

Needham Research Institute Newsletter

李約瑟研究所通訊

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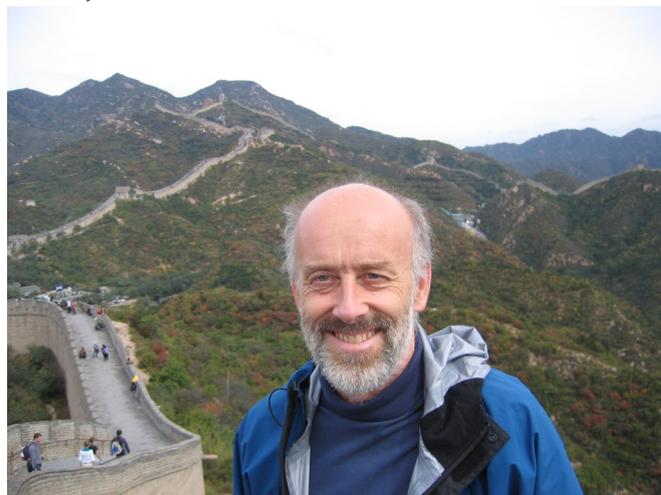
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A word from the new Chairman, Professor Martin Jones

It is almost half a century since I looked up at the engaging figure of Joseph Needham, I from the conference floor, Joseph from the chair of an interdisciplinary *Royal Society* public meeting, enthusiastically encouraging us all to debate the emergence of civilization. I now have both the enormous privilege and the great pleasure of chairing the Trustees of the Institute that bears his name.

In doing so, I attempt (at least in part) to fill the shoes of my predecessor, Sir John Boyd, who has thoughtfully and expertly served that role for nine years, and who, I am delighted to say, remains on the Board. During his chairmanship, eleven significant scholarly volumes have reached completion and publication, twenty-five workshops and conferences have been hosted, and around 160 international visiting scholars have been welcomed, each for one month or more.



The Trust's business has been rich and varied, and has ranged between the exciting and the challenging. Throughout, our bedrock has been the unfailing humour and humanity of Sir John, contributing so much to the vitality and vision of the Needham Research Institute. To him we owe enormous gratitude. I look forward to building on his work in support of the Institute's

Joseph Needham Memorial Lecture 2017, delivered by Professor Justin Yifu Lin



The second Joseph Needham Memorial Lecture, sponsored by the Jing Brand Co. Ltd., China, took place at the Riley Auditorium, Clare College on Friday, 27th October, and attracted a wide audience. The lecture, entitled 'The Needham Puzzle and China's Renaissance: A New Structural Economics Perspective', was delivered by Professor Justin Yifu Lin of Peking University, and was chaired by Professor Roel

Sterckx, Joseph Needham Professor in the University of Cambridge, and attended by around 150 people.

As a world renowned economist, Professor Lin offered his personal thoughts on the so-called Needham Puzzle and shared his insights into the driving forces behind the speedy growth of China's economy over the past three decades. His main arguments are as follows: in pre-modern times, technological change and scientific discovery were based on the experience of craftsmen and intellectuals' casual observation, China had the advantage in this due to its large population. In modern times, the paradigm of technological change and scientific discovery changed to that of experiment. China failed to undergo such a paradigm change indigenously and quickly lagged behind. China's renaissance has been a national dream ever since. Like other developing countries, China tried various social and political means, including the socialist revolution, to pursue that dream. Only after adopting a pragmatic, gradual approach to the transition from a planned economy to a market economy at the end of 1978 did China start to exhibit dynamic growth. This approach has allowed China to maintain stabil-

Visit to Singapore



On 17-21 August 2017, The Director and Trustee Prof. Roel Sterckx attended the International Conference on Philosophy and Technology in Early China, which was held at the National University of Singapore. Whilst in Singapore, they first met Dr. Yap Su-Yin, Chief Executive Officer of the Tan Chin Tuan Foundation, and also paid a visit to Dr. S. T. Lee to report to him on the Institute's achievements and activities over the past year. They expressed the Institute's tremendous gratitude

Donations

The Institute records its grateful thanks for generous donations received from Dr. Peter Lee and Dr. Zu Yanfu to support the newly established Needham Archival project. A donation received from Professor Geoffrey Lloyd will be added to the

2017-2018 Fellowship holders

Jing Brand Fellowships have been awarded to: Dr. Uganda Kwan (Nanyang Technological University), Dr. José Antonio Cantón Álvarez, Dr. Seung-Joon Lee (National University of Singapore), and Dr. SA Rina (Shanghai Jiao Tong University). Their research topics cover medical history, nutrition science and food politics in industrial China and the history of mathematics. Dr. XIAO Lei (China University of Political Science and Law) and Dr. XIE Dan (Hebei University of Technology) have been awarded the 2017-2018 Needham-Silk Road fellowships. Dr. XIAO's research topic is concerned with music theory in ancient China, while Dr. XIE works on and the Military Defense System and Spatial Layout of the Great Wall. Li Foundation Fellowships have been awarded to Dr. ZHOU Liqun (Beijing Foreign Studies University), working on time-reckoning in the Buddhist Canon and Dr. LI Haijing (National Water Museum of China), focusing on European modern water science and technology in China.

Visiting scholars funded by other funding bodies in 2017 include: Professor JUN, Yong Hong (Academy of Korean Studies), Dr. YUN Yan (Chinese Academy of Social Sciences), Dr. YANG Weiheng (Shanxi University), Dr. Lena Springer (University of Westminster), Dr. Peter Vamos (Hungarian Academy of Sciences), Dr. XU Bin (The Palace Museum), Dr. SHI Hongshuai (Shaanxi Normal University), Dr. LI Yan (Tianjin University), Dr. SHEN Yubin (Georgetown University), Dr. LIN Shing-Ting (Berkely University), Dr. WANG Chuanchao (Bingzhou Medical University), Professor TANG Quan (Xianyang Normal University), Mr. WANG Gong (Tsinghua University), Ms. YANG Huan (The Museum of the First Emperor of Qin), Dr. HE Beijie (Tianjing University), Dr. AN Sooyoung (Fudan University), Dr. CHEN Kunlong (University of Science and Technology Beijing).

New Name for Hong Kong Trust



We were delighted to hear from its Chairman, Peter Lee, that our sister Trust and long-standing major supporter in Hong Kong, the *East Asian History of Science Foundation*, has changed its name to the *Joseph Needham Foundation for Science and Civilisation*. The Trust has been very active, organising a range of activities in HK, such as a biennial

Joseph Needham lecture, regular lectures on history of science and popular science in schools, and circulating the pop-up exhibition "Chinese Wartime Science Through the Lens of Joseph Needham" to universities throughout the SAR. We are most grateful for all their efforts and support, and shall continue to work closely with them in the future to promote the aims of the Institute.

Xingzhi Fellowship programme

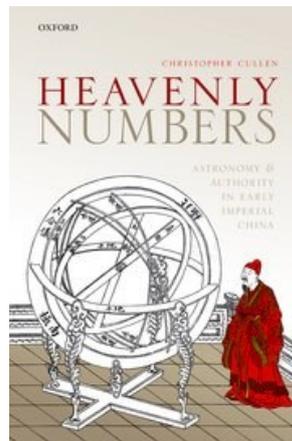
We are delighted to announce that the Beijing Xingzhi Exploring Culture Development Group Corp., Ltd. have agreed to extend their sponsorship of the Exploring China—Ancient Technological and Cultural Exchanges along the Silk Road Scholarships for a fourth year. These will henceforth be known as the "Needham-Silk Road Fellow-

Soon-Young Kim Fellowship



The most recent recipient of the S. Y. Kim fellowship is Ms. YU Jia, who is studying for a Ph.D under the supervision of Dr. Mary Brazelton at the Cambridge University Department of History and Philosophy of Science. Ms. Yu arrived in Cambridge in January 2018, and is a member of Lucy Cavendish College.

Prof. Christopher Cullen's new Book



We are delighted to report that Professor Christopher Cullen, the Emeritus Director of our Institute, has just published a new book entitled *Heavenly Numbers: Astronomy and Authority in Early Imperial China* with the Oxford University Press. This new book offers a narrative history of the work done by ancient Chinese astronomical specialists between the late third century BCE and the early third

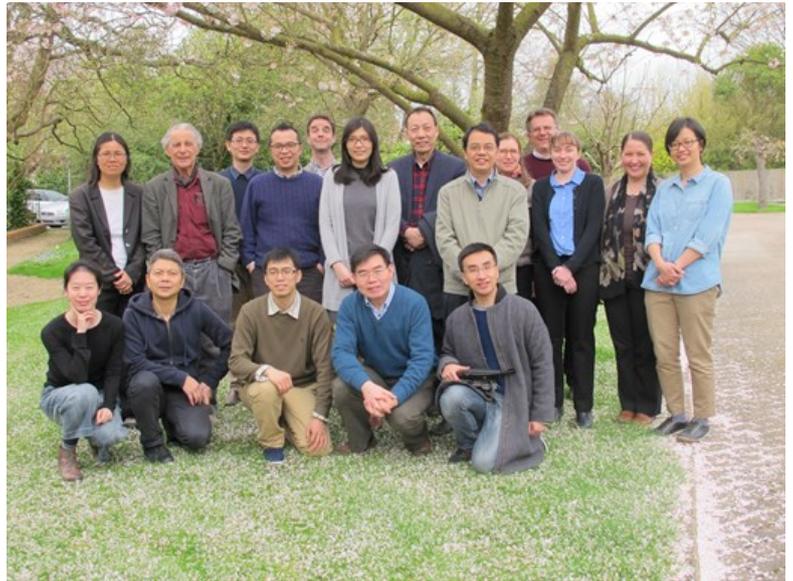
century CE, based in part on the material translated in his earlier book *The Foundations of Celestial Reckoning* published by Routledge in early 2017. It was designed to be accessible to a broad readership interested in the history of science, the history of China, and the comparative history of ancient cultures, while still being useful to spe-

Academic Activities

Laoguanshan Medical Manuscripts Workshop

On 31st March, the Institute hosted a fascinating workshop centred on the bamboo manuscripts and material culture of the Laoguanshan tomb finds, excavated in 2012-13, in the suburbs of Chengdu, Sichuan. The finds, dating from the 2nd century B.C., which include 900 bamboo strips dedicated to remedy collections and new medical theories, are still in the process of being transcribed and analysed, and this was the first time that many of the images of them had been presented to those outside the core group of researchers.

The workshop brought together the archaeologist Professor Xie Tao, who led the excavations, Professor Liu Changhua and his group of researchers working on the texts from the China Academy of Chinese Medical Sciences, as well as experts on the history of medical manuscripts, including Professors Li Jianmin (Academia Sinica, Taipei), Donald Harper (University of Chicago), and Dr. Vivienne Lo (UCL). Scholars from the NRI and Cambridge also attended. This was a fascinating and exciting day of wide ranging discussions, and we await with bated breath the publication of the completed transcrip-



Science in the Forest, Science in the Past

The workshop “Science in the Forest, Science in the Past” took place here in the K.P.Tin Hall on 31st May – 2nd June, convened by Prof. Sir Geoffrey Lloyd in collaboration with Profs. Aparecida Vilaça, Mauro William Barbosa de Almeida and Manuela Carneiro da Cunha. It was jointly sponsored by the NRI, the Chiang Ching-kuo Foundation, and the Faculty of Classics, the Department of History and Philosophy of Science, and the Division of Social Anthropology at Cambridge. The workshop brought together specialists from a wide range of disciplines, including history of science and history of mathematics, social anthropology, and computer science, to discuss and question the ontological presuppositions of their branches of inquiry, drawing examples from past societies as well as contemporary ones, in particular ethnographical work involving living indigenous peoples. Presentations from the workshop led to lively discussions from participants, and the proceedings

Workshops and Seminars

2017 was a bumper year for research events at the Institute. Our Friday seminar series celebrated its 25th birthday with a rich mixture of talks and text-readings on a host of topics. Its baby sister, the Historiography of Non-Western Science Reading Group also had a successful second year, strengthening cooperation between the NRI and University departments. We also held the inaugural Ma Kanwen Memorial Lecture in May (see below).

The Institute also held a number of other workshops through the year. The 3rd annual “Technology in Modern East Asian History Workshop”, a mentoring and development event for early career scholars of East Asia, took place in early June. We are most grateful, once again, to the organiser Dr. Aleksandra Kobiljski (CNRS/EHESS-CCJ, France), and to SHOT, the Max Planck Institute and CNRS for their support for this marvellous event. Some of our visiting scholars also arranged two other workshops on medicine in China during the year, “Medicine in



Photograph of the attendees of the *Technology in Modern East Asian History* Workshop, June 2017

Ma Kanwen Memorial Lecture and Fund

On 26th May 2017 the 1st Ma Kanwen Memorial Lecture was given by Dr. Zhang Shujian (Nanjing University of Chinese Medicine) entitled “Where is Real Tradition? A Historical and Comparative View of Chinese Acupuncture.” This annual lecture and a fund to support it have been established thanks to the generosity of Prof. Ma’s family to honour the memory of a pioneer in the study of the history of medicine in China. For further details, see :

Library News

Over the summer, Prof. Chen Zhengong of the Chinese Classics Research Institute of Fudan University, accompanied by Dr. Liu Kun and student Yang Peng, made a second visit to the NRI to continue their work on producing a traditional style catalogue of our Chinese thread-bound books. The work is almost completed, and it is intended that an illustrated, selected catalogue will be published in 2018, and the full catalogue thereafter. We have also had considerable interest in our modest collection of mainly 20th-century Chinese art – paintings, calligraphy and rubbings – gifted to Dr. Needham over his many years of engagement with China. This included a visit during the summer by a group of experts and students from the PRC, USA and Germany interested in the items he collected during his time in China in World War II. As always, the Library has received a steady stream of gifts of volumes throughout the year. We are deeply grateful to you all for your continuing support for our unique library.

Co-Operation with the University of Science and Technology, Beijing (USTB)



On 14th December 2017, The Director and Professor Zhang Xinxin, President of the University of Science and Technology Beijing (USTB) signed a Memorandum of Understanding between the USTB and the NRI, further strengthening the existing cooperation and exchange relationship. The NRI agreed to help the USTB organize an international conference on early painted pottery cultures in Northwest China, which will be held in Qin'an, Gansu in May 2018. The two institutions will also engage in coop-

Obituary: Mr Stephen Keynes OBE



We very much regret to report the death of Stephen Keynes OBE, who died on 13th August 2017. Stephen was one of the longest serving Trustees of the Needham Research Institute, and we are grateful to have had the benefit of his experience and guidance for over thirty years. As the great-grandson of Charles Darwin and the nephew of the economist John Maynard Keynes, Stephen was a distinguished member of one of the intellectually most outstanding Cambridge lineages. Stephen was not only a most modest and charming person, he also had a sheaf of important achievements to his credit. Quite apart from a successful City career, he made innovative films in China at a time when so doing demanded great diplomatic as well as artistic skills. His experience in that field made him an invaluable adviser to the NRI when we undertook the series of films *The Dragon's Ascent*. Stephen will be sorely missed by all who appreciated his wide-ranging intellectual interests, his

Independent Schools Foundation

The ISF academy students from Hong Kong visited our Institute from 27th June to 15th July. There were eight students in the group, five girls and three boys. With the help of Dr. WU Huiyi, students carried out research on a number of interesting topics, such as the acceptance of acupuncture in Europe (1600-1800), Pipa in the Tang dynasty, the development of the image of the fox in China, the impact of smallpox on Ming-Qing history, China's incense culture, and the development of civil aviation in China. Based on the previous year's results, Dr. WU led the students to continue the historical GIS project in order to produce a spatial visualization of Joseph Needham's wartime trips on the basis of his diaries. Furthermore, two guest talks were organised and given by Dr. FU Liangyu (University of Michigan) on late Qing educational scientific wall charts (26th June) and Dr. CHEN Kunlong (NRI) on bronze tech-

Award for Dr. Huiyi WU

We are delighted to report that our ISF fellow, Dr. WU Huiyi has been awarded the "Prix international d'encouragement aux études post-doctorales « Études globales »" (International Award for the Encouragement of Post-doctoral studies in "Global Studies") by the Ecole des hautes études en sciences sociales (EHESS), France. We congratulate Dr. Wu on this award!



Photo exhibition in Hong Kong

Over the past two years, with the Institute's support, the Joseph Needham Foundation for Science and Civilisation (Hong Kong) (JNFSC, formerly the East Asian History of Science Foundation, HK) has been organizing a travelling exhibition in Hong Kong and Macau, entitled "Chinese Wartime Science: Through the Lens of Joseph Needham". The exhibition (*left*) has been held at a number of universities such as the University of Hong Kong, the University of Macau and the Chinese University of Hong Kong. The Foundation also organized lectures to accompany the exhibition, and the events have generated much interest. In the coming years we intend to develop more such exhibitions and we are actively seeking funds to