

Reviews

JOHN M. MACKENZIE (ed.), *Imperialism and the Natural World*.
Manchester and New York: Manchester University Press 1990. 216 pp,
£ 39.50.

In his introduction (pp. 1-14) editor John M. MacKenzie indicates that the natural sciences and their history have an important contribution to make to our understanding of imperialism. It is, so to speak, the 'workshop' of this imperialism, which is revealed to us in the present volume. 'Sciences' in the 19th century had a connotation far closer to the Latin term *scientia*, meaning general knowledge that was not only available to scholars, but which could also be gained by amateurs. Indeed, 19th century English scholarship was far more influenced by self-taught and amateur 'scientists' than its continental counterpart.

The East India Company (EIC) played an important role in the spread of natural science in England and abroad. An early example of this was the botanical and geographical survey of India begun by employees of the EIC. „Here commercial enterprise and imperial rule were intertwined and the efforts to move beyond the old mercantile trading patterns have their origins in the last decades of the eighteenth century.“

Richard H. Grove's contribution, 'Colonial conservation, colonial hegemony and popular resistance: towards a global synthesis' (pp. 15-50) and that of Deepak-Kumar, 'The evolution of colonial science in India: natural history and the East India Company' demonstrate precisely this connection. Once colonial power had established a new relationship between people and land (private property versus state control), exploitation of natural resources, particularly forests, began on a new scale. Ecological damage was evident on Mauritius and St Helena from early on. The desiccation theory which pointed to a connection between deforestation, a drop in precipitation and general climatic change led to conservation policies on both these islands consisting mainly of reforestation programmes. The EIC's success on St Helena after 1784 prompted the later director of Kew Gardens, Dr J.D. Hooker, to call for the introduction of a forest conservation programme in India after 1847. In particular, the findings of several members of the EIC medical service from the 1820s onwards delivered a more refined picture of the desiccation theory, resulting in a rigid EIC

forest conservation policy. Private timber interests were systematically excluded from the state forest reserves.

If 17th and 18th century conservation policy was prompted by paradisaical images of people and nature, there was a definite reversal in the 19th century.

„[...] the emergence of an ambiguous philosophy of game reservation policy combined such „Edenic“ constructions with a more blatantly class-orientated interest in retaining large animal species for exclusive European delectation, for commercial profit or for recreational hunting purposes. The overarching process, however, was characterised by a process of drawing lines and boundaries.“

Here we have the key phrase of ecological thought which persists today. Add to this the fact that conservation policies were (and are) only introduced when the damage to the environment can no longer be overlooked and is often irreversible. Globally this process of thought and action can be seen as a historical process, which R. Grove shows at work in India and Africa.

Drawing such lines on maps prompted social unrest. Railway construction and timber interests caused far greater damage than the shifting cultivation of a few tribes. Even the investment capital which now flowed into remote or hitherto barely profitable areas led to numerous rural riots with the adoption of plantations and monocultures. More recently, the legacy of colonial forest policy could be felt when in 1984 north Indian peasants were shot because they trespassed onto conservation areas whilst reasserting their traditional rights to graze their cattle in local forest. Disputes also occurred in Africa, where conflict broke out in Rhodesia, Nyasaland and Kenya between 1935 and 1955 as a result of compulsory conservation programmes. More recently the large scale dam projects of the post-war period have strengthened the opposition of indigenous populations. Richard Grove makes it depressingly clear how the curse of colonial conservation policy falls today on the newly „independent“ states, although opposition does continue to increase, and, with it, the possibility of strengthening their own identity.

Deepak Kumar gives a chronological and systematic overview of the development of natural history in India. He begins with the premise „that technological changes affected the timing and location of the European conquests and this determined the economic relations of colonialism. Colonisation primarily meant exploration and exploitation.“ The EIC was thus uninterested in the ways and means; only the results mattered. The creation of the Botanical Gardens in Calcutta from 1786 gave an early

indication of this. Various experiments and inadequate financial support led the Botanical Garden into immense difficulties. Yet thanks to the initiative of a few devotees it repeatedly served as the starting point for expeditions. Such was Dr. J.D. Hooker's journey through Bengal, Sikkim, Nepal and the Khasia Hills between 1847 and 1852. His publications had undreamed of consequences when Col. Younghusband pushed as far as the Forbidden City in 1903, using only Hooker's information. The botanical notes had commercial and military as well as academic value.

The article by Robert A. Stafford, 'Annexing the landscapes of the past: British imperial geology in the nineteenth century' (pp. 67-89), deals with the cartographic survey of the Empire and its adjoining areas. This provided knowledge of natural resources and thus of the contour of commercial and political developments. Results on the ground were attributed to the maps: „The advance of high farming and the demand for raw materials created by industrialisation made it clear that estate revenues both at home and in the colonies could be raised through systematic resource exploitation based on an improved knowledge of soil types, drainage characteristics and the occurrence of coal, ores and building stone.“

The distinguishing feature of imperial cartography was a decentralised yet structured network that developed out of the most diverse set of pre-conditions into the Empire. London was its evaluation centre.

A special case was the geographical and geological examination of Australia and New Zealand, seen as landscapes of the past. The same attitude existed towards Africa. These parts of the earth were essentially seen as lost worlds, whose flora, fauna and inhabitants remained in a primeval state. This kind of thinking provided a retrospective justification on an academic level for colonisation. Only white racial superiority, so the argument went, could end this situation. Or, seen another way, the white race was only able to argue its superiority by relying on these definitions. The article by R.A. Stafford stands out by virtue of its particularly critical attitude towards the academic treatment of the Empire. For him, the geographical and geological survey of the world beyond Europe is a cornerstone of imperialism.

North Europeans' fears of the dangers to body and soul of the tropical sun are described by Dane Kennedy in 'The perils of the midday sun: climatic anxieties in the colonial tropics.' (pp. 118-40). Prospects and expectations in the tropics were attractive, the climate, however, was repellent. For white settlers the tropical sun was an impenetrable and almost mystical centre of danger, prompting discussion in the 19th and 20th centuries of whether long-term white settlement in the tropics was actually feasible. Neurasthenia was the title given to the symptoms of intense exposure to

the sun. These covered an astonishingly wide range including fatigue, loss of concentration, irritability, hypochondria, loss of appetite, digestive disorders, insomnia, headaches, depression, palpitations, alcoholism, sexual profligacy and debility and even suicide! Protection against the above came in the form of a head covering (topi), special cloths, specific colours for house facades and general avoidance of the sun, particularly at lunch time. All this was surprisingly given scientific support, with Dr. Charles E. Woodruff, brigade surgeon in the U.S. Army breathing new life into the concept of neurasthenia whilst stationed in the Philippines during the American-Spanish War with his book, published in 1905 and entitled *The Effects of Tropical Light on White Man*. „Scientific“ reflection also offered another basis for racism and imperialism. In social Darwinist style Woodruff argued that natural selection had developed people of different races for different climatic conditions. Paradoxically, he also arrived at the conclusion that the white race was the fittest and most agile on account of the cold climate. In the tropics, climatic conditions weighted the struggle in favour of the less active darker races, threatening white intruders with degeneration. Accordingly, the white race was unsuited for settling in the tropics, but called nevertheless to control the former. „The white man’s burden“ this found further legitimation.

Between the two World Wars attitudes to the sun quickly changed. Sunbathing was suddenly healthy and life-affirming. The opposite of neurasthenia was heliotherapy. After 1945 racist arguments of aversion to people with darker skins and therefore to their environment, the tropics, found few listeners.

Michael Mann

MICHEL MOLLAT DU JOURDIN, *Europa und das Meer*. (Europa bauen). München: Beck Verlag 1993. 320 Seiten, 18 Karten, 2 Abbildungen, DM 48.-. ISBN 3-406-36726-7

In seinem Vorwort zu der Reihe „Europa bauen“, die von fünf Verlegern unterschiedlicher Sprache und Nationalität getragen wird, ordnet der Herausgeber Jacques Le Goff das Gesamtprojekt den aktuellen politisch-kulturellen Entwicklungen und Gestaltungsmöglichkeiten des „alten Kontinents“ zu. Das gemeinsame Europa muß sich seiner Vergangenheit bewußt werden, um seine Zukunft erfolgreich in Angriff nehmen zu können. Diesem Anspruch verpflichten sich die Bearbeiter der jeweiligen Einzelbände, so auch Michel Mollat, der die verbindenden Elemente des Meeres in der