
J. N. L. Baker taught geography in Oxford University for nearly forty years, and on his retirement in 1962 six of his former students collected together eighteen of his published essays into a book with a short appreciation of his work and a list of his publications. Like many Oxford men, Baker had a life-long devotion to his college, and was largely responsible for its financial welfare through his post as Senior Bursar from 1939. Unusually for an academic man, he was a city councillor and served as Lord Mayor of Oxford in 1964-5. He gave devoted service not only to Jesus College and the much-loved city in which it was placed, but also to various learned societies, notably the Institute of British Geographers, the Hakluyt Society and the British Association for the Advancement of Science, geographical section. In 1913 he went to Oxford from Liverpool College but his graduation was postponed to 1920, as he served in France and India during the War. Like many other geographers of his time, he took his degree in Modern History but he followed this with the Diploma in Geography course as no Honours degree course was then available in geography.

History and geography have long been allied in universities, not only in Britain but also in France and in many other countries. Baker kept throughout his life a passion for historical accuracy, and an abiding wish to find the origin of any idea or any theory of geographical relevance. Always one should quote sources, and find the original source. After the 1939-45 war, some young geographers in Britain began to speak of themselves with more arrogance than sense as «the third generation of British geographers». This drew from Baker, both in articles and in comments, withering scorn for in his view the history of geography has been long and honorable and those who now practise it have every reason to be proud of their heritage. In Britain, the modern growth of geography is often dated from 1887, when H. J. Mackinder was appointed as Reader in geography at Oxford, and many other universities began to provide courses in the subject of varying value and interest. Baker, in his essay on the history of geography at Oxford, has shown that Richard Hakluyt lectured on what he regarded as «new» geography in 1574. Apparently the lectures were on the revisions in the world map made necessary by the discoveries of the period, and the partial colonisation of a new world (p. 120). But Hakluyt was not the first teacher of geography in Oxford, for Baldwin Norton was giving instruction at Magdalen College in 1540 and 1541, and the subject was studied at other colleges of the university, largely to enable students to understand the work of classical and even of modern authors more intelligently.

The association of geography with classical learning and with biblical scholarship has long been fruitful. In 1872 H. F. Tozer published his Lectures on the geography of Greece and in 1894, George Adam Smith's Historical Geography of the Holy Land entered the first of its many editions. Smith acknowledged his debt to the «picture geography» of Thomas Arnold which, says Baker (p. 72) was «the real geography of a country, bringing out the meaning of its connected parts, and giving point to the location of places». Arnold was an historian convinced that any true student of history needed a knowledge of geography. His influence lived on for many years after his death, and it is unfortunate that it did not survive in Britain to the present time. Characteristically, Baker looks back to see what works can have influenced Arnold, and notes that B. G. Niebuhr first lectured on ancient history at Berlin in 1810 and published his History of Rome in 1811-12 (p. 33). Arnold graduated in 1814, and learned German so that he could study Niebuhr's work, which he regarded as «a work of such extraordinary ability and learning that it opened wide before my eyes the extent of my own ignorance» (p. 34). When Arnold published the first volume of his own History of Rome in 1838 he included a chapter on the city, its territory and its scenery, and a section on «physical history», in which an effort was made to elucidate the climatic conditions of ancient Italy. The evidence for the distribution of malaria, apparently less prevalent than when Arnold wrote, was also considered, together with changes in the habitability of the land and volcanic phenomena.
Geographical changes in historical times were a source of fruitful enquiry in Baker's hands. Over the long period of his academic career, it has become accepted that there were such changes, and the recognition of past climatic periods has been of particular value in archaeological studies. Baker, however, was interested in more recent times, as is shown in his essay on «The climate of England in the Seventeenth century» (pp. 220-40), originally published in the Quarterly Journal of the Royal Meteorological Society, vol. 58, 1932. This paper is based primarily on the comments of numerous descriptive writers of the period, along with various local records and diaries of observers. Undoubtedly a large amount of material exists but Baker shows that it is hardly adequate to support generalizations on the weather of the century as a whole: he gently criticises workers who have done this. The paper on climate shows reading of great width and depth and the researcher's ability to find, by patient endeavour, helpful sources in remote places. Like many Englishmen of culture, Baker is well acquainted with the work of Shakespeare, Milton and other men of greatness; indeed he begins one essay with a long quotation from Shakespeare (p. 241) and he draws attention to the views of John Milton on the place of geography in education (p. 91). And he writes amusingly on Charles Lamb's Essays of Elia, who commented on the visits to the sea-side which began in the middle of the eighteenth century and became increasingly popular as time went on. Lamb's first visit to Margate was successful as he had never been away from home for as long as a week before. But the view of the sea proved less entrancing than he expected and the visits of later years to Worthing, Brighton, Eastbourne and Hastings proved devastatingly dull (p. 177). Worst of them all was Hastings, which should have remained a fishing town but had been ruined by the new buildings for fugitive visitors. Charles Lamb was happier in London, where he would let his vivid imagination roam over a world of which he could only see a small part.

Of the eighteen essays in this book, one of the most attractive is «Mary Somerville and Geography in England» (pp. 51-71), originally published in the Geographical Journal. Mrs. Somerville lived from 1780-1872, and her Physical Geography appeared in 1848. It was not her first book, but had developed partly from her two earlier works. It won warm praise from the leading geographers of the day, including Humboldt. Nicodemus-like, the Royal Geographical Society honoured her with its Victoria Medal in 1869, when she was nearly ninety years of age: by that time her book had gone through five editions, and two more followed in 1870 and 1877. Her name is known to a wide circle of university people and one hopes, many others, from Somerville College, Oxford, the second woman's Hall to be founded and named after her, in 1870. Baker gives a vivid portrait of Mary Somerville's life and relates her work to the geography of the times. Another article of a biographical character in this volume is «Major James Rennell, 1742-1830» (pp. 130-57), though this is written partly as a supplement to earlier works, mainly to show the importance of Rennell in the history of geography. The work of Rennell in India is considered here, along with his contributions to physical geography and to theories of ocean currents. Rennell has been called «the father of Oceanography» and his map of the Atlantic currents was published in the Physikalischer Atlas of H. Berghaus (1837), the great Physical Atlas of Keith Johnston (1848) and the Atlas of Physical Geography by A. Petermann (1890). In 1851, however, M. F. Maury, the American, published his Currents of the Sea, followed four years later by Physical Geography of the Sea, which superseded Rennell's earlier works. The wide use of Rennell's work by other geographers is noted by Baker. An article on Bernhard Varenius, 1622-1650, who wrote much of permanent interest in his short life, ends with the comment that he was far in advance of most geographers in his day.

Of several other essays in this book, one of special interest deals with the controversy between Sir Richard Burton and J. H. Speke on the source of the Nile, finally settled in 1876, when H. M. Stanley showed that Speke (who died in 1864) was right. The final essay in the volume, on «The Geographical Doctrine of Balance» bears clear marks of its date, 1947, when people were looking forward to a world that must be different from, if related to, that of the inter-war period. In one form or another, «balance» was desired: some planners and geographers found satisfaction in statistical assessments, such as those who regarded the concentration of more than one-third of the workers in a single industry in any community as showing a lack of balance. In fact resources of a particular kind, such as coal, iron ore, wood, are concentrated in nature, and «balance» is not therefore something of inherent physical origin but a planning
conception belonging to a society in which man is the supreme geographical agent. Nor is there a stable economic state for all time, or even a short time, but rather constant fluctuation on the local as on the international level. As always, in this paper on « balance », Baker works out his theories with copious references and even quotations from other authors including Milton. The article draws attention to some of the difficulties facing planners and notes some of the past failures: beyond question, it comes from a writer possessing a strong social conscience.

Books of presentation essays to retiring geographers are becoming more frequent year by year in Britain. Some consist of essays by the organisers and their friends; this one is entirely by J. N. L. Baker apart from a brief, perhaps excessively brief, tribute. A few of the essays given here have not been previously published and the rest form only a fraction of the author's output over forty years. Curiously enough, Baker published only one book, *A History of Geographical Discovery and Exploration*, 1937, subsequently translated into French and Polish. As one reads these essays, one wishes that Baker had followed the clearly marked though stony road of book production rather than the inviting avenues through forests of learning that the writing of papers provides. But there are writers who prefer the long rugged road of endeavour that leads to a book and others who like to clear a small patch of jungle, and Baker belong to the second group. He has gone forward, armed with a passion for accuracy, the will to search rigidly, and a deep understanding of the English literature like many other son of the English Church he has absorbed some of its powers of saying things simply and directly. His essays show a gravity of mind, a penetration of comment not far short of asperity and an unerring sharpness of judgment. It was said of one living British geographer that one could not conceive that he was ever young: of Baker it could be said that one cannot conceive that he ever could be old. Rarely is he humourous but a certain brightness shines through his pages which suggests that he has enjoyed the adventure of writing through the years, and no doubt will continue to do so.

T. W. FREEMAN,
University of Manchester, England.

GLACIERS DE L'ALASKA


Glacier Bay comprises a body of water about 100 km (62 mi) long, and up to 15 km (9 mi) wide, centered at latitude 58°40'N and longitude 136°05'W; the sea water in the inlets and fiords ranges to depths of 1,000 to over 2,000 feet. At the time of these investigations ten glaciers in five different inlets had termini resting in tidewater and actively discharging icebergs; five other valley glaciers terminated on outwash plains within 30 m (100 ft.) of sea level.

But in the middle of the xviii th century this whole bay region was completely filled with glaciers to its very mouth. Catastrophic glacier wastage followed, with water now 1,000 feet deep where ice had stood 3,000 feet above sea level 200 years ago. Rate of glacier recession here has been 15 times more rapid than in any other known region of the world. Unpetrified fossil forests of 12 to 14 radiocarbon ages ranging from less than 300 to more than 7,000 years have been exposed by the intense erosion by meltwater streams and wave action.

Cooper in 1937 explained the extreme sensitivity of this region to climatic change as due to the palmate arrangement of the valleys draining mountains on three sides toward a single outlet like the veins of a maple leaf coalescing toward the supporting petiole at the base. Another feature of importance is the large area of rather low altitude snow collecting surface which could change suddenly from a glacial asset to a glacial liability with climatic warming and rising of