

progressive movements. Botanical gardens were place in which knowledge about the natural world was created and through which information about the natural world circulated on a global scale, not only between metropole and periphery, but across colonial territories. They also acted as social institutions in which environmental awareness was fostered. Vinita outlined CWEH's proposed 'Kew and India' project focusing initially on the correspondence of William and Joseph Hooker and the scoping of the Calcutta botanical garden. Colonial sources like these also have the potential to yield data for comprehensive climate studies.

Research questions

The session was chaired by Richard Follet. Deepak Kumar was unable to be present. Rohan d'Souza was connected by Skype.

Alan Lester noted that the workshop had been organised under the research theme 'global transformations'. Alan then spoke about his own research, focusing on connections between the settler colonies and Britain in the nineteenth century. He spoke of his interest in the way that spatially remote transactions, including settler and humanitarian networks, shape the politics of empire, in particular racial discourse. He discussed the ambivalent nature of many colonial and postcolonial development projects, which were developed in contestation with mainstream discourses, but are nonetheless shaped by their own prejudices and can lead to the flattening or denial of difference. Following individual lives and networks can provide insights into agency, power, policy and practise in colonial spaces and the work that many of the participants are doing involves tracing the personal networks of botanists and climate scientists. Alan described the interdisciplinary aims of the six research themes including 'global transformations' and how this resonates with moves on the part of the research councils towards funding large interdisciplinary bids. The aim is to create an interdisciplinary network of expertise around the themes which goes beyond collaboration on single projects. The support staff include Eleanor Marsh, who was assisting with the day's workshop.

Rob Iliffe introduced his work in the history of science and global history and the international collaborations involved in the digital humanities project such as the Newton Project. He noted that scale was a key challenge for digital humanities projects, along with the development of tools, including for visualisation. He spoke of the potential of crowd sourcing projects for processing large data sets, in the humanities as well as the sciences. This would involve engagement with the non-academic community and dealing with issues of copyright. Sustainability and ownership are crucial and related questions. Open access models are essential in terms of enabling access to information in those countries in Asia and Africa which have traditionally had restricted access. Collaboration between Indian and British partners will be innovative and politically significant and the structure of this collaboration will need working out in the course of the discussions about how to take projects forward. Given that scientists are used to dealing with larger data sets and are typically better funded than the humanities, it will be crucial to learn from techniques currently used in the sciences. In return, the humanities provide scientists with raw data in the form of observations of climate drawn from archival sources such as log books.

Rohan d'Souza envisaged three solutions for moving global history forward. Environmental history must engage with contemporary challenges, including climate change. Research agendas should reflect this. Collaborations with scientists are crucial, but the humanities do not only provide data in the form of new archival materials, the work of historians and social scientists also provides a narrative which is otherwise often lacking in the hard sciences. Finally, we need to think outside national geographies and think about a planetary geography. He noted Richard Grove's work as highlighting linked ecologies transcending national boundaries. Since we are entering an era of

extreme and volatile environment, we have to think of new narratives to discuss and describe them. This necessitates interdisciplinary collaborations and fieldwork. As public interest and concern about climate change continues to grow, environmental historians must speak to wider audiences and media. He re-

It illustrates a period in which ideas about forest conservation were emerging, prompted in a large part by Hooker's own investigations. The sample was named after William Roxborough, an illustration of the layers of information provided by nomenclature. The second piece, of sandalwood, was an 1855 donation from Cleghorn, who was the professor of botany and *materia medica*

(University of Colorado and the National Climate Centre) as well as Australia (Queensland State Government). ACRE has three main aims: to bring together historical weather observations from a variety of sources; to improve the quantity and quality of climate information that is available in

reconstructing climate and responses to climate change and environmental destruction in this period. These include the records of colonists and missionaries who were fascinated but also threatened by the climates they encountered. Climate data is included in newspapers, personal diaries and writings. George showed some examples of reconstructions of the timing and intensity of monsoons in western India, which allows an analysis of the variability of the onset of monsoons.

Visit to library collections

Members of the workshop visited Sussex University's Special Collections which were introduced by the archivist Rose Lock. We looked at collections including the correspondence and writings of Leonard and Virginia Woolf and Rudyard Kipling and the papers of Dudley Stamp relating to Burma. Some examples of the Mass Observation Archive and from selected works of travel and botany were also shown.

Book launch

Workshop participants attended the launch of Deepak Kumar, Vinita Damodaran and Rohan D'Souza, *The British empire and the natural world: environmental encounters in South Asia*, Oxford University Press 2011. Jim Livesey, Mark Elvin and other friends and colleagues spoke of the contribution of Richard Grove, to whom the work was dedicated, to the development of the Centre for World Environmental History at Sussex and of the discipline more widely.