

41. HISTORY OF ASTRONOMY (HISTOIRE DE L'ASTRONOMIE)

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The composition of this commission reflects the wide appeal of science history studies and the need for interdisciplinary approach, especially in the studies of ancient and medieval astronomy, where combined scientific, philological and historical competence are necessary conditions. This is why the commission lists over thirty consulting members, historians of science by profession and academic training. The commission is recognized by the IUHPS as a joint commission of both Unions, with a representative of this organization in our Organizing Committee. 69 IAU members, together with the group of consulting members mentioned above, make up for an unusually numerous body. It should be noted that this size is undesirable in some respects and it may call for a general reevaluation.

Among the activities directly within the scope of the commission the "General History of Astronomy" forms the main enterprise. This project, supported both by the IAU and IUHPS is a 4-volume collective work under the general editorship of M.Hoskin, president elect of the commission. GHA will be published by the Cambridge University Press. It is expected that one volume will be ready for submission to the printers during 1979. Most contributions to the other volumes have been assigned, and some of them were received by the editors.

Satisfactory progress has been reported on the "Greenwich List of Observatories", a detailed catalogue of instrumental equipment in 1670-1850, directed by H.D.Howse. This census, to be incorporated in the "General History of Astronomy", might be profitably extended beyond the period covered.

The Information Circular of the commission is distributed once a year by the President. Circulars 27 and 28 were published in 1977-78; circular 29 to be sent before this year's IAU General Assembly.

Bibliography of Books and Papers on the History of Astronomy is a yearly publication, prepared by the Astronomical Council of the USSR Academy of Sciences /editor: P.Kulikovsky/. No. 16 /for 1975/ lists over 600 publications. The Bibliography is distributed to over 200 addresses, including all members of the commission.

A project of an annotated bibliography of methods and tablets for astronomical navigation has been recently started by the International Association of Institutes of Navigation. Its aim is to provide as complete as possible a record of the practical application of astronomy from ancient times to the present day and bears direct interest for the historians of astronomy. Dr. H. C.Freiesleben of this commission is a member of the Project Committee.

Sessions and Meetings

XV INTERNATIONAL CONGRESS OF THE HISTORY OF SCIENCE /Edinburgh, August 1977/

Over 30 papers on history of astronomy were read at this congress.

"Cosmology since Newton" was the subject of a symposium with following papers:

- Cosmology in the 18th and 19th centuries /M.A.Hoskin/
- The giant reflector in the 19th century /J.A.Bennett/
- Thèmes cosmologiques chez les fondateurs de la thermodynamique classique /J.Merleau-Ponty/
- Observational cosmology in the 20th century /N.S.Hetherington and C.W.Smith/
- Theoretical cosmology in the 20th century /G.J.Whitrow/.

JOHANNES REGIOMONTANUS /500th ANNIVERSARY/ /Vienna, October 1976/

Organized by the Austrian Academy of Science and the University of Vienna.

ARYABHATA I /1500th ANNIVERSARY/ /Delhi, November 1976/

Organized by the Indian National Science Academy, this symposium was opened with invited discourses by K.S.Shukla: Aryabhata I, his methods and observations, and by W.Petri: Reference systems in the Aryabhata Siddhanta. The Academy also published the "Aryabhataiya", its commentaries by Bhaskara I and Suryadeva, the English and Hindi translations /ed. K.S.Shukla, K.V.Sarma, R.N.Rai, New Delhi 1976, 4 vol./.

Publications

In the aftermath of the scientific events of the previous period work was continued on publications of works and correspondence of astronomers and physicists. Copernicus's "De revolutionibus" has been translated into English by A.M.Duncan /New York 1976/ and by E.Rosen /vol. II of "Nicholas Copernicus, Complete works, Warsaw-Cracow 1978.

The survey of first editions of the work of Copernicus has been completed by O.Gingerich.

Among journals in the field the Journal for the History of Astronomy, now in its 10th year of publication, obviously became leading in the field, supplemented by the history of science periodicals such as Archives Internationales d'Histoire des Sciences. The Archives published a.o. R.Mercier's Studies in the medieval conception of precession and a series of polemical papers by E.Rosen and N.Swerdlow on the importance of spheres in Copernicus' cosmology.

Many periodical publications contain papers on regional history of astronomy, like the Journal of the R.Astr.Soc. of Canada. Ist.-astr. Issledovania /Moscow/ also present papers regularly, among others on Middle East astronomy.

In the last decade astroarcheology became an important branch of history of astronomy. Most important surveys of archeological monuments believed to be astronomically oriented center on British and American /pre-Columbian/ sites.

For Antiquity and Middle Ages mention should be made of the discussion of the authenticity of Ptolemy's observations /R.R.Newton/, of the publication of the long awaited edition of works and monograph of Richard of Walling-

ford, by J.D.North and of the publication of the third volume of the "Census of the Exact Sciences in Sanskrit" by D.Pingree.

Progress and new results can be noted in studies of the history of cosmology on the period from Newton to Kant. For more recent times I would like to offer my personal opinion that the studies have been enhanced by the growing extent of combined historical and scientific competence. This holds both for studies of 19th century sources /e.g. by D.Herrmann/ and for monographs like "Man discovers the Galaxies" by R.Berendzen, R.Hart and D.Seeley.

The preceding comments are not standing for a selective bibliography. It is proposed to present such a selection at the Commission's meeting and to publish it in the proceedings. The list will include, among others, items not available at the time of writing of this report.

J. DOBRZYCKI
President of the Commission