

European Science Foundation
Standing Committee for the Humanities (SCH)

ESF SCH EXPLORATORY WORKSHOP

**Sciences in Asia:
Representations and Historiography,
17th to 20th Centuries**

A workshop to mark the publication of Joseph Needham's "Conclusions and Reflections" in *Science and Civilisation in China*, vol. VII, part 2



Cambridge, United Kingdom, 12-16 January 2005

**Convened by:
Christopher Cullen ^① and Catherine Jami ^②**

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The European Science Foundation (ESF) acts as a catalyst for the development of science by bringing together leading scientists and funding agencies to debate, plan and implement pan-European scientific and science policy initiatives.

ESF is the European association of 76 major national funding agencies devoted to scientific research in 29 countries. It represents all scientific disciplines: physical and engineering sciences, life and environmental sciences, medical sciences, humanities and social sciences. The Foundation assists its Member Organisations in two main ways. It brings scientists together in its EUROCORES (ESF Collaborative Research Programmes), Scientific Forward Looks, Programmes, Networks, Exploratory Workshops and European Research Conferences to work on topics of common concern including Research Infrastructures. It also conducts the joint studies of issues of strategic importance in European science policy.

It maintains close relations with other scientific institutions within and outside Europe. By its activities, the ESF adds value by cooperation and coordination across national frontiers and endeavours, offers expert scientific advice on strategic issues, and provides the European forum for science.

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Main Objectives of the Workshop:

The history of science in Asia is rapidly maturing as a worldwide discipline. Many of its most active practitioners are currently located in Europe. This workshop will be a first step in the formation of a research network, while also aiming at advancing the methodological sophistication of the field. A wider aim will be to promote the integration of European work on the history of science in Asia into the growing network of European resources in Asian studies.

Starting from a multi-voice review of the final volume of Joseph Needham's *Science and Civilisation in China* (vol 7.2 Cambridge, June 2004), the discussion will extend to various aspects of Needham's historiography. The discussion will broaden to take in the historiography of the sciences in Asia in the last four centuries, and the issue of value judgements in the contexts of comparative studies and the circulation of knowledge. Further, a number of contributions will focus on the European and East Asian representations of the sciences and of their history as shaped by the exchanges between the two continents in the early modern period. The appropriation of the past and the construction of history of science in the age of empires and more recently will also be discussed, extending the scope of enquiry to South-Asia and the Middle East.

Besides the importance of the topic of historiography, which nourishes the reflexive dimension indispensable to critical scholarship, this meeting will be an excellent opportunity to share problems and questions that are specific to the particular scientific discipline, time period and cultural area in which each participant specialises. While we chose to start from questions stemming from our practice as historians of Asian science rather than from better advertised debates – such as that surrounding “orientalism” –, we are aware of the problems that many see behind the phrase “Asian science”. To mention only the two extremes, some scholars still hold that “Asia had no science”, while others hold that science is universal, so that no adjective referring to a particular part of the world, religion or group of people should ever qualify it. It is our hope that the discussions of the workshop will help construct a middle way, and give stronger foundations to our field both in itself and as an element that contributes to a better understanding of science as a historical phenomenon, as well as to a better understanding of Asia.



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PRELIMINARY PROGRAMME

Wednesday 12 January 2005

Afternoon/Evening *Arrival*

Thursday 13 January 2005

Location: Department of History and Philosophy of Science, Seminar Room 2

- 09:30 **OPENING: Christopher CULLEN, Catherine JAMI**
- Presentation of the European Science Foundation (ESF)**
 to be announced (Standing Committee for the Humanities)
- SCIENCE AND CIVILISATION IN CHINA 7.2: A MULTI-VOICE REVIEW**
 Chair: **Christopher CULLEN** (NRI, Cambridge)
- 09:45 Contributions by **Georges MÉTAILIÉ** (CNRS, Paris), **Dhruv RAINA**
 (JNU, Delhi), **Simon SCHAFFER** (University of Cambridge)
- 11:15 Coffee Break
- 11:30- 12:30 Discussion

Location: Needham Research Institute

- 13:00 Lunch
- JOSEPH NEEDHAM'S HISTORIOGRAPHY AND SCIENTIFIC UNIVERSALISM I**
 Chair: **Agathe KELLER** (CNRS, Paris)
- 14:00 **Patrick PETITJEAN** (CNRS, Paris), *Needham's and Febvre's participation in the UNESCO project of a "scientific and cultural history of mankind": an aborted attempt to depart from a Eurocentric history*
- 14:45 **Karine CHEMLA** (CNRS, Paris), *Chinese language and science: Historiographical reflections inspired by Science and Civilisation in China, 7.2*
- 15:30 Coffee break
- JOSEPH NEEDHAM'S HISTORIOGRAPHY AND SCIENTIFIC UNIVERSALISM II**
 Chair: **Feza GÜNERGUN** (Istanbul University),
- 16:00 **Hans Ulrich VOGEL** (University of Tübingen), *Invention, innovation and diffusion of salt production techniques: A comparative approach*
- 16:45 **KURIYAMA Shigehisa** (International Center for Japanese Studies, Kyoto), *Ecumenical science and the exception of medicine*
- 18:00 Reception at the Cambridge University Press Bookstore
- 19:15 Workshop Dinner at Gonville and Caius College



Friday, 14 January 2005

Location: Needham Research Institute

WHAT DO WE DO WITH JUDGEMENTS?

Chair: **Karine CHEMLA** (CNRS, Paris),

09:30

Geoffrey LLOYD (NRI, Cambridge), *Value judgements in the history of science*

10:15

Nicolas STANDAERT (Catholic University, Leuven), *The 'failure' and 'success' of the 'Ricci map': Its historiography and an attempt to look at the map from the point of view of communication*

11:00

Coffee break

JESUIT MISSIONARIES' NARRATIVES FOR EUROPEAN AUDIENCES

Chair: **Luis SARAIVA** (University of Lisbon)

11:30

Noël GOLVERS (Catholic University, Leuven), *The spread and reception of Ferdinand Verbiest's materials on Western astronomy in China in 17th and 18th century Europe*

12:15

Vladimir LIŠČÁK (Oriental Institute, Prague), *Chinese science through the eyes of an 18th-century Jesuit missionary: Karel Slavíček and his correspondence from China with European astronomers and other scholars*

13:00

Lunch

CHINESE SCHOLARS' NARRATIVES, 17TH AND 18TH CENTURIES

Chair: **Nick JARDINE** (University of Cambridge)

14:00

Catherine JAMI (CNRS & Churchill College), *Ancient and Modern, Chinese and Western: Constructing the history of mathematics and astronomy in late Ming and early Qing China*

14:45

TIAN Miao (IHNS, Beijing), *Qing scholars' approach to the history of mathematics and astronomy: the cases of Li Rui and Qian Daxin*

15:30

Coffee break

THE CASE OF MEDICINE IN EAST ASIA

Chair: **Shigehisa KURIYAMA** (International Center for Japanese Studies, Kyoto)

16:00

Florence BRETTELLE-ESTABLET (CNRS, Paris), *Who shaped the historiography of Chinese medicine, if not the Chinese state?*

16:45

Harmen BEUKERS (Leiden University), *The introduction of Western medicine in Japan seen through the Deshima diaries*



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Saturday, 15 January 2005

Location: Needham Research Institute

WHO DOES THE PAST BELONG TO?

Chair: **Annette IMHAUSEN** (University of Cambridge)

09:30

Eleanor ROBSON (University of Cambridge), *Babylon, Mesopotamia, or Iraq? Locations and appropriations of an ancient mathematical culture*

10:15

Feza GÜNERGUN (Istanbul University), *In search of "Islamic" and "Turkish" contributions: The beginnings of history of science in Turkey (first half of the 20th century)*

11:00

Coffee Break

THE INVENTION OF SCIENTIFIC TRADITIONS

Chair: **Joachim KURTZ** (EHESS, Paris & Emory University, Atlanta)

11:30

Iwo AMELUNG (University of Tübingen), *Discovering "Chinese Optics" in late 19th and early 20th century China. The reception of scientific knowledge from the West and the formation and development of research into a field of indigenous science*

12:15

Christopher CULLEN (NRI, Cambridge), *The retrospective invention of discovery: China and the sphericity of the Earth*

13:00

Lunch

COLONIAL AND POST-COLONIAL HISTORIOGRAPHIES

Chair: **Patrick PETITJEAN** (CNRS, Paris)

14:00

Sujit SIVASUNDARAM (University of Cambridge), *British imperial science recontextualised: The case of Sri Lanka*

12:45

Agathe KELLER (CNRS, Paris), *"Vedic mathematics" and late 20th-century trends in the historiography of science in India*

15:30

Coffee Break

16:00

General discussion and prospects for a European network

Chair: **Catherine JAMI** (CNRS & Churchill College)

17:30

Close

Sunday, 16 January 2005

Departure



European Science Foundation

Objectives of the ESF Standing Committee for the Humanities (SCH)

The main tasks of the **ESF Standing Committee for the Humanities (SCH)** are:

- to encourage interdisciplinary work through the independent evaluation of collaborative research proposals emanating from the scholarly community;
- to identify priority research areas and to play an integrative and co-ordinating role by creating links between research communities which in the Humanities are often small and fragmented.
- to contribute to the development of the ESF science policy agenda and to provide expert advice on science policy actions at the European level in the field of its responsibilities.

The Committee is well aware that the ESF is the only European Agency where the Humanities have a place next to the other sciences and where European projects are reviewed, developed and subsequently operated.

The Committee considers it all the more important to be heard as the voice of the Human Sciences in Europe and to continue pleading for a more prominent place for the Humanities in the European landscape.

Exploratory workshops are viewed by ESF Standing Committees as a useful instrument for identifying emerging fields requiring action at a European level. Exploratory Workshops are aimed at helping European research teams to exchange knowledge, establish new links and to explore the possibilities of developing future collaborative actions. Further information at <http://www.esf.org/workshops>.

One desirable outcome of an ESF Exploratory Workshop may be that participants submit **high quality proposals for further ESF activities** (such as "[à la carte Programmes](#)" or a EUROCORES initiative), or **research funding applications** for submission to the EU 6th Framework Programme or to other European or international funding organisations.

In the case of **ESF Programmes** ("[à la carte](#)" or [EUROCORES](#)), which are financed by, and coordinated through, the European Science Foundation, a draft proposal should be submitted to the SCH Secretariat for advice, to then subsequently undergo further external refereeing. If successful in obtaining SCH's scientific recommendation, the proposal will be submitted to ESF Member Organisations for funding on a voluntary basis. More details are available at <http://www.esf.org/sch>.



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