

Manufacturing Landscapes: Nature and Technology in Environmental History

Rachel
Carson
Center

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Sponsors: Rachel Carson Center for Environment and Society (RCC), Center for Ecological History, Renmin University of China (RUC)

Convenors: Xia Mingfang (Renmin University of China), Helmuth Trischler (RCC/ Deutsches Museum), Donald Worster (RCC/RUC/University of Kansas)

Presenters: Edmund Russell (University of Kansas), William D. Bryan (Emory University), Sandra Chaney (Erskine College), Craig E. Colten (Louisiana State University), Helen Anne Curry (University of Cambridge), Frederick Rowe Davis (Florida State University), Gao Shengrong (Shaanxi Normal University), Maurits W. Ertzen (Delft University of Technology), Matthias Heymann (Aarhus University), Chihyung Jeon and Yeonsil Kang (Korea Advanced Institute of Science and Technology), Paul Josephson (Colby College and Tomsk State University), Timothy James LeCain (Montana State University), Li Yushang and Gu Weifang (Shanghai Jiao Tong University), Roger Pielke Jr. and Björn-Ola Linnér (University of Colorado and Linköping University), Mao Da (Beijing Normal University), Shawn W. Miller (Brigham Young University), Gijs Mom (Eindhoven University of Technology), Maya K. Peterson (UC Santa Cruz), Xun Lili (Chinese Academy of Social Sciences), Yang Wenjun (Renmin University of China), Yu Xinzhong (Nankai University), Thomas Zeller (University of Maryland)

From 28 to 31 May 2015, the international workshop “Manufacturing Landscapes: Nature and Technology in Environmental History” was held in Beijing, jointly organized by the RCC and the Center for Ecological History at RUC. More than 60 scholars from China, Germany, the United States, Britain, the Netherlands, Denmark, Sweden, and the Republic of Korea attended the meeting. This forum was the fourth annual conference held by the two institutes and has been an important academic platform for environmental historians and related scholars in China and across the world since 2012.

The opening ceremony was chaired by CEH director Xia Mingfang and translated by Vice-Director Hou Shen, with speeches and greetings by the Dean of the School of History, Huang Xingtao, Helmuth Trischler of the RCC/Deutsches Museum, and RUC President Chen Yulu.

HUANG XINGTAO presented his greetings to all attendees, introduced the School of History and highlighted the academic achievements of the CEH since it was founded in 2012. He pointed out that the theme of this conference, in Chinese “Tiangong Kaiwu,” was derived from the title of a technical book (literally translated The Exploitation of the Works of Nature) written by Song Yingxing in the Ming Dynasty. The title has a double meaning—Qiaoduo Tiangong (superb workmanship excelling nature’s works) and Kaiwu Chengwu (Understanding the law of nature and handling things accordingly), indicating the ancient Chinese wisdom to follow nature, use nature, and change nature, representing a key understanding that truly skilled technologies should be based on the consultation of and respect towards nature. Dean Huang also mentioned that Song’s book has been published in translation in Europe and Japan; it can thus be seen as part of early international communications about nature and technology in environmental history. The series of international workshops promotes this communication in new intellectual landscapes.

HELMUTH TRISCHLER expressed his gratitude to the authorities of RUC and his colleagues of CEH. Coming to China and attending the meeting in May each year has been a tradition for the RCC. The recent renewal of the RCC’s funding by the German government has laid a solid foundation for continuing the cooperation between Chinese and German partners. He specifically mentioned that Chinese Vice-Premier Ma Kai, an alumnus of Renmin University, visited the current special exhibition “Welcome to the Anthropocene” at the Deutsches Museum. He conveyed the cordial greetings of Vice Premier Ma Kai to this conference.

CHEN YULU expressed his gratitude to the conference conveners. Then he pointed out that China is currently under the great transformation of industrialization. Consequently the government is trying to accomplish the goal of economic and technical growth as well as public health, social stabilization and the harmony relationship between human and nature. He expressed his hope that this conference would provide more international wisdom to support the construction of a Chinese ecological civilization.

EDMUND P. RUSSELL presented the keynote lecture. Russell has devoted himself to a new research field, evolutionary history, advocating to combine historical and ecological methodologies to get a deep understanding about earth history. In his speech, entitled “Spinning their Way into History: Silkworms, Mulberries, and Manufacturing Landscapes,” Russell used the example of

silkworms, mulberries, and the silk industry to illustrate the complex co-evolution process between humans and nonhuman species. Russell looked at the way the silk trade and introduction of silkworms and mulberry plants in other parts of the globe has transformed landscapes and human history in complex ways. In his commentary, **DONALD WORSTER** reemphasized the importance of continuity between people and nature in evolutionary history. However, he noted, historians also need pay attention to discontinuity and conflict between people and nature.

The workshop successfully experimented with new forms of discussion. After brief paper presentations, Q&A sessions, and in some cases commentaries, scholars conducted group discussions. For each session, scholars broke out in four groups, led in-depth discussions on the topics in question, and identified overarching conceptual ideas and questions which arose from the papers. Rapporteurs summarized the main conclusions of each group for the plenary audience, followed by a concluding Q&A part. The conference profited particularly from the exchange between Chinese and Western scholars, and the experts on local manufactured landscapes added an invaluable place-based dimension to its lively discussions.

The panel discussions, based on pre-circulated papers, were divided into five topics. The first session discussed papers by **LI YUSHANG, BJÖRN-OLA LINNÉR, Frederick ROWE DAVIS, HELEN CURRY, and YANG WENJUN**. These papers were grouped around “Landscapes of Food,” touching issues like the genescapes of modern industrial agriculture; pesticides and synthesized nature; the effects of the Green Revolution; fish cultivation in the Shaoxing region; and straw burning in contemporary Chinese urbanization processes.

The session two focused on water control and featured papers by **XUN LILI, PAUL JOSEPHSON, MAYA PETERSON, GAO SHENGRONG, and MAURITS ERTSEN**. They particularly explored the legacy of Russian and Chinese water management projects both in the twentieth century and in earlier eras and the role of irrigation in central Asia, as well as the topic of human agency more generally in creating such landscapes.

The third session looked at the papers of **TIM LECAIN, WILL BRYAN, SANDRA CHANEY, MATTHIAS HEYMANN, CRAIG COLTEN, YEON CHIHYUNG and YEONSIL KANG**. Their papers analyzed issues of conflicts between nature and technology, as featured in the discussions surrounding the Carbocene and Anthropocene and culture-environment relations. The papers also looked at specific issues such as industrial groundwater contamination and chemical pollution; and landscapes both permanently marked by humans (in the American South) and renaturalized (in Cheonggyecheon, South Korea).

During the last session, the papers by **THOMAS ZELLER, SHAWN MILLER, GIJS MOM, MAO DA,** and **YU XINZHONG,** turned the discussion to topics related to mobility. They ranged from examinations of roads in Rio de Janeiro and in China to envirotechnical understandings of infrastructures. They also took on mobility-related health issues such as the dioxin controversy in China, and disease and public hygiene in twentieth-century China.

In the concluding discussion, **HELMUTH TRISCHLER** offered a reflective summary of the conference. Trischler thought that this conference promoted the understandings of nature and technology in environmental history in both dimensions of conceptual discussion and case studies. He considered the following questions: How did state powers shape nature? How did social traditions view nature? What is the importance of different dimensions and scales in environment history? What are the effects of international geo-politics, such as the Cold War, on natural landscapes? How is knowledge about nature produced and distributed? Other important themes brought up included the dynamics of landscapes transformation; visions and visualizations of landscapes; the effects of nature on history; mobility and circulation; and the impact of peripheries and centers on world systems.

XIA MINGFANG's concluding remarks began with an ancient Chinese myth of how "Nu Wa created man from mud." He used the metaphor "You are among us and we are among you" from a poem composed by Guan Daosheng, a female calligrapher of Yuan Dynasty, for her husband Zhao Mengfu, to emphasize the inseparable relationship between humans and nature. That is, enemies and lovers are destined to meet and also sought for harmonious relations through conflicts. Then he quoted the legend of the silkworm goddess Ma Tou Niang to respond to the questions raised by Edmund Russell's keynote speech, suggesting that humans didn't treat nature well enough and consequently suffered from nature in the end. Xia also pointed out that, unlike in a marriage, humans cannot fundamentally dissolve their contract with nature. Once separated from nature, humans cannot exist and nature itself also loses its meaning to humans. He concluded that humans have changed landscapes by means of different kinds of technologies and became a giant as a result. However, this giant inevitably owns a pair of feet made of mud and rooted in earth. A human being is always a "mud man."

— Ning Ya, Agnes Kneitz