca. 1400)

#### AMĪCANDRA (fl. 1842)

Amīcandra Śrāvaga of the Ajamerāgotra wrote a Hindi translation of the *Līlāvati* of Bhāskara (b. 1114) at Jayapura on 2 Śuklapakṣa of Āṣāḍha in Saṃ. 1899 = ca. 8 July 1842. Manuscripts:

RORI Cat. II 8496. 88ff. Copied by Motilāla Lakhamī-canda on 10 kṛṣṇapakṣa of Jyeṣṭha in Śaṃ. 1925 = ca. 2 June 1868.

The colophon reads: iti śrībhāskariyasiddhāntaśiromaṇyā pātililāvati ki bhāṣā amīcandraṇa śrāvaga aṣṭa-merā gotreṇa budhi anusāreṇa śrījayanagare racitā/saṃvat aṣṭādasa sataka navanavato adhikāya/sukala dauji āṣāḍa ki racī sumaṅgala dāya//

#### AMĪRACANDRA

Amīracandra (Paṇḍita) of the Lomaśagotra is author of three works on jyotiṣa:

1. *Bhūvijñānagrantha*. Manuscripts:

Jammu and Kashmir 2872. 131ff.

2. *Svaralāstrasaṅgraha*. Manuscripts:

Oudh XI (1878) Yoga 16. (see NCC, vol. 1, p. 257; CC, vol. 1, p. 28).

3. A ṭikā (or vyākhyā) on the *Sighrabodha* (of Kāśī-nātha?). Manuscripts:

VVRI 3300. 32ff. Copied in Śaṃ. 1900 = A.D. 1843. (vivāhaprakaraṇa). (Vyākhyā).

VVRI 3291. 10ff. (Ṭikā). Incomplete.

VVRI 3314. 46ff. (muhūrtaprakaraṇa). (Ṭikā).

VVRI 3322. 9 ff. (Vyākhyā). Incomplete.

VVRI 3335. 51ff. (Vyākhyā). Incomplete.

#### AMĪSAṆKARĀTMAJA

This son of Amīsaṅkara, whose name is unknown, wrote a *Cakrasāra*. Manuscripts:

Benares (1963) 34690. 96ff. Copied in Śaṃ. 1866 = A.D. 1809.

#### AMṚTAMĀDHAVA VĀGHOLAKĀRA

Author of a *Strījātaka* published with a Marāṭhī translation in Bombay 1905 (IO 19. B. 12).

#### AMṚTALĀLA

The son of Devadatta and a resident of Indrapuri (Delhi) near Kurukṣetra, Amṛtalāla wrote an *Amṛtala-harīsāraṇī* (= *Kheṭakṛtī*). Manuscripts:

Kathmandu (1960) 21 (III 1156). 49ff. Copied in Śaka 1677 = A.D. 1755. Incomplete.

The first verse is:

śrīmatkurukṣetrasamīpavarttini yā paṇḍitair indrapuri  
virājate/  
śrīdevadattasya suto dvijānugas tasyāṃ vasan kheṭa-  
kṛtīm cikīrṣati//

#### AMṚTĀNANDA

Author of a commentary (*Amṛtacaṣaka*) on the *Aṣṭāṅganirṇaya*. Manuscripts:

Benares (1963) 34774. 13ff. Copied in Śaṃ. 1874 = A.D. 1817.

PUL II 3262. 13ff. Copied in Śaṃ. 1881 = A.D. 1824 Oxford CS d. 886 (ii). 14ff. (*Aṣṭāṅganirṇayāmṛta*). PUL II 3263. 2ff. Incomplete.

#### AMBĀRĀMA

Author of the *Siddhāntādarśa*, a commentary on the *Siddhāntacintāmaṇi* of Vyāsa Sadānanda. Manuscripts:

IO 8053 (Wilkins VI a (ii)). 22ff. Copied ca. 1790.

From Sir Charles Wilkins. Incomplete. (only to verse 70 of the first adhikāra).

The third verse at the beginning is:

mīrahāskarakacakrayute rathe  
sugaṇakāryabhāṣāvyṭtabandhure/  
lalitalallaturāṅgamayoṣite  
jayati bhaumabhaṭo gaṇakāgrṇih//

The commentary proper begins: iha khalu purāṇajai-nayavanānām jyotiḥśāstrāny udadhivadanagāhyakalaja vyāsavaṭaṅkākikābhīdhasyātmajena vyāsasādānandena bālābodbodhanakṛtaḥ saṅkṣiptaḥ siddhāntacintāmaṇi-nāmā granthaḥ samarthitaḥ / tatra ṭikām vinā sande-hanīrasanam na bhavati / hy ato tatkrpāpātreṇa śīṣyānūnā upādhyāyavaṭaṅka ambārāmaṇa siddhāntā-darśākhyaṃ ṭippanaṃ racyate /

#### AYODHYĀNĀTHA ŚARMA (1864-1926)

The son of Śyāmacaraṇa Śarma (1833-97) and an astronomer of Benares. See S. Dvivedin [1892; repr. 1933] 133-134.

#### AYODHYĀPRASĀDA ŚARMA (= AYODHYĀNĀTHA ŚARMA?) (fl. 1899)

Author of two works on astrology.

1. *Vivaraṇa* on the *Bhuvanadīpaka* (of Padmaprabha Śūri?). Manuscripts:

N-W P II (1877) B 35. 44ff. Property of Khusūlpuri of Benares.

2. *Ayodhyājātaka*, a work on horoscopy in 121 verses written at Agra in Śaka 1821 = A.D. 1899. Published with bhāṣāṭikā by the Śrī Veṅkaṭeśvara Press, Bombay Śaṃ. 1995, Śaka 1860 = A.D. 1938.

Two additional verses at the end read:

kvīndudvivasucandrābde śakākhye prathite bhūvi/  
ayodhyājātakaṃ nāma pustakaṃ saparīśramam//  
āgarānagarāntaḥsthatā jagāṇjanivāsīnā/  
śrīayodhyāprasādēna nīramāyī satīṃ mude//

#### ALAKHADĀSA

Author of a *Pavanavijayasvarodaya*, otherwise known as the *Aṅkolavidhāna*. Manuscripts:

SOI 33 = Cat. I 1360-33. 406 granthas. Copied in Śaṃ. 1927 = A.D. 1870.

**ALAVESVARA** (between ca. 1050 and 1486)

The son of Vāmana, Alaveśvara wrote a *Jātakakāvallī*, in which he quotes Jīvaśarman, Purāṇayavanācārya, Satyācārya, and the *Rājamṛgāṅka* of Bhojadeva (fl. ca. 995-1056). Manuscripts:

AS Bombay 349. Fl. 4-56. Copied in Saṃ. 1543 = A.D. 1486. From Bhāu Dāji. Incomplete.

Verses 388-389 of chapter 8 read:

mahātripurasundaryāḥ prasādād alaveśvaraḥ/  
vāmanīḥ kalpalatikām cakre samyak phalapradām//  
guruprasādām samavāpya samyag vijñātattvaḥ saka-  
lāgamānām/  
śrīvāmanīḥ sarvavidām varīṣṭhaś cakre kavir jātakakā-  
pavallim//

There are 8 adhyāyas:

1. bhāvasādhana 110 vss.
2. dṛṣṭisādhana 11 vss.
3. grahānām balanirṇaya 113 vss.
4. mīśrakādhyāya 97 vss.
5. āyuhprakāśaka 112 vss.
6. āyuhprakāśaka 98 vss.
7. ariṣṭabhaṅgavivecana 65 vss.
8. daśākramaphalavyaktivinirṇaya 391 vss.

**ALASIṄGARĀCĀRYA (= ALASIṄGYA)**

A member of the Kāśyapagotra, Alasiṅgarācārya wrote a *Jātakarāja* or *Jātakarājīya*. Manuscripts:

GOML Madras R 1526. 14ff. Telugu. Presented by Pandyāla Subrahmaṇya Śāstrigāru of Cocanada in 1915/16. Incomplete.

IO 6381A (3661). 23ff. Grantha. Acquired 5 December 1921.

The first verse is:

śrīkāśyapakulīnena śiṅgyā (?) rṣyeṇa dhīmatā/  
nāmnā jātakarājo 'yaṃ bālabodhāya x x te//

**KALPAKURTI ALLANĀRYASŪRI**

Author of a *ṭikā* in Telugu on the *Sūryasiddhānta*. Manuscripts:

GOML Madras R 5090. 222ff. Telugu. Copied from a manuscript belonging to Koṭikalapūḍi Śivarāmadāsa Pantulugāru of Bobbili; this manuscript was copied by Sunarao Veṅkaṭakṛṣṇamma on Wednesday 3 Śuklapakṣa of Bhādrapada in the year Sukla=8 September 1869.

The colophon reads: iti śrīsūryasiddhānte kalpakur-  
tijyautiṣagajakesaryallanāryasūrivirācitāndhrabhāṣṭīkā-  
yāṃ . . .

**ALLĀḌANĀTHA**

The son of Lakṣmaṇa Siddha, Allāḍanātha wrote for a king named Sūryasena a *Nirṇayamṛta* in 4 prakāraṇas: vratanirṇaya, tithinirṇaya, śrāddhanirṇaya, and śaucanirṇaya. Manuscript:

Berlin 1170 (Chambers 560). 126ff.

**AṢṬANARASIMHA**

See Appaya Sūri.

**ASITA**

An astrologer quoted first by Varāhamihira in *Bṛhat-saṃhitā* 11.1; see P. V. Kane [1948/49] 5 (his reference to *Bṛhadhyogayātrā* 19.1 is wrong).

**AHOBILANĀTHA (= AHOBILA PAṆḌITA or SĀSTRIN)**

Ahobilanātha wrote an astronomical text which is called variously *Ahobilanāthīya*, *Ahobilanāthasiddhānta*, and *Grahaṅtra*; a commentary on it was written by Vellāla Veṅkaṭayajvan in ca. 1627. Manuscripts:

GOML Madras D 15447 = D 12538 Fl. 63v-121. Grantha. Incomplete.

Oppert II 1946. 20 pp. Telugu. Property of Veṅkaṭeś-varajosa of Siddhavaṭṭa, Kaḍapa District.

Oppert II 1947. 82 pp. Telugu. Property of Veṅkaṭeś-varajosa of Siddhavaṭṭa, Kaḍapa District.

GOML Madras (Telugu) 1242.

GOML Madras (Telugu) 1244.

The *Ahobilanāthīya* has twice been published in Telugu script in Madras; these editions are B 971 and B 3839 of the Mysore GOL. B 3839 contains an Āndhraṭikā.

**AHOBILABHAṬṬA (= AHOBALABHAṬṬA)**

Author of a *Pañcāṅgapaddhati*. Manuscripts:

Adyar List (2 copies) = Adyar Index 3462 = Adyar Cat. 28 F 28. 51ff. Grantha. Incomplete (ends with fourth adhyāya).

**AHOŠAKA DEVA**

See Moṣadeva.

**ĀṄGIRAS**

See Aṅgiras and Bṛhaspati, the son of Aṅgiras.

**ĀTUKA**

The son of Sadāsiva, Ātuka (spelled Ātuka in NCC, vol. 2, p. 42) wrote a *Tājīkamuktāvālī* in 135 verses. Manuscripts:

BORI 73 of A 1882/83. 7ff. From Rājasthān.

**ĀTMABODHA**

Author of a *Svarāṇavasārāmṛta*. Manuscripts:

LDI 7423 (5008). 12ff. Copied in Saṃ. 1660 = A.D. 1603.

**ĀTMĀRĀMA**

Author of a *Naṣṭakāladīpikā*. Manuscripts:

CP, Hiralal 2491. Property of Śrīkrṣṇa Pāṇḍuraṅg of Bālāpur, Akolā District.

**ĀTMĀRĀMA ŚARMAN VIDYĀLĀṢKĀRA** (fl. 1836)

Author of a *Bhuvanaprakāśa* of which part 1 was published with a Bengālī translation at Serampore in 1836 (NL Calcutta 180. Jc. 83. 3).

**ĀTREYA**

See Atri.

**ĀDITYA KAVIKRĀNTA**

Author of a *vivarāṇa* on an unidentified *Viśvadarśa*. Manuscripts:

CP, Kielhorn XXIII 155. 112ff. Copied in Sam. 1604 = A.D. 1547. Property of Sadāśivabhaṭṭa Ṭopale of Burhānpur.

**ĀDITYADEVA**

Author of a *Balatantramahārṇava* or *Narapatīvijayīya* based on the *Narapatījayacāryā* of Narapati (fl. 1175). Manuscripts:

Adyar Index 3974 = Adyar Cat. 8 J 70. 189ff. Incomplete (ends with the *rāśicakra*).

GOML Madras D 13938 = Sastrī, Rep. (1893-94) 188. Ff. 108-154. Telugu. Formerly the property of Velamūri Veṅkambhaṭṭagāri. With *Āndhraṭikā* of Siṃha. Mysore (1922) 313. 34ff.

Mysore (1922) 370. 42ff.

Mysore (1922) 1802. Ff. 52-197.

Mysore (1911+1922) 2252. Ff. 46-168.

Mysore (1911+1922) 2631. Ff. 20-65. Incomplete (ends with the *abhiśekavidhi*).

Mysore (1911+1922) 2639. Ff. 89-139. Incomplete (ends with the *ghuṭikāgrayoga*).

The relation of this work to Narapati's remains obscure. The GOML Madras manuscript contains Narapati's text, but the colophon reads: *iti śrīmahārājādhirāja-sūryavamaśānvayaśrisarasvatīvaraprasādakulapadmāditīyadevaviracite narapatījayacāryāsvarodaye . . .* The *Mahārājādhirāja* is not identified; but it is known that Narapati wrote at Vallinagara under Ajayapāla, the Caulukya monarch of Gujarat from ca. 1172 to 1175.

**ĀDITYABHAṬṬA (= ĀDITYASŪRI)** (between 1200 and 1325)

Also known as Kavivallabha, and perhaps as Mālava (see NCC, vol. 2, p. 75). Ādityabhaṭṭa of the Gargotra was the pupil of Viśveśvara and the author of a *Kālidarśa* or *Kālanirṇaya*, which appears in both prose and metrical versions. Manuscripts:

BORI 325 of 1880/81. 190ff. Copied in Sam. 1581 = A.D. 1524. (*Kālanirṇaya*).

Kerala 3497 (12404). 4500 granthas. Malayālam. Copied in ME 708 = A.D. 1535. With *vyākhyā*.

PL, Bühler III E 74. 202ff. Copied in Sam. 1660 = A.D.

1603. Property of Maṅgalasaṅkara of Ahmadābād. Baroda 1048. 149ff. Copied in Śaka 1673 = A.D. 1751.

Adyar List (2 copies) = Adyar Index 1266 =

Adyar Cat. 22 J 13. 246 ff. Telugu. With *ṭikā*.

Adyar Cat. 22 J 14. 46ff. Grantha.

Adyar Cat. 22 J 16. 212ff. Grantha. Incomplete.

Adyar Cat. 33 I 10. 170ff. Grantha. Incomplete.

AS Bengal 2655.

BORI 142 of Viśhrambag I. 171ff.

CP, Kielhorn XIX 51. 141ff. Property of Hariguru of Sammalpur.

GOML Madras R 4276 (d). Ff. 59-72.

Hamburg A. 46a. From Oppert. (Kavivallabha).

IO 1655 (2705). Ff. 2-131. Telugu. From Mackenzie.

IO 5596 (Mackenzie VIII. 69a). 165ff. Grantha.

IO 5597 (Burnell 145a). 10ff. Copied by Tiruveṅkaṭācārya. Grantha (the metrical version).

Jaipur.

Kerala 3495 (352B). 3900 granthas. Telugu.

Kerala 3496 (324). 2200 granthas. Telugu. Incomplete. Nagpur 375 (1482). 33ff. From Nāsik.

Oppert I 6560. Property of Durbha Rāmasāstrulu of Maḍḍi, Vizagapatam District.

Oppert II 1045. Property of Tirupuṭkuli Śrīkrṣṇa Tātācāryār of Kāncīpuram, Chingleput District.

VVRI 3895. 123ff. Telugu.

VVRI 4420. 63ff. Telugu.

Verse 3 of the metrical version is:

viśveśvarācāryapadāravindapraṇāmavistāritavāgvilā-

saḥ/

ādityasūriḥ smṛtitattvadarśi kālāṃ vinirṇeṣyati manda-

buddhyai//

**ĀDITYASŪRI**

Author of a *Tīthinirṇaya*. Manuscripts:

IM Calcutta 3187 (see NCC, vol. 2, p. 76).

This is perhaps Ādityabhaṭṭa's *Kālanirṇaya*, though one would not expect to find a copy of that text in Bengal.

**ĀDINĀTHA**

Author of a *Trailokyadīpaka* or *Daṇḍajñāna* (*goṣṭhi*) on divination from the hours of the day and their colors, in four chapters. Manuscripts:

Oudh V (1875) VIII 6. 32 pp. Copied in A.D. 1838.

Property of Śrīkrṣṇa of Ayodhyā, Faizabad Zila.

AS Bengal 7179 (G 7900) B. 6ff. Copied by Vaḍāga-

neśa Mahalle in Nāgapura on Thursday, Śrāvaṇa śukla 7 of Sam. 1937 = 12 August 1880.

AS Bengal 7119 (G 7840). 3ff. Incomplete (ends at the beginning of the 4th adhyāya).

Lucknow 520. A 20 G (46135).

Oudh XXI (1889) VIII 18. 32 pp. Property of Raghuvāra Prasāda of Gonda Zila.

The first verse is:

natvā guruṃ samāsūdyā sarvasāstrāṇi sarvasaḥ/

kriyate ādināthena praśnaṃ trailokyadīpakam//

**PAÑCĀRGULA ĀDINĀRĀYAṆA ŚĀSTRIN**

Author of a *Strījātaka* published in Telugu script with a Telugu *ṭikā* in Madras 1926 (IO San. D. 840).

**ĀDISARMAN** (before 1625)

Author of a *Jātakāmṛta* and of a *vyākhyā* or *ṭikā*, *Amṛtaprakāśa*, on the same. Ādisarman is quoted by Divākara (fl. 1625) in his *Praudhāmanoramā*. Manuscripts:

PUL II 3431. 4ff. Copied in Saṃ. 1889=A.D. 1832. (*Amṛtaprakāśa*; āyurdāya only).

PL, Buhler IV E 122. 71ff. *Vyākhyā*. Property of Bālakṛṣṇa Jośi of Ahmadābād, Rajputana p. 30. From a Jaina Bhāṇḍār in Jaisalmer. *Ṭikā*.

VVRI 6922. 60ff. (with *Amṛtaprakāśa*).

The last verse of the *mūla* is:

ity ādisarmasamprokta jātakāmṛtakirtanāt/  
paramātmāni jivātmā sphuṭāḥ vo daśame śamait (?) //

**ĀNANDA**

See Bhagavadānanda.

**ĀNANDA**

Author of a *Prañāsāra*. Manuscripts:

IM Calcutta 1273 (see NCC, vol. 2, p. 106).

**ĀNANDAKANDA**

See Makaranda (fl. 1478).

**ĀNANDADHARA (= GOVINDĀNANDA?)**

Author of a *Jātakasāra*. Manuscripts:

PUL II 3423. 15ff. Copied in Saṃ. 1829=A.D. 1772.

**ĀNANDANILAYA**

The son of Konāmbū and Veṅkaṭācala, Ānandanilaya wrote a *Horāvibhūṣaṇa* in at least six chapters based on the *Horāsāra*. Manuscripts:

GOML Madras D 13917. Ff. 32-57. Telugu. Incomplete.

At the end of the fifth adhyāya occur the following verses:

ānandanilayaprokte śāstre horāvibhūṣaṇe/  
yogaprakaraṇaṃ nāma pañcamam samudīritam//  
yan mātāpitarau khyātau konāmbāveṅkaṭācalau/  
ānandanilayākhyena teneḍaṃ sāṅgam iritam//  
krodhanābde sitānāṅgabhārgave candramaulinā/  
etaḍ dvijenālikhitaṃ horāsāstravibhūṣaṇam//  
horāsāraṃ tu saṅgrhya mayā sudhijānā mudā/  
dṛṣṭvā nandas tu doṣaś cet samikurvantu sarvadā//

The chapters are:

1. rāsīprakaraṇa
2. grahaprakaraṇa

3. janmaprakaraṇa

4. āyuprakaraṇa

5. yogaprakaraṇa

6. sthānaphalajñānaprakaraṇa

**ĀNANDAMUNI** (fl. 1674)

Author of a *Gaṇitasāroddhāra* in Saṃ. 1731=A.D. 1674. Manuscripts:

Baroda 3100=PL, Buhler IV E 54. 66ff. Copied in Saṃ. 1879=A.D. 1822. Formerly the property of Uttamarāma Jośi of Ahmadābād.

Perhaps the same as the work entitled *Gaṇitasāroddhāra* for which no author is listed. Manuscripts:

N-W P I (1874) 188. 6ff. Property of Sāma Lāla of Benares.

N-W P I (1874) 200. 6ff. Property of Divākara Gaṇaka of Benares.

**ĀNANDASIDDHA**

Author of a *Nakṣatrarogāvalivicāra*. Manuscripts:

SOI 3316=Cat. II: 1024 (3316). 5ff.

**ĀNANDASUNDARĪ**

Author of a *Prañāsāstra*. Manuscripts:

Kerala 10408 (6127A). 350 granthas. Malayālam. Incomplete.

Kerala 10409 (T. 481). 288 granthas. Incomplete.

**ĀNANDASŪRI**

The pupil of Jineśvara, the pupil of Devabhadra, Ānandasūri wrote a commentary (vṛtti) on the *Kṣetrasamāsa* of Jinabhadra Gaṇi Kṣamāsramaṇi (see Velankar p. 99). His vṛtti on the anonymous (?) *Laghukṣetrasamāsa* (Velankar p. 335) is probably the same work.

**ĀPADEVA (RAGHUNĀTHA DHARMĀDHIKĀRĪ)**  
(before 1746)

A resident of Janasthāna, Āpadeva is the author of three works combining jyotiḥśāstra and dharmasāstra.

1. *Grahapīṭhamālā* = *Grahapīṭhasādhana* = *Kheṭapīṭhamālā* = *Khecrapīṭhamālā*. Manuscripts:

PL, Buhler IV E 70. 10ff. Copied in Saṃ. 1803=A.D. 1746. Property of Uttamarāma Jośi of Ahmadābād.

Bühler notes another copy.

BORI 94 of 1882/83. 5ff. Copied in Saṃ. 1804=A.D. 1747. From Gujarat (Āpadeva).

Baroda 11057. 14ff. Copied in Śaka 1702=A.D. 1780.

With Āpadeva's own *vyākhyā*.

Ānandāsrama 3357. (*Grahapīṭhamālā*).

Ānandāsrama 3451. (*Khecrapīṭhamālā*).

Baroda 3106. 21ff. With his own *vyākhyā*.

Benares (1963) 35664. 15ff. With *ṭikā*. (Āpadeva).

Benares (1963) 37025. Ff. 1-18 and 1. With *ṭikā*.

CP, Kielhorn XIX 74. 2ff. Property of Javāhara Śāstri of Chāndā. (*Kheṭapīṭhamālā*).  
 DC 375. 13ff. (Āpodeva Raghunātha Dharmādhikāri).  
 DC 4954. 216ff. No author mentioned.  
 IM Calcutta 5671 (see NCC, vol. 2, p. 124).  
 IM Calcutta 5808 (see NCC).  
 Nagpur 518 (1264). Ff. 5-24. From Nāsik.  
 Oudh VIII (1876) VIII 9. 42 pp. Property of Keśava Prasāda of Khiri Zila.  
 PUL II App., p. 11 (see NCC).  
 Śāstri, Not. 1907 (p. 53) (see NCC).  
 SOI 6750 (List 565). With ṭippaṇa. (Āpābhaṭṭa).  
 SOI 7867. With ṭippaṇa. No author mentioned.

2. *Grahapīṭhamālāvṛkhyā*. Manuscripts:

Baroda 11057. 14ff. Copied in Śaka 1702 = A.D. 1780.  
 Baroda 3106. 21ff.

3. *Tīthitattvasāra*. Manuscripts:

PL, Buhler III E 110. 6ff. Property of Bālakṛṣṇa Jośi of Ahmadābād.

ĀPASTAMBA

Name of the school to which belongs the *Āpastambaśrautasūtra* (sixth century B.C.). A part of the *Āpastambaśrautasūtra* is the *Āpastambasūtrasūtra*, which has been commented on by Kapardisvāmin, Karavindasvāmin, Gopāla, and Sundararāja. The manuscripts are listed in NCC, vol. 2, pp. 131-135. The text has been edited with a German translation by A. Bürk [1901/02], and with the commentaries of Kapardisvāmin, Karavindasvāmin, and Sundararāja by D. Srinivasachar and S. Narasimhachar, MSS 73, Mysore 1931. For studies of the *sūtras* see G. Thibaut [1875]; M. Cantor [1877] [1904]; H. G. Zeuthen [1904]; H. Vogt [1906] [1906/07]; B. Levi [1909/10]; G. Milhaud [1910]; N. K. Mazumdar [1922]; R. N. Apte [1926]; C. Müller [1929]; B. Datta [1932]; S. Ganguli [1932]; G. Lorio [1935]; F. Drenkhahn [1936]; L. V. Gurjar [1942a] [1942b]; K. N. Kamlamma [1948]; and M. P. Tripathi [1959].

ĀPĀJIPANTA KHĀNDEKARA (fl. 1800-1808)

See Rāghava.

ĀPPĀ GOSVĀMI KHIRE (fl. 1819)

The son of Rāma and an inhabitant of Revaḍā. Āppā Khire wrote in Śaka 1741 = A.D. 1819 a *ṭīkā* entitled *Lalitā* on the *Paddhaticandrikā* composed by Rāghava in 1818. See S. B. Dikshit [1896] 298.

ĀMARĀJA = ĀMAŚARMAN (fl. ca. 1200)

The son of Mahādeva of the Śrījanyūlayakula, resident of Ānandapura in Saurāṣṭra, uncle of another Mahādeva (fl. 1263) who commented on the *Jyotiṣaratnamālā* of Śrīpati (fl. 1040), and pupil of Trivikrama (fl. 1080). Āmarāja belonged to a family which was closely connected with the Caulukya dynasty in Guja-

rat; his grandfather, Bandhuka, was associated with Karna (1066/67-ca. 1093) and his brother, Ajayī, with Bhīma II (ca. 1178-ca. 1241). Āmarāja is author of a *Vāsanābhāṣya* on the *Khaṇḍakhādya* written by Brahmagupta in 665. In this work he refers to the previous commentaries by Lalla (fl. 748?), Prthūdaka-svāmin (fl. 864), Utpala (fl. 966), and Someśvara (fl. 1040), as well as to Varāhamihira (fl. ca. 550), Bhojarāja (fl. ca. 995-1056), and Bhāskara (b. 1114), and to Durga, Bhāradvāja, Rihlīya, the *Paulīśatantra*, the *Pradyotanasiddhānta*, and the *Sūryasiddhānta*. Manuscripts:

Benares (1963) 34420. Ff. 81, 87, 89-93, and 95-99.  
 Kathmandu (1960) 62 (I 1207). 54ff. Incomplete. (Ātmārāma).

A manuscript copied in Sam. 1783 = A.D. 1726 belonged to Bhāu Dāji (Bhāu Dāji [1865] 398).

The *Vāsanābhāṣya* was edited with the *Khaṇḍakhādya* by Babua Misra, Calcutta 1925. The final colophon reads: *iti paṇḍitamahādevātmaśarmasarmaviracite . . .* On p. 20 is found: *ato bijaphalānayanam asmadupādhyāyatrivikramakṛtam*, and this *bija* is stated to be for Śaka 1102 = A.D. 1180.

ĀRYAKULA

This is perhaps the correct transliteration of the *A.r.y.k.l* mentioned by Ibn al-Nadīm (*Fihrist*, p. 271 Flügel).

ĀRYABHAṬṬA (?)

Author of a *Siddhāntamuktāvalī*. Manuscripts:

Oppert II 6502. Property of Narasiṅhācārya of Kumbhāgonam, Tanjore District.

ĀRYABHAṬṬA (b. 476; fl. 499)

Āryabhaṭṭa himself states (Gaṇitapāda 1) that he wrote the *Āryabhaṭṭiya* in Kusumapura (= Pāṭalipura, modern Patna) and that he was twenty-three years old in Kali 3600 (= A.D. 499) (Kālakriyā 10). The statement of Nilakanṭha (b. 1443) that he was born in the Āsmakajanapada (on Gaṇitapāda 1) probably refers to his predecessor as commentator, Bhāskara (fl. 629). He wrote two works: the *Āryabhaṭṭiya* influenced particularly South India, his *īrdharātrika* system North-west India, Irān, and the early 'Abbāsīd caliphate.

1. The *Āryabhaṭṭiya*, expounding the audayaka system and based in part on the *Paitāmahasiddhānta* of the *Viṣṇudharmottarapurāna*, contains four parts:

1. Daśagītikā (10 vss.)
2. Gaṇitapāda (33 vss.)
3. Kālakriyā (25 vss.)
4. Golapāda (50 vss.)

(the last three pādas are known collectively as the *Āryūṣṭalata*). Aside from anonymous commentaries which will be listed in CESS, ser. B, the following are known:

- Prabhākara (ca. 525); Bhāskara (ff. 629); Someśvara (ff. 1040); Sūryadeva (b. 1191); Paramēśvara (ca. 1380-1460); Nilakanṭha (b. 1443); Yallaya (ff. 1482); Raghunātha (ff. 1590); Kodaṅḍarāma (ff. 1854) (in Telugu); Ghaṭigopa; Bhūtiṣṭu; and Virūpākṣa Sūri (in Telugu).
- Manuscripts:**
- Berlin 834 (Chambers 480). 9ff. Copied by Kalyāna, the son of Meghaji Rāola at Kāsi in Śaka 1547=A.D. 1625. With the commentary of Bhūtiṣṭu.
- Bombay U 332. 10ff. Copied in Śaka 1574=A.D. 1652.
- Berlin 1730 (or. fol. 808). 7ff. Copied by Viṣṭu in Śaka 1611=A.D. 1689.
- Bombay U 333. 4ff. Copied in Śaka 1782=A.D. 1860 from a manuscript copied in Śaka 1611=A.D. 1689 (Berlin 1730?).
- Baroda 9331. 6ff. Copied in Sam. 1918=A.D. 1861.
- Bombay U 330. 6ff. Copied in Śaka 1785=A.D. 1863 from a manuscript copied in Śaka 1760=A.D. 1838. (See Bhāu Dāji [1865] 397.)
- Bombay U 335. 35ff. Copied in Śaka 1785=A.D. 1863. With the *Vāsanābhāṣya* of Someśvara. (See Bombay U 329.)
- IO 6271 (Burnell 293). 95 pp. Copied from a manuscript in the Chirakkil Rājā's Library by Uṇṇi Panikar at Calicut in 1863. With *Bhaṭadīpikā* of Paramēśvara.
- IO 6266 (Burnell 265). 60ff. Copied in 1865 from a manuscript at Travancore. Malayālam. With the commentary of Sūryadeva.
- Kerala 1852 (5957 B). 2000 granthas. Copied in ME 1043=A.D. 1868. Malayālam. With the commentary of Sūryadeva.
- Poleman 4668 (Smith Indic 214). 70ff. Copied in 1909/12 from a manuscript in Madras. Grantha.
- GOML Madras R 5261. 142ff. Copied in 1926/27 from a manuscript belonging to Nārāyaṇa Nambūdirippāḍ, Pūmalli-mana, Chalasseri, Malabar District. With the commentary of Nilakanṭha. Incomplete (only Kālakriyāpāda and Golapāda).
- Adyar List (2 copies) =
- Adyar Index 669=Adyar Cat. 21 F 37. 37ff. Grantha. Incomplete.
- Adyar Index 670=Adyar Cat. 8 H 5. 371ff. Telugu. With *vvākhyā* of Raghunātha.
- Ādhyān Nambūdiripād 30 (see NCC, vol. 2, p. 171).
- Ānandāśrama 6668.
- Ānandāśrama 6680.
- Anup 4445. 27ff. Formerly the property of Iyotiṣarāja (without Daśagītikā).
- Anup 4446. 2ff. With the commentary of Bhūtiṣṭu (Daśagītikā only).
- Anup 4447. 9ff. With *Bhaṭadīpikā* of Paramēśvara (Daśagītikā only).
- AS Bengal 6827 (G 770)=Mitra, Not. 1566. 8ff.
- Baroda 3065. 6ff.
- Baroda 7873 (a). 58ff. Grantha. With the commentary of Paramēśvara.
- Baroda 9384. 4ff.
- Baroda 9886 (a). 66ff. Malayālam. With the commentary of Sūryadeva. Incomplete.
- Baroda 9886 (b). 80ff. Malayālam. With the commentary of Nilakanṭha. Incomplete (Golapāda only).
- Baroda 9887. 176ff. Malayālam. With the commentary of Nilakanṭha. Incomplete (to middle of Golapāda).
- Baroda 10884 (e). 6ff. Malayālam.
- Baroda 13742. 82ff. Malayālam. With the commentary of Sūryadeva. Incomplete (not all of Golapāda).
- Bombay U 329. 50ff. With *Vāsanābhāṣya* of Someśvara. (See Bhāu Dāji [1865] 397-398.)
- Bombay U 331. 8ff. Copied from a manuscript written in Śaka 1785=A.D. 1863. (See Bombay U 330.)
- Bombay U 334. 17ff. With a Marāṭhi translation made in 1860.
- BORI 859 of 1887/91. 5ff. (f. 1 missing). Incomplete (Golapāda only). From Gujarat.
- BORI 848 of 1891/95. 106ff. With *Bhaṭadīpikā* of Paramēśvara.
- Calcutta Sanskrit College 2. 7ff. Incomplete (Kālakriyā only).
- Cambridge R.15.97. 16ff. With the commentary of Yallaya. Copied from Cambridge R.15.98.
- Cambridge R.15.98. 20ff. Telugu. With the commentary of Yallaya.
- GOML Madras D 13385. Ff. 1-6v. Grantha.
- GOML Madras D 13386. Ff. 1-6v. Copied by disciples of Bālakumāra, the former owner. Incomplete (lacks Kālakriyā).
- GOML Madras D 13387. Ff. 21-26v. Telugu.
- GOML Madras D 13388. Ff. 1-6. Telugu. Order of sections is Kālakriyā, Gaṇitapāda, Golapāda, and Daśagīti.
- GOML Madras D 13389. Ff. 7-102v. Grantha. With the *Bhaṭadīpikā* of Sūryadeva.
- GOML Madras D13390. 121 ff. With the *Bhaṭadīpikā* of Sūryadeva.
- GOML Madras D 13391. Ff. 6v-71. Telugu. With the *Bhaṭadīpikā* of Sūryadeva.
- GOML Madras D 13392. 62ff. With the *Bhaṭadīpikā* of Sūryadeva. Incomplete (ends at Kālakriyā 35).
- GOML Madras D 13393. 127ff. Grantha. With the commentaries of Sūryadeva and Yallaya.
- GOML Madras D 15394. 66ff. Grantha. With the *Bhaṭadīpikā* of Paramēśvara.
- GOML Madras R 3870(c). Ff. 145v-150v. Telegu, Grantha, and Nandināgarī. Purchased in 1921/22 from Anṇāsvāmī Sāstrigal, Bhavani, Coimbatore District.
- GOML Madras R 4875. 93ff. With the *Bhaṭadīpikā* of Sūryadeva.
- Granthappura p. 37 (see NCC, vol. 2, p. 171).
- IO 2767 (3210). 7ff.+80ff. Grantha. Ff. 1-7 contain the mūla, Ff. 8-87 mūla with the *Bhaṭadīpikā* of Sūryadeva. From Mackenzie.
- IO 6263 (Burnell 107d). 10ff. Malayālam. With tabular summary.
- IO 6264 (Burnell 253). 16ff. Malayālam. Incomplete

- (Daśagītikā [three times] and Kālakriyā 1-6).  
 IO 6265 (Burnell 517). 134ff. Grantha. With the *Bhāṣya* of Bhāskara. Incomplete (ends in the middle of Golapāda).  
 IO 6268 (Mackenzie VIII. 46) = Mackenzie 5. 38ff. Grantha. With the *Bhāṣya* of Sūryadeva.  
 IO 6269 (Mackenzie III. 79b). 16ff. Telugu. With the *Bhāṣya* of Sūryadeva. Incomplete (only Daśagītikā 1 and Gaṇitapāda 2-33).  
 IO 6270 (Mackenzie VIII. 89). 75ff. Grantha. With the commentaries of Sūryadeva (in part) and Yalaya. Incomplete (Kālakriyā and part of Golapāda).  
 IO 6272 (Burnell 107c). 45ff. Malayālam. With the *Bhāṣya* of Parameśvara.  
 IO 6273 (Burnell 77). 76ff. Grantha. With a commentary in bhāṣā.  
 Kavindrācārya 855.  
 Kerala 1823 (475A). 150 granthas. Malayālam.  
 Kerala 1824 (1092A). 150 granthas. Malayālam.  
 Kerala 1825 (5131B). 150 granthas. Malayālam.  
 Kerala 1826 (13259B). 150 granthas. Malayālam.  
 Kerala 1827 (13300A). 150 granthas. Malayālam.  
 Kerala 1828 (13305B). 150 granthas. Malayālam.  
 Kerala 1829 (C. 575C). 150 granthas. Malayālam.  
 Kerala 1830 (C. 1024A). 150 granthas. Malayālam.  
 Kerala 1831 (C. 166A). 150 granthas. Malayālam.  
 Kerala 1832 (C. 1869A). 150 granthas. Malayālam.  
 Kerala 1833 (CM. 8E). 150 granthas. Malayālam.  
 Kerala 1834 (CM. 621A). 150 granthas. Malayālam.  
 Kerala 1835 (501A). 125 granthas. Malayālam. Incomplete.  
 Kerala 1836 (C. 2160A). 125 granthas. Malayālam. Incomplete.  
 Kerala 1837 (5848). 950 granthas. Malayālam. With the *bhāṣya* of Nilakantha. Incomplete.  
 Kerala 1838 (C. 157). 2100 granthas. Malayālam. With the *bhāṣya* of Nilakantha. Incomplete.  
 Kerala 1839 (C. 1415A). 3400 granthas. Malayālam. With the *bhāṣya* of Nilakantha. Incomplete.  
 Kerala 1840 (13259A). 1250 granthas. Malayālam. With the *bhāṣya* of Bhāskara. Incomplete.  
 Kerala 1851 (13305A). 850 granthas. Malayālam. With the commentary of Ghaṭigopa.  
 Kerala 1853 (C. 224A). 2000 granthas. Malayālam. With the commentary of Sūryadeva.  
 Kerala 1854 (C. 2121 C and D). 2000 granthas. Malayālam. With the commentary of Sūryadeva.  
 Kerala 1855 (C. 2320A). 2000 granthas. Malayālam. With the commentary of Sūryadeva.  
 Kerala 1856 (C. 2475). 2000 granthas. Malayālam. With the commentary of Sūryadeva.  
 Kerala 1857 (T. 24). 2000 granthas. With the commentary of Sūryadeva.  
 Kerala 1858 (C. 1828). 1950 granthas. Malayālam. With the commentary of Sūryadeva. Incomplete.  
 Kerala 1859 (C. 2160D). 450 granthas. Malayālam. With the commentary of Sūryadeva. Incomplete.  
 Kerala 1860 (10617). 1750 granthas. Malayālam. With the *Bhāṣya* of Parameśvara.  
 Kerala 1861 (C. 1363B). 1750 granthas. Malayālam. With the *Bhāṣya* of Parameśvara.  
 Kerala 1862 (L. 1334A). 1500 granthas. Malayālam. With a Keralabhāṣā.  
 Kerala 1863 (C. 2333). 2000 granthas. Malayālam. With a Keralabhāṣā.  
 Lucknow 520. A79A (45755).  
 Lucknow 520. A79A (45886).  
 Madras Univ. R.K.S. 52(a) (see NCC).  
 Mysore (1922) A 25. 73ff. With the commentary of Sūryadeva.  
 Mysore (1911 and 1922) B 573. 113ff. With the Telugu commentary of Virūpākṣa Sūri.  
 Mysore (1911 and 1922) C 859. 3ff.  
 Mysore and Coorg 261. With commentary in bhāṣā. Property of Mahādeva Joyisa of Srīgeri.  
 N-W P I (1874) 48. 4ff. Property of Pūrṇānanda Jotishi of Benares.  
 Oppert I 1208. Property of Vaṅkīpuram Śrinivāsācāryār of Tiruvallūr, Chingleput District.  
 Oppert I 4518. 125 pp. Grantha. Property of Kṛṣṇa Jyōyār of Pudukōṭa, Tanjore District.  
 Oppert I 7851. Property of Paravastu Veṅkaṭarāṅgācāryār of Viśākhapaṭṭanam, Vizagapatam District.  
 Oppert II 3107. Property of Taḍakamalla Veṅkaṭakṛṣṇarāyār of Tiruvallikēni, Madras District.  
 Oppert II 4486. Property of Saṅkarācāryasvāmīmaṭha of Srīgeri, Mysore.  
 Oppert II 6643. Property of P. Raṅgācāryār of Kumbhaghōṇam, Tanjore District.  
 Oppert II 9890. Property of Subbarāmasāstri of Mahādīnapuram, Trichinopoly District.  
 Oxford 769 (Wilson 539b). Ff. 49-55. Copied for Fitz-Edward Hall from a manuscript in the library of the Schore school, which is purported to be copied from a manuscript in Nepal. Incomplete (Daśagītikā and Gaṇitapāda only).  
 Peh 9 (see NCC).  
 PL. Buhler IV E 13. 6ff. Incomplete. Property of Hariśaṅkara Jośi of Ahmadābād.  
 Poleman 4669 (Library of Congress W 30) = Weber (A) 35, 10. 9 pp. Copied from Berlin 834. With the commentary of Bhūtiviṣṇu.  
 RAS (Add.) 13(c).  
 S01 9405.  
 S01 9929.  
 Sucīndram 156 (see NCC).  
 Sucīndram 157 (see NCC).  
 Tāmarakkāṭṭu Mana 59c (see NCC).  
 Trippūnītura I 1054 (see NCC).  
 Viśvabhārati 1352 (see NCC).  
 Editions:  
 Ed. H. Kern, Leiden 1875. With the *Bhāṣya* of Parameśvara. Based on IO 6271 and a now lost manuscript of Whish. Reprinted and translated into Hindi by Udaya Nārāyaṇa Singh, Madhurapur, Etawah 1906.  
 Ed. K. Sāmbaśiva Sāstri (I and II) and Suranad Kunjan Pillai (III). TSS 101, 110, and 185, Trivan-



drum 1930, 1931, and 1957. With the *Bhāṣya* of Nilakanṭha; omits the *Daśagītikā*. Based on two manuscripts at the University of Kerala and one belonging to the Rājā of Kilimanur.

Ed. Baladeva Mishra, Patna [1966]. With new Sanskrit and Hindi commentaries.

There is also an edition with vyākhyā in Malayālam script published at Trivandram; this is A2109 of the Mysore GOL.

#### Translations:

- Anonymous, *Zij al-Arjabhar* (ca. 800). Arabic.  
 Anonymous, 1860. Marāṭhī (see Bombay U. 334).  
 L. Rodet [1879b]. (Gaṇitapāda only). French.  
 G. R. Kaye [1908a]. (Gaṇitapāda only). English.  
 Baidyanath Rath Sastri, Chicago 1925 (unpublished thesis). English.  
 P. C. Sengupta [1927b]. English.  
 Walter Eugene Clark, Chicago 1930. English.

#### Discussions:

- C.M. Whish [1827a]; F.-E. Hall [1860]; W. D. Whitney [1860]; H. Kern [1865]; Bhāu Dāji [1865] 392-406 and 413-414; Y. Sarkār [1878]; L. Rodet [1880]; S. Dvivedin [1892] 2-7; S. B. Dikshīt [1896] 190-210; G. Thibaut [1899] 54-55; T. R. Pillai [1905]; G. R. Kaye [1908a]; [1909/10]; J. F. Fleet [1911a]; [1911f]; L. D. S. Pillai [1911] 2, 6, 8, 16-20(b), and 48-75; N. K. Mazumdar [1911/12]; J. F. Fleet [1915b]; P. C. Sengupta [1920/21]; R. Sewell [1921/22]; [1923/24a]; G. R. Kaye [1924]; A. A. K. Ayyangar [1926]; B. Datta [1926b]; S. K. Ganguly [1926b]; [1926c]; B. Datta [1927c]; S. K. Ganguly [1927a]; P. C. Sengupta [1929]; S. K. Ganguly [1930]; B. Datta [1932b]; P. K. Gode [1938]; S. N. Sen [1963]; and S. Prakash [1965] 419-449.

The first verse in the Gaṇitapāda is:

brahmakūśāśibudhabhṛguravikujagurukonabhagaṇān  
 namaskṛtya/  
 āryabhaṭas tv iha nigadati kusumapure 'bhyarcitam  
 jñānam//

The tenth in the Kūlakriyā is:

ṣaṣṭyabdnāṃ ṣaṣṭir yadā vyatītās trayas ca yugapādāh/  
 tryadhikā vipśatir abdās tadeha mama janmano 'tītāh//

And the fiftieth in the Golapāda is:

āryabhaṭīyaṃ nāmnā pūrvaṃ svayambhuvam sadā sa-  
 yam/  
 sukṛtāyusoḥ prañāśāḥ kurute pratikañcukam yo 'sya//

2. The ārdharātrika system. This system was expounded in a now lost work which was utilized by Bhāskara (fl. 629) and Brahmagupta (fl. 665); it probably also preceded and influenced the version of the *Sūryasiddhānta* produced by Lāṭadeva (fl. 505). For its parameters see P. C. Sengupta [1930]. For its influence

on the Sasanian and Islamic astronomy, see E. S. Kennedy [1958]; and D. Pingree [1962]; [1968a]; and [1968b].

#### ĀRYABHAṬA (fl. between ca. 950 and 1100)

Āryabhaṭa is the author of a *Mahāsiddhānta* = *Āryasiddhānta* which, besides summarizing a lost work of Parāśara, is alleged to depend on Śrīdhara (fl. between 850 and 1050) and is referred to by Bhāskara (b. 1114). Since the manuscripts are all from Gujarat, Rajasthan, Uttar Pradesh, and Bengal, it may be that Āryabhaṭa was a northerner. His work contains 18 adhyāyas in two sections:

- A. grahagaṇitādhyāya  
 1. madhyamādhyāya (61 vss.)  
 2. pārāsaramatādhyāya (17 vss.)  
 3. spaṣṭādihikāra (41 vss.)  
 4. tripraśnādihikāra (51 vss.)  
 5. candragrahaṇādhyāya (17 vss.)  
 6. sūryagrahaṇādihikāra (15 vss.)  
 7. śṛṅgonnatyadhikāra (8 vss.)  
 8. chedyakādihikāra (12 vss.)  
 9. udayāstādihikāra (8 vss.)  
 10. grahaacchāyādihikāra (8 vss.)  
 11. grahayutyadhikāra (11 vss.)  
 12. bhagrahayutyadhikāra (13 vss.)  
 13. pātādihikāra (14 vss.)

- B. golādhyāya (= golādihikāra)  
 14. praśnādihikāra (57 vss.)  
 15. pātyādhyāya (120 vss.)  
 16. bhuvanakośapraśnottarādhyāya (46 vss.)  
 17. praśnottarādihikāra (62 vss.)  
 18. kuṭṭakādhyāya (70 vss.)

For discussions see: F.-E. Hall [1860]; S. B. Dikshīt [1896] 230-234; G. R. Kaye [1910a] 289-292; J. F. Fleet [1912b]; and B. Datta [1926b]; and [1927c].

#### Manuscripts:

- Benares (1963) 35747. Ff. 1-18 and 21-25. Copied in Sam. 1656 = A.D. 1599. Incomplete (Golādhyāya only).  
 Bombay U 327. 28ff. Copied in Śaka 1576 = A.D. 1654. From Gujarat (see Bhāu Dāji [1865] 398, who reads Śaka 1676 = A.D. 1754).  
 Cambridge R.15.99. 41ff. Copied in 1814.  
 Oxford 770 (Wilson 538). 40 pp. Copied for Fitz-Edward Hall on Sunday 3 śuklapakṣa of Śrāvṇa in Sam. 1890 = 29 July 1832 from a manuscript belonging to Bāpū Deva Sūstrin of Benares, which was copied on 13 kṛṣṇapakṣa of Bhādrapada in Sam. 1872 = ca. 12 Sept. 1814 (see Cambridge R.15.99).  
 Bombay U 325. 14ff. Copied in Śaka 1782 = A.D. 1860 (see Paris BN 983).  
 Paris BN 983 (Sans. Dév. 278) II. 18ff. Copied for Bhāu Dāji on Tuesday purnimā of Phālguna in Śaka 1782 = 6 March 1860 (see Bhāu Dāji [1865] 398).

who reads Saka 1762 = A.D. 1840). Presented to BN by J. Mohl.

Baroda 9310. 31ff. Copied in Saka 1784 = A.D. 1862.

Bombay U 326. 30ff. Copied in Saka 1785 = A.D. 1863 from a manuscript written in Saka 1767 = A.D. 1845 (should one read Saka 1676 = A.D. 1754? see Bombay U 327).

Baroda 3102. 38ff. Copied in Saka 1791 = A.D. 1869.

Bombay U 328. 55ff. Copied in Saka 1791 = A.D. 1869.

AS Bengal 6828 (G 4178). 51ff.

AS Bengal 6829 (G 968) = Mitra, Not. 1568. 37ff.

AS Bengal 6830 (G 7871). 38ff.

Baroda 9835. 17ff.

Berlin 1731 (or. fol. 981e). 45ff.

BORI 5 of 1869/70. 46ff.

Calcutta Sanskrit Coll. 16. 22 ff. Incomplete (Golādhikāra only).

Oxford 771 (Wilson 539a), ff. 1-48. Copied for Fitz-Edward Hall from a manuscript in the library of the Sehore school which was copied from a manuscript in Nepal. Incomplete (ends at sixth verse of adhyāya 15).

SOI 9373. Incomplete (Golādhyāya only).

The *Mahāsiddhānta* was edited with his own Sanskrit commentary by MM. Sudhākara Dvivedin, BSS 148-150, Benares 1910 on the basis of four manuscripts: (1) one brought by Vināyaka Sāstrin from Udayapura to Benares, which was copied in Sam. 1950 = A.D. 1893 from a manuscript copied by Govinda on Wednesday 11 śuklapakṣa of Kārttika in Saka 1567 = 30 October 1644; (2) a manuscript in the Asiatic Society of Bengal (AS Bengal 68297); (3 and 4) two manuscripts of his own.

The first verse of adhyāya 1 is:

vividhakhagāgamapāṭikūttakabijādidṛṣṭasāstrena/  
āryabhaṭena kriyate siddhānto rucira āryābhīh//

The last two verses of adhyāya 13 are:

evam paropakṣtaye svoktyoktam khecarānayanam/  
kiñcit pūrvāgamasamam uktaṃ viprāḥ paṭhantv idam  
nānye//  
vṛddhāryabhaṭapṛoktāt siddhāntād yan mahākālāt/  
paṭhair gatam ucchedam viśeṣitam tan mayā svoktyā//

ĀRṢṬIṢĒNA (fl. before 1400)

An authority on astrology who is first cited by Sivaraṅga (fl. between 1400 and 1480) in his *Jyotiribandha*.

ĀSĀDHARA

Author of a *Jātakavallī*. Manuscripts:

VVRI 6927. 10ff. Copied in Sam. 1861 = A.D. 1804.

Verse 383 is:

guruprasādām samavāpya samyagvijñātātattvaḥ sakalā-  
gamānām/  
āsādharaḥ sarvavidām varīṣṭhaś cakre kavir jātakakal-  
pavallim//

ĀSĀDHARA (fl. 1132).

The son of Rihluka, the son of Vatsa, the son of Viṣṇu, the son of Bhānu of the Mudgalagotra, Āsādhara wrote a *Grahañāna* = *Grahaṅgita* = *Brahmatulyānāyana* = *Bhaumādiṣṭācagrahānāyana* = *Kṣānikagrahānāyana* = *Āsādhara* in 30 verses with tables based on the *Brahmasphuṣasiddhānta* (628) of Brahmagupta in Saka 1054 = A.D. 1132; it is possible that his father Rihluka is identical with the Rihliya cited by Āmarāṅga (fl. ca. 1200) in his commentary on the *Khayṣakhādya*. An expanded version of the *Grahañāna* was written by Harihara (fl. ca. 1575). Manuscripts:

IO 2922 (2464b). 5ff. Copied by Nilakaṅṭha, the son of Nārāyaṇa of the Girinārāyaṇa family on Monday 13 kṛṣṇapakṣa of Āṣāḍha in Sam. 1694, Saka 1559 = 10 July 1637. From Gaikawar.

IO 2923 (2464c). 5ff. Copied by Josi Vidyādhara of the Girinārāyaṇa family in ca. 1650. (*Grahasūriṇī* only). From Gaikawar.

RORI Cat. I 257 = RORI 257. 1 f. Copied in Sam. 1708 = A.D. 1651. (*Bhaumādigrahaspaṣṭavidhi*).

Baroda 7635 (a). 1 f. Copied in Sam. 1835 = A.D. 1776. (*Kṣānikagrahānāyanavyākhyā* of Āsādhara Tripaṭhin).

Ānandāśrama 5417. (*Āsādhara*).

Anup 4946. 2ff. (*Bhaumādiṣṭācagrahānāyana*).

Dāhīlakṣmī XXXIII 59 (see NCC, vol. 2, p. 193).

(*Brahmatulyānāyana*).

LDI 6674 (5780). 1 f. (*Āsādhara* of Ihlaka!).

PL, Buhler IV E 63. 4ff. Property of Mayādhara Muralidhara of Mehmādābād. (*Grahaṅgita*).

RAS (Tod) 36c. 17ff.

The first verse and a half are:

brahmeśacyutaṇḍravitsitaravikṣoṇisutejyārkaḥ  
nakṣatrāṇi sarasvatīm gaṇapatīm natvā pṛthag bhak-  
titaḥ/  
śrībrahmoktapariṣphuṭopakarāṇair bhaumādayo yādṛśās  
tattulyānāyanaṃ bravimi sukhadaṃ mandāsūpātair  
vinā//  
śāko 'bhibhānapadaśabhīr vīyuto 'hato 'śvi-  
bhāṇaiḥ pṛthag śasīnavāṣṭāṅpāptahīnaḥ//

Verses 28-30 are:

āsīd ṛṣīḥ sannihitādhivāsī śrīmudgalo brahmavidāp  
varīṣṭhaḥ/  
tasyānvyave vedavidāp varīṣṭhaḥ śrībhānūnāmā ravivat  
prasiddhaḥ//  
tasyotpannaḥ prathamatanāyo viṣṇunāmā maṇiṣi  
vede śāstre 'pratihatamatis tasya putro babhūva/  
śrīvatsākhyo dhanapatir asau kalpavṛkṣopamānas  
tasyaiko 'bhūt pravaratānāyo rihlukākhyah sa vidvān//  
tasyādyasūnur gaṇakābjabhānur āsādhara viṣṇupadām-  
busaktaḥ/  
vedottamāṅgaṃ bahusāstrasāraṃ cakre daivajāhitāya  
śāstram//

**ĀSĀNANDA**

Author of a *Siddhāntasāra*. Manuscripts:  
LDI (LDC) 4112. 44ff. (Āsānanda).

**ICCHĀRĀMA**

Author of a *Pālisaraṭṭavicāra*. Manuscripts:  
IM Calcutta 1238 (see NCC, vol. 2, p. 245).

**INDRA**

First cited as an authority on astrology by Varāhamihira (fl. ca. 550) in his *Bṛhatsaṃhitā* (85,1). This is perhaps the I.n.d.y (reading I.n.d.r) of Ibn al-Nadīm (*Fihrist*, p. 271 Flügel).

**INDRAJIT**

Author of a work on divination by letters, the *Indrajīkerālī*, in 207 verses. Manuscripts:

Mitra, Not. 2240. 18ff. Bengālī. Property of Rāmacandra Bhaṭṭācārya, Brāhmaṇīkuṇḍā, Zillā Rāṅgpur.

**INDRADATTOPĀDHYĀYA**

The son of Kṣemāvatidevī and of Lālamaṇi Upādhyāya, the son of Mohanalāla, the son of Muralīdhara of the Gargagotra, Indradatta wrote, among other works, a commentary (dīdhīti) on the *Jyotiṣaratnamālā* of Śrīpati (fl. 1040). Manuscripts:

AS Bengal 2680 (see NCC, vol. 2, pp. 251-252).

**INDRAVĀMADEVA**

Jaina author of a *Trailokyadīpaka* based on the *Trailokyāsāra* of Nemicaṇḍra (fl. ca. 975). He wrote this for Nemideva of the Puravāṭa (i.e., Prāgavāṭa) family. It contains three adhikāras:

1. adholakavyāvārṇana (206 vss.)
2. madhyalokavyāvārṇana (6167 vss.)
3. (description of the upper world) (425 vss.)

Manuscripts:

BORI 603 of 1875/76. 86ff. Copied in Sam. 1793 = A.D. 1736. From Jaipur.

BORI 506 of 1884/86. 82ff.

BORI 942 of 1892/95. 81ff.

BORI 740 of 1899/1915. 22ff.

Chani 698. Property of Kantivijayaji Maharaj of Chani, near Baroda (see Velankar p. 165).

CP, Hiralal 7364. Property of the Senagaṇa Jain mandir at Kārañjā, Akolā District.

CP, Hiralal 7365. Property of Balātkāragaṇa Jain mandir at Kārañjā, Akolā District.

CP, Hiralal 7366. Property of Balātkāragaṇa Jain mandir at Kārañjā, Akolā District.

Florence 460. 96ff.

Hamsa 31. Property of Hamsavijayaji Maharaj; at Kantivijaya Bhandar at Baroda (see Velankar).

Idar A. 19. Property of the Dīgambar Bhandar at Idar, Ahmadabad District (see Velankar).

IO 7530 (2583). 85ff. From Colin Mackenzie.

Lal. 79. Property of the Lalitakīrti Bhandar at Ajmer (see Velankar).

Lal. 336. Property of the Lalitakīrti Bhandar at Ajmer (see Velankar).

Mysore and Coorg 2884. 2000 granthas. Karṇāṭakī. Property of the Jaina Maṭha, Śravaṇa Beḷgoḷa. Incomplete.

SG 24. Property of the Pannalal Jain Sarasvatī Bhavana at Bhuleśvara, Bombay (see Velankar).

SG 2022. Property of the Pannalal Jain Sanskrit Bhavana at Bhuleśvara, Bombay (see Velankar).

Tera 12. Property of the Tera Panthi Bada Bhandar at Jaipur (see Velankar).

Tera 15. Property of the Tera Panthi Bada Bhandar at Jaipur (see Velankar).

Tera 20. Property of the Tera Panthi Bada Bhandar at Jaipur (see Velankar).

Verses 8-9 of the first adhikāra are:

puravāṭavamaśabbhūṣaṇajotanayasya nemidevasya/  
abhyarthanayārabdhō grantho 'yaṃ bhavyabodhāya//  
atha pañca gurūn natvā vakṣya saṃskṛtabhūṣayā/  
trailokyasūram ālokyā grantham trailokadīpakam//

The first two colophons read: itindravāmadevaviracite puravāṭavamaśaviśeṣakāśrīnemidevasya yaśahprakāśake trailokapradīpake . . . .

**ISĀNADATTA**

See Nāhṇidatta.

**ISVARA (fl. ca. 1375)**

Author of a *Kāraṇakāñṭhīra* or *Kāraṇakesarī* composed at Kollamburapura under Firūz Shāh (1351-1388). Manuscripts:

Anup 4456. 26ff. Copied by Lakṣmīdhara in Śaka 1465 = A.D. 1543.

**ISVARADĀSA (fl. 1663)**

The son of Jyotiṣarāya Keśavaśarmaṇ, the son of Kaṃharaśarmaṇ of the Vatsagotra, Isvaradāsa belonged to a family of Kānyakubja Brāhmaṇas residing at Kālīñjara in Bundelkhand. He completed his *Muhūrtaratna* in 27 chapters on Sunday 11 śuklapakṣa of Kārttika in Śaka 1585 = 1 November 1663. See M. M. Patkar [1938a] and [1938b] 174. The chapters are:

1. saṃvatsara
2. tithi
3. vāra
4. nakṣatra
5. yoga
6. kāraṇapraviṣṭi
7. muhūrta
8. upagraha
9. saṅkrānti
10. gocara
11. candratārādīsthala

12. lagna
13. saṃskāra
14. samayaśuddhi
15. mahādoṣanirūpaṇa
16. vratabandha
17. samāvartana
18. churikā
19. vivāha
20. vadhūpraveśa
21. rājyābhīṣeka
22. yātrā
23. vāstu
24. grhapraveśa
25. devapratīṣṭhā
26. Genealogy of Aurangzeb (1659-1707)
27. svasthānagotravarṇana

## Manuscripts:

- Kathmandu (1960) 350 (I 1173). 154ff. Nevāri.  
Copied on 14 śuklapakṣa of Jyeṣṭha in Nepāla Saṃ.  
861 = 27 May 1740.
- BORI 842 of 1884/87. 148ff. (f. 147 missing). Copied  
in Saṃ. 1868 = A.D. 1811. From Gujarat.
- Benares (1963) 36408. 84ff. Copied in Saṃ. 1885 =  
A.D. 1828.
- Alwar 1909. Two copies.
- Anup 4998 = Bikaner 686. 66ff.
- AS Bengal 2724 = Mitra, Not. 1694. 84ff.
- BORI 177 of A 1883/84. 69ff.
- CP, Hiralal 4300. Property of Ayodhyābhāṭṭa of Hardā,  
Hoṣāṅgābād District.
- Dāhilaṅkṣmī XXXIII 14 (see NCC, vol. 2, p. 275).  
LDI (LDC) 4666. 68ff.
- Tokyo U 325. Ff. 1 and 31. Nevāri.

The first five verses of the twenty-seventh chapter are:

kālīñjaragirau rāmye kānyakubjadvijāgrāñḥ/  
vātsyaḥ kaṃharaśarmāsīd yajñakṛd vedapāragah//  
tasmāt keśavaśarmābhūt khyātas triskandhavigramah/  
gajāśvarathasamgrāmair yo 'rcitaḥ syān nṛpottamañḥ//  
so 'yaṃ jyotiṣarāyākhyo jahāñgīrāvanipateḥ/  
svagūdhaprasnasamvādair lebbe praśnavīdāṃ varaḥ//  
tulāpramukhadāneṣu yas tv asaṃkhyavasūni vai/  
viprasāskṛtavān kāle nārūyanaparāyaṇah//  
tajjas tv īśvarādāsākhyo vyavahāraavidāṃ mude/  
grantham muhūrtaratnākhyam kṛtvā cakre śivārpa-  
nam//

The last verse is:

pañcāṣṭavāṇendugate śakābde viṣṇuprabodhe 'hani  
sūryavāre/  
sāmpūrṇam āsīt tu muhūrtaratnam praṣthe maghonas tv  
avaraṅgarāje//

## ĪSVARAMISRA (=ĪSVARA)

Author of a commentary, *Dīpikā*, on the *Laghujātaka*  
of Varāhamihira (fl. ca. 550). Manuscripts:

- Benares (1963) 35277 = Benares (1897-1901) 841. Ff.  
1 and 3-67. Copied in Saṃ. 1828 = A.D. 1771. Incom-  
plete (only on adhyāya 13; rest by Bhaṭṭotpala).  
IO 3071 (1122c). 36ff. Copied by Agnihotrīn Śivadatta  
in 1799. From H. T. Colebrooke.
- IO 3072 (2295). 33ff. Copied from IO 3071 in 1813.  
From Calcutta.
- VVRI 1356. 31ff. Copied in Saṃ. 1879 = A.D. 1822. The  
*Laghujātaka* is ascribed to Īśvara, the *Dīpikā* to  
Bhaṭṭotpala.
- AS Bengal 7278 (G 5554). 34ff. Copied by Vidyādharma  
on Wednesday 7 Māgha Saṃ. 1914 = 20 January  
1858.
- Oudh XIX (1887) VIII 1. 48 pp. Copied in 1872.  
Property of Gaṅgādharma Vājapeyin of Unao Zila.
- LDI (LDC) 3316/1. 21ff. Copied in Saṃ. 1932 = A.D.  
1875.
- Oudh XIX (1887) VIII 2. 80ff. Property of Śaktidhara  
of Hardoi Zila.
- Udaipur II 186. 19. Property of the Library of Nāthad-  
vāra, Udaipur (see NCC, vol. 2, p. 273).

The concluding verse of the *Dīpikā* is:

laghujātakabhāvārthadīpikā tv īśvaroditā/  
ādhanaprasavāriṣṭayogādīnām prakāśikā//

## UTTAMANĀTHA

Author of a *Jyotiṣasaṅgraha* or *Laghusaṅgraha*.  
Manuscripts:

- Allahabad 27 (see NCC, vol. 2, p. 298) (*Jyotiṣasaṅgra-  
ha*).
- Benares (1963) 36525. 33ff. (*Laghusaṅgraha*).

## UTTAMAVIJAYA

Author of a *Pañcavākyīśakunāvālī* in Gujarātī.  
Manuscripts:

- LDI (MPC) P/8263. 5ff. Copied in Saṃ. 1881 = A.D.  
1824.

## UTPALA

See Bhaṭṭotpala (fl. 966).

## UDAYADIVĀKARA (fl. 1073)

Known as Jyautīṣikabhāṭṭa, Udayadivākara was the  
author of a commentary, *Sundarī*, on the *Laghubhā-  
sārīya* of Bhāskara (fl. 629). Manuscripts:

- Baroda 13330. 92ff. Grantha.
- Kerala—(GD 942). 50ff. Malayālam (see S. N. Sen  
[1966] 250).
- Kerala—(GD 943). 92ff. Malayālam (see S. N. Sen  
[1966]).
- Kerala—(GD 944). 120ff. Malayālam (see S. N. Sen  
[1966]).
- Kerala—(GD 945). 160ff. Malayālam (see S. N. Sen  
[1966]).
- Kerala—(GD 977). 143ff. Malayālam (see S. N. Sen  
[1966]).

Kerala—(TCD 761) (see NCC, vol. 2, p. 326).

Kerala—(TCD 762) (see NCC).

Lucknow. Manuscript formerly belonging to A. N. Singh (see K. S. Shukla, ed., *Laghubhāskariya*, Lucknow 1963, p. i).

**UDAYAPRABHA SŪRI** (fl. 1221/43)

A Jaina of the Nāgendra-gaccha, Udayaprabha was the pupil of Vijayasena (died 1245; see B. J. Sandesara [1953] 69-70), the pupil of Haribhadra, the pupil of Ānanda and Amaraçandra who were contemporaries of Jayasīma Siddharāja (fl. ca. 1093-1143) and pupils of Śāntisūri, the pupil of Mahendraprabhu (see BORI 1886/92, pp. xiii-xiv) and a member of the literary circle of Vastupāla (died 1 January 1240) who was minister from 1220 to the Vāghela Lavanaprasāda and Viradhavala (died 1238). Udayaprabha wrote many poems, praśastis, and commentaries between 1221 and 1243; the details are given in B. J. Sandesara [1953] 71-72 *et passim*. Two of his praśastis of Vastupāla can be found in *Sukṛtakīrtikāloḍḍyādi Vastupālapraśasti-saṅgraha*, *SJS* 5, 1961, pp. 1-20; his *Dharmābhyudaya* is edited in *SJS* 4, Bombay 1949. His work on astrology is entitled *Ārambhāsiddhi = Pañcavimāśā* in 412 verses and 5 chapters. Aside from anonymous commentaries, an avacūrṇi was written by Samayaratna Gaṇi and a vārttika by Hemahamṣa Gaṇi (fl. 1458). Manuscripts:

LDI 6667 (5310). 9ff. Copied in Stambhatīrtha in Sam. 1480=A.D. 1423.

LDI 6668 (3241). 8ff. Copied in Mūhijagapura in Sam. 1488=A.D. 1431.

BORI 1354 of 1891/95. 8ff. Copied in Sam. 1500=A.D. 1443.

Anup 4818. 15ff. Copied by Harṣakīrti in Sam. 1637=A.D. 1580. (*Pañcavimāśā*).

BM 485 (Or. 2139). 222ff. Copied by Sāmala Tejasāgara in Dhanadapura on Wednesday in kṛṣṇapakṣa of Śrāvāṇa in Sam. 1638=July/August 1581. With the vārttika of Hemahamṣa.

PL, Buhler IV E. 11. 166ff. Copied in Sam. 1639=A.D. 1582. Property of Uttamarāma Jośi of Ahmadābād.

Benares (1963) 37093. Ff. 16-34. Copied in Sam. 1649=A.D. 1592.

RORI Cat. I 3448=RORI 3448. 118ff. Copied on Saturday 6 śuklapakṣa of Caitra in Sam. 1662=16 March 1605. With the vārttika of Hemahamṣa.

BM 487 (Or. 5199)=Jacobi. 14ff. Copied by Nayavijaya Gaṇi and dedicated by his pupil, Jasavijaya, in Sam. 1665=A.D. 1608.

Florence 279. 10ff. Copied in Sam. 1680=A.D. 1625.

LDI\* (LDC) 4921. 16ff. Copied in Sam. 1714=A.D. 1657.

Baroda, Pra. Śrī. Kām. Vi. Sam. Śāstra Saṅgraha. Copied by Rāghava, the son of Govyanda, for muni Saubhāgya in Sam. 1715=A.D. 1658 (see Praśasti (1), vol. 2, p. 222).

Surat, Jaina Ānanda Pustakālaya. Copied by Mānavijaya muni, a companion of Kāntivijaya and of Har-

ṣavijaya Gaṇi, and a pupil of Guṇavijaya Gaṇi, in Sam. 1727=A.D. 1670 (see Praśasti (1), vol. 2, p. 239).

LDI 6669 (1017). 134ff. Copied in Sam. 1964=A.D. 1907. With the vārttika of Hemahamṣa.

LDI (LDC) 3870. 126ff. Copied in Sam. 1964=A.D. 1907. With the vārttika of Hemahamṣa.

Agra 2997-2999 (5 MSS). Property of the Vijayadharmā Lakṣmī Jñānamandira at Belan Ganj, Agra (see Velankar, p. 31).

Ahmadabad, Bhandar of the Vimāla Gaccha Upasraya 1 (17) and 3 (7; 15; 42; and 43) (5 MSS.) (see Velankar).

AS Bengal 6980 (G 7026). Ff. 1-18 and 20. Incomplete.

AS Bengal Jaina 7606.

Baroda 2728. 166ff. With the vārttika of Hemahamṣa.

Baroda 2729. 150ff. With the vārttika of Hemahamṣa.

Baroda 7194. 12ff. With the vārttika of Hemahamṣa. Incomplete.

Berlin 1741 (or. fol. 679). 154ff. With the vārttika of Hemahamṣa.

Bikaner, Mahimabhakti Bhandar 69 (see Velankar).

BM 486 (or. 2140a). 9ff. With an avacūrṇi (of Samayaratna Gaṇi?).

Bombay, Seth Manekchand 32 (see Velankar).

BORI 599 of 1871/72. 70ff. With the vārttika of Hemahamṣa.

BORI 410 of 1871/72. 19ff. Incomplete (*Pañcavimāśā*).

BORI 1338 of 1884/87. 98ff. With a ṭikā (of Hemahamṣa?).

BORI 874 of 1886/92. 9ff.

BORI 769 of 1895/1902. 138ff. With the vārttika of Hemahamṣa.

BORI 770 of 1895/1902. 92ff. With the vārttika of Hemahamṣa.

Chāṇi, Svetāmbara Jñāna Mandira 87; 320; 997; 1028; 1363; 1540; 2044; 3105; 4012 (nine MSS.) (see NCC, vol. 2, p. 137).

Chāṇi, Kāntivijaya Maharaj 990 (see Velankar).

Dāhilakṣmī XIX 15 (see NCC).

Dela Upāsraya Bhandar, Ahmadabad (ground floor) 67 (30-32; 76) (3 MSS.) (see Velankar).

Dela Upāsraya Bhandar, Ahmadabad (first floor) 24 (155-159) (5 MSS.) (see Velankar).

Florence 280. 9ff.

Florence, Jain II.1.2 (see NCC).

Idar 156. Property of the Digambar Bhandar. (*Lagna-parikṣā* only) (see Velankar).

Jain Bhandars of the Panjab I 209-211 (3 MSS.) (see NCC).

Jaipur, Inner Bhandar of Harisāgaragaṇi 59 (2c) (see Velankar).

Jaipur, Bhagavandas Jyotisi (see Velankar).

LDI 6666 (5996/1). Ff. 1A-6A.

LDI 6670 (8880). Ff. 3-154. With vārttika of Hemahamṣa.

LDI 6671 (5893). 19ff. With vṛtti.

- LDI (LDC) 4751. Ff. 111-121. With vṛtti.  
 Leumann 61 (fragment).  
 Leumann 111. ff. (extracts from BM 485 and 486).  
 Oxford 1541 (Sansk. d 184) = Hultsch 279. 20ff.  
 Oxford 1542 (Sansk. d 185) = Hultsch 278. 3ff.  
 Pattan, Agali Sheri 49, 22 (see Velankar).  
 Pattan, Khetaravasi Bhandāra 18 (1). Ff. 2-120. Incomplete (Pattan p. 279).  
 Pattan, New Sangha Bhandar 3, 6 (see Velankar).  
 Pattan, Pophliāno Pāḍo 41, 6. 104ff. (BORI 1883/84 p. 185).  
 Pattan, Pophliāno Pāḍo 41 mo, 69. 143ff. (BORI 1883/84 p. 241).  
 Pattan, Pophliāno Pāḍo 41 mo, 70. 9ff. (BORI 1883/84 p. 241).  
 Pattan, Pophliāno Pāḍo 49 mo, 49. 22ff. (BORI 1883/84 p. 248).  
 Pattan, Pophliāno Pāḍo 49 mo, 51. 89ff. (BORI 1883/84 p. 248).  
 Pattan, Sangha Bhandar 73, 17 (see Velankar).  
 Pattan, Sangha Bhandar 79, 46 (see Velankar).  
 Poleman 4946 (Smith Indic M.B.) XLII ff. (see SATIUS p. 30b).  
 Poleman 4958 (Harvard 1012). Ff. 2-30 (31) and 32-144. With vārttika of Hemahansa.  
 RORI Cat. I 3449=RORI 3449. Ff. 1-3 and 5-9. Incomplete (*Lagnaparikṣā* only).  
 RORI Cat. II 5927=RORI 5927. 14ff. With avacūri.  
 RORI Cat. II 5938=RORI 5938. 97ff. With vārttika of Hemahansa.  
 RORI Cat. II 8598. Ff. 2-50. With vārttika of Hemahansa.  
 Surat, Adinatha Temple Library (see Velankar).  
 Surat, Devchand Lalbhai Pustakodhar Fund Library (see Velankar).  
 Surat, Jainānanda Bhandar 108 and 210 (2 MSS.) (see Velankar) (one of these is the manuscript dated A.D. 1670).  
 Surat, Mohanlal Bhandar 2 (165) (see Velankar).  
 Wien (Univ) 95. (= Vienna 157 see NCC).  
 Viśvabhāratī 1497 (see NCC).  
 The *Ārambhasiddhi* was published by the Nirnayāsāgara Press, Bombay 1918 (IO San. D. 134), and by the Jain Śāsana Press, Bhavnagar (N.D.) (see Velankar). Both editions include the vārttika of Hemahansa.
- UDAYASĀGARA**  
 Jaina author of a commentary (*Bālāvabodha*) on the *Kṣetrasamāsa* of Ratnaśekhara Sūri (see Velankar p. 100).
- UDAYĀDITYA**  
 Author of an udāharaṇa on a *Yantracintāmaṇi*. Manuscripts:  
 LDI 7155 (1264). 13ff.
- UDUMBARA MAHĀDEVA**  
 See Mahādeva (fl. 1876).

**UPAYOGIN (?)**

Author of a work called simply *Jyotiṣa*. Manuscripts:  
 DC 1758. 2ff.

**UPENDRA (fl. ca. 1525)**

The son of Lakṣmidāsa Mīra (fl. 1501), the son of Vācaspati Mīra, the son of Keśava of the Upamanyugotra, Upendra wrote a *Sakunapradīpacūḍāmaṇi* in 7 adhyāyas. Manuscripts:

RORI Cat. II 4657=RORI 4657. 12ff. Copied by Chabilarāma at Argalāpura on Sunday 8 kṛṣṇapakṣa of Jyeṣṭha in Saṃ. 1799=13 June 1742.

The colophon reads: iti śrīśākulavarddhanaśrīvācaspatīputraśrīmīśralakṣmīdāsātmajopendraviracite śakunapradīpacūḍāmaṇau. . . .

**UPENDRĀCĀRYA**

Author of an astrological text entitled *Jinendramālā* which was translated into English by N. Chidambaram Iyer, Madras 1890 (Emeneau 3167).

**UMĀNĀTHA**

Author of a *Praśnapārijāta*. Manuscripts:  
 Mithilā (see NCC, vol. 2, p. 390).

**UMĀPATI**

Author of a ṭikā on the *Jyotiṣaratnamālā* of Śrīpati (fl. 1040). Manuscripts:

N-W P I (1874) 189. 25ff. Property of Gaṇeśa Rāma of Benares.

**UMĀSĀṆKARA**

Author of a *Jyotiṣārṇava*, published in Bombay; a copy is B 1683 in the Mysore GOL.

**UMĀSVĀTĪ VĀCAKA (fl. first century A.D.)**

This famous Jaina author, born at Nyagrodhikā to Svāti and Vātsi and known as Gr̥dhrapiccha, composed at Pāṭaliputra among other works a *Tattvārthadhigamasūtra*, of which chapters 3 and 4 deal with cosmography and geography, and a *Kṣetrasamāsa* = *Jambūdvīpasamāsa* on the same subjects. Manuscripts and commentaries will be found listed in Velankar along with the editions (pp. 154-157 for the *Tattvārthadhigamasūtra*, pp. 98 and 131-132 for the *Kṣetrasamāsa* = *Jambūdvīpasamāsa*). Umāsvāti is mentioned here because of his having been used by W. Kirfel [1920] 208-339 and in various articles by B. Datta. There are commentaries on the *Kṣetrasamāsa* by Vijayasimha (fl. 1158) and on the *Tattvārthadhigamasūtra* by Umāsvāti himself (Velankar p. 155). Vādigajagandhastin Siddhasena Divākara, Siddhasena Gaṇi, Haribhadra and Yaśobhadra, Nāgara Vācaka, Malayagiri, Yaśovijaya Upādhyāya, Samantabhadra, Devanandin Pūjyapāda, Akalaṅka, Padmanābha, Vidyānandin.

Yogadeva, Prabhācandra, Śrutasaṅgāra, Bālacandra, Jayanta Paṇḍita, Bhāskaranandin, Kamalakīrti, Divākarabhaṭṭa, Māghanandin, Vibudhasena, Lakṣmīdeva, Subhacandra, Yogīndradeva, Devidāsa, Ravinanda, Padmakīrti, Kanakakīrti, Rājendra Maulin, Śivakoṭi, Ratnasīṃha, and Prabhācandra.

#### UŚANAS

See Bhṛgu.

#### RṢABHA

An astrologer mentioned by Varāhamihira (ca. 550) (*Bṛhasaṃhitā* 85.1) as having summarized the views of Śakra (= Indra), Sukra (= Bhṛgu), Vāgīśa (= Bṛhaspati), Kapīṣṭhala, Garutmān, Bhāguri, and Devala on śakuna:

yac chakraśukravāgīśakapīṣṭhalagarutmatām  
matebhyah prāha ṛṣabho bhāgurer devalasya ca

See P. V. Kane [1948/49] 15.

#### RṢI

Presumably the correct transliteration of the Arabic A.r.s.ā, an astrologer frequently cited in texts of the late eighth century and of the ninth.

#### RṢIPUTRA

An astrologer first mentioned by Varāhamihira (ca. 550), and one whose ślokas are often cited by Bhaṭṭopala (fl. 966) and others. See P. V. Kane [1948/49] 15-16. He quotes Atri, Parāśara, Vasīṣṭha, Aṅgīras, Garga, Devala, Bṛhaspati, Uśanas, Gautama, and Bhārgava. According to CC, vol. 1, p. 75 he is Krauṣṭhiki, the son of Garga and an interlocutor in the *Gargasamhitā*.

#### RṢISARMAN

Author of an astrological treatise entitled *Jñānamāñjarī*. Is he the same as Gadādhara? Manuscripts:

LDI 6892 (4688). 11ff. Copied by Kalyāṇasurindara in Jāvālapura for Labdhisundara in Sam. 1703 = A.D. 1646 (*Jñānamāñjarīkevalikā* of Rṣindra).

Anup 4665. 25ff. Copied by Udayakalyāṇa at Bikānera in Sam. 1743 = A.D. 1686.

Benares (1963) 36565 = Benares (1897/1901) 605 A. 21ff. Copied in Sam. 1834 = A.D. 1777 (date of copying not given in Benares (1963)).

RORI Cat. II 4464 = RORI 4464. 26ff. Copied by Govardhananātha at Jayapura during the reign of Jayasīṃha III (1819-35) in Sam. 1878 = A.D. 1821. Benares (1963) 36455 = Benares (1903) 1133. 22ff. Copied in Sam. 1884 = A.D. 1827.

Poleman 4671 (U Penn 1729). 23ff. Copied in Sam. 1925 = A.D. 1868. Incomplete (ends with akṣarapraśnavidyā).

Anup 4664 = Bikaner 648. 29ff. Owned (or copied) by Pokarādāsa.

Anup 4666. 11ff. Incomplete.

Baroda 8745. 9ff. Incomplete.

Benares (1963) 35803 = Benares (1913/14) 2334. 17ff. Incomplete.

Benares (1963) 37364. Ff. 2-35. Incomplete (ends with akṣarapraśnavidyā).

CP, Kielhorn XXIII 38. 21ff. Property of Anantarāma Vaidya of Śāgar.

Jammu and Kashmir 2911. 20ff. Copied from a manuscript written in Śaka 1750 = A.D. 1828.

Jammu and Kashmir 2914. 2ff. Incomplete (through jīvabhedaprakaraṇa).

Kotah 295. 21 pp.

Kotah 314. 13 pp.

Oudh XX (1888) VIII 119. 40 pp. Property of Pratāpa Nārāyaṇa of Allahabad Zila.

SOI 6512 = List 513.

The first verse is:

ajñānatimirāndhasya jñānāñjanasālākayā/  
cakṣur unmlītaṃ yena tasmai śrīgururve namaḥ//

The colophon in Poleman 4671 is: iti śrīṣiśarmācārya-  
viracitāyāṃ jñānamāñjarīyāṃ

#### EKANĀTHA

Author of a *Muhūrtanicaya*. Manuscripts:

Benares (1963) 36848. Ff. 1-3 and 5-24.

Kavindrācārya 810 (no author mentioned).

#### EKANĀTHA

The son of Caṇḍika of the Kauṇḍinyagotra and resident of Vāripuri on the Godā (or Godāvaripuri?). Ekanātha wrote a *Gaṇakaparakāśa* based on the Brāhma, Ārya, and Saura pakṣas in 9 adhyāyas and 74 verses. The adhyāyas are:

1. dhruvakasiddhi (15 vss.)
2. pañcāṅgasādhana (10 vss.)
3. grahaspaṣṭīkarāṇa (11 vss.)
4. laṅgeṣṭakālanatannatacarakhaṇḍacaravadeśodaya-sādhana (17 vss.)
5. dvādaśabhūvasādhana (7 vss.)
6. candragrahaṇasādhana (5 vss.)
7. sūryagrahaṇasādhana (5 vss.)
8. valanaparīlekhanādhyaīya (3 vss.)
9. mahāpātādhyaīya (3 vss.)

Manuscripts:

AS Bombay 228. 6ff. Copied (in 1865?) from a manuscript written on Friday 11 śuklapakṣa of Bhādrapada in Śaka 1543 = 17 August 1621. From Bhāu Dāji.

III Oxford Stein 261e (cxliv). Ff. 4v-6. Śārādā.

The first verse is:

natvāyutatrinayanārkaśivāgāṇeśān  
pañcāṅgasūryaśaīparvakhaṅgapaśādhyaī/

brahmāryasauramatatulyam ahaṃ karomi  
khalv ekanāthagaṇako gaṇakaprakāśam//

The last verse reads:

āsīd kauṇḍīnyagotre gaṇakagaṇavaras caṇḍikākhyāta-  
nāmā  
godāyāṃ varipuryāṃ sujanabudhajanair mānito bhūpa-  
pūjyāḥ/  
tajjāḥ siddhāntasāragāṇakamatamatam caikanāthābhī-  
dhānas  
cakre tantram vicītram śīsumatitadam maṇḍanam  
paṇḍitānām//

**EKANĀTHA** (fl. 1370)

The son of Śārṅga and the brother of Viṣṇu, Eka-  
nātha apparently lived at Mahāṇḍanagara. He wrote a  
ṭīkā on the *Karāṇakutūhala* of Bhāskara (1183) in  
which he mentions Śaka 1286, 1288, 1290, and 1291 =  
A.D. 1364, 1366, 1368, and 1369. Manuscripts:

Baroda 9297. 76ff. Copied in Śaka 14(5)4 = A.D.  
15(3)2. (*Brahmatulyabhāṣya*)  
Leipzig 969. Fl. 2-7, 9-10, 12-33, and 51-88. Copied in  
1647 by Jyotirvid Rāmacandra. Incomplete.  
Baroda 11306. 36ff. Incomplete.  
BORI 386 of 1884/86. 43ff.

**ĀLUTŪRI (= ALŪRU) EKĀMRA** (fl. 1858/65)

Editor of various *Purāṇas* and commentator in Telugu  
on Śaṅkara, Ekāmra wrote three works on jyotiḥśāstra:

1. *Abhayadaprasnaśāstra* in Sanskrit and Telugu.

Manuscripts:

Adyar (2 cop.) = Adyar Index 291 =  
Adyar Cat. 9 C 145. 64ff.

Adyar Cat. 26 E 10. 66ff. Grantha.

This work was published in Madras 1860.

2. *Jātakacintāmaṇi* in Sanskrit. Manuscripts:

GOML Madras R 2647. 46ff.

This work was published in Telugu script in Madras  
1889 (IO 22.BB.1).

3. *Gopālaratnākara* in Telugu. Published Madras  
1864 and Madras 1865. He also wrote Telugu commen-  
taries on the *Jātakacandrikā* of Veṅkaṭeśvara, his own  
*Gopālaratnākara*, the *Jātakakālānidhi* of Nṛsiṃha, and  
the *Jātakālaṅkāra* of Bhaṭṭoji Dīkṣita which, as revised  
by Kokaṇṭi Keśava Ācārya, were published with his  
*Gopālaratnākara*.

**OMKĀRA BHATTA** (fl. 1840/41)

Author of a *Bhūgolasāra* (= *Jyotiṣacandrikā*). Manu-  
scripts:

PUL II 3745. 28ff. Copied in Saṃ. 1937 = A.D. 1880.

This was published at Agra in 1840. See also O. Bhut  
[1841].

**AUVUNIKURNAKA**

Author of a *Sannipātakalikā*. Manuscripts:

N-W P I (1874) 118. 9ff. Property of Pūrṇānanda  
Jotiṣi of Benares.





New York University  
Bobst, Circulation Department  
70 Washington Square South  
New York, NY 10012-1091

*Web Renewals:*  
<http://library.nyu.edu>  
*Circulation policies*  
<http://library.nyu.edu/about>

**THIS ITEM IS SUBJECT TO RECALL AT ANY TIME**

DUE DATE RETURNED MAR 13 2017 BOBST LIBRARY NYU LIBRARY		

**NOTE NEW DUE DATE WHEN RENEWING BOOKS ONLINE**

BOBST LIBRARY



3 1142 01113 5673



Elmer Holmes  
Bobst Library

New York  
University

OVER