U04485 Colonial Science and Its Legacies

Proposal for a new 20 credit Honours course, from first semester 2009/10

Convenor: Dr. Lawrence Dritsas, SSU/ISSTI

Introduction
This proposal is to create an Honours option for the already existing PG option of the same name (P02266). The Honours and PG students will be taught simultaneously, with the PG students also receiving an extra contact hour per week. The course will be directed at all SSPS Honours students and will also be listed with the History programme (discussions ongoing) as a potential option for their students.

The proposed syllabus follows.
COLONIAL SCIENCE AND ITS LEGACIES (P02266/U04485)

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Meetings: TBA
Location: TBA

Assessment: 2 x 500 word short responses to a weekly seminar worth 10% each
1 x 4000 word essay (80%) on a topic not already discussed in short responses

Course Aims
This interdisciplinary option aims to introduce issues surrounding the history and sociology of science and technology as they were mediated by colonial empires. To achieve this aim we will examine the social construction and implementation of scientific knowledge in a variety of disciplines, spaces and time periods, with an emphasis on India and Africa in the nineteenth and twentieth centuries. The course includes material from roughly 1750 until the 1960s and will use examples from around the globe, although with emphasis on Indian and African contexts.

Our concerns in this course will include:

• the role of scientific knowledge as a justifier of colonial intervention;
• the appropriation of local knowledge and its incorporation into western science;
• mechanisms for technology transfer;
• how western science influenced, and was influenced by, the wider world;
• the influence of place on scientific knowledge;
• the history of development schemes and the necessity of understanding this history for current development policy and analysis.

Learning Outcomes
By the end of the course students will:

• be able to offer their own analyses of the practices of colonial science using theoretical tools from within the history and sociology of scientific knowledge and technology;
• possess an advanced knowledge of the historiographical and sociological literature which addresses the themes of the course;
• gain experience in dealing with primary source materials and learn to assess these materials critically;
• develop their skills in essay-writing and oral presentation.

Weekly Themes
1. Introduction: ‘the spread of western science’
2. Historiography of Colonial Science
3. Geography of/as Colonial Science
4. Tropical Medicine and Human Acclimatisation
5. The rise of conservationist thinking: theory, intervention, resistance
7. Spaces of ‘Indigenous’ Knowledge
8. Case Study: social perceptions of African Sleeping Sickness and Nagana
9. Psychiatry in the Colonies
10. Late-Colonial Government and ‘Development’
Readings
There are a set of required and suggested readings for each topic below. The reading for each week may include primary source material and secondary source reading. The primary source readings are always required, the required secondary readings for each topic are indicated in bold. Most of the journal articles will be available in the University Library, either in hard-copy or electronically. The non-required readings are provided to direct further reading and support research into essay topics; there is a much larger body of literature available beyond this list. Aside from the readings indicated there are a number of publications that may be considered pertinent to the entire course; these are the general readings and students are encouraged, as the semester and their interests progress, to look at the following texts.

General Readings
Adas, Michael. Machines as the Measure of Men: Science, Technology and Ideologies of Western Dominance (Chigago: 1989).
Headrick, Daniel. The Tentacles of Progress: Technology Transfer in the Age of Imperialism (New York: 1988)
Livingstone, David N. Putting Science in its Place: Geographies of Scientific Knowledge (Chicago: 2003).
MacLeod, Roy and Deepak Kumar, eds. Technology and the Raj: Western Technology and Technical Transfers to India, 1700-1947 (New Delhi: 1995).

special issues of journals
Osiris 21 (2006): ‘Global Power Knowledge: Science and Technology in International Affairs
Weekly Readings

1. **Introduction: ‘the spread of western science’** In this first week we will consider some classic models and debates which concern the diffusion of science and technology throughout the world. An overview of colonial history will form part of the lecture—preparing students for the rest of the semester.

2. **Historiography of Colonial Science**
   
   **Readings**
   
   **Further Reading**
   h. Ibid., *Science, Space, and Hermeneutics* (Heidelberg: 2002).

3. **Geography of/as Colonial Science**
   
   **Primary Sources**
   a. Major-General Sir F J Goldsmid. ‘Geography’ [Presidential Address to Section E of the BAAS], 1886, BAAS Report, 712-726.
   
   **Secondary Sources**
   h. D. Graham Burnett *Masters of all they surveyed: exploration, geography and a British El Dorado.* (Chicago: 2000)
4. Tropical Medicines and Human Acclimatisation

**Primary Sources**


**Secondary Sources**


5. The rise of conservationist thinking: theory, intervention, resistance, continuity

**Primary Source**


**Secondary Sources**


**Primary Sources**

a. Extracts from *Reports of the Annual Meetings of the Indian Association for the Cultivation of Science*

**Secondary Sources**


7. Spaces of Indigenous Knowledge

Readings


Further Readings


8. Case Study: African Sleeping Sickness and Nagana

Readings


Further Readings


9. Colonial psychiatry

Primary sources


Secondary Sources


g. Waltraud Ernst, "Colonial Psychiatry," in G Berrios and H Freeman, eds, 150 Years of British Psychiatry: 1841-1858 (Gaskell, 1991)

h. James Mills, Madness, Cannabis and Colonialism: the 'native only' lunatic asylums of British India, 1857 to 1900, Basingstoke, Palgrave, 2000


10. Late-Colonial Science and ‘Development’
Primary Source
a. EB Worthington. *Science in the Development of Africa* (London: 1958); chapter 3 'Principles of Science' (provided)

Secondary Sources