

Foreword: Archibald Geikie – geologist, administrator, artist, writer

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was somewhat coy in his own autobiography. Geikie's life story followed the classical 'making good' scenario that allowed talent and hard work to succeed in Victorian society, at a time when class barriers were starting to display some permeability. He was a gifted man: a shrewd observer as a field geologist, an artist with a rare gift for deconstructing a landscape into its fundamentals, a capable administrator when in charge of the Geological Survey, and a passionate believer in communicating with a wider audience. He was also ambitious, and could be ruthless to those who criticized his work; he was sometimes less than generous to fellow scientists who had insights similar to his own. He was president of the Geological Society of London (1890–92) and it is particularly appropriate to examine Geikie's achievements – and maybe his shortcomings – in a volume published by the Society itself. Science is the principal focus in the articles that follow, but some essays reveal the other ways this most versatile and influential man impacted the development of our science. I was unaware of his pioneering work on the weathering of gravestones, as described by Nina Morgan, and of his involvement (Mike Benton) with the Triassic dating of the famous reptiles from Elgin.

In the darker corners of almost any antiquarian bookshop will be discovered volumes on geology written by Archibald Geikie. Rather neglected now, and unappealing in their dark bindings, they were once among the most read geological texts in English. Geikie's *Text-book of Geology* of 1885 ran into several editions. Even seven years after his death in 1924 the Macmillan Science Primers series were still printing a fifth edition of his short introductory text *Geology* (Geikie 1931). In the mind of the general public Sir A. Geikie embodied British geology in a remarkable way. The story of his public achievements is also the story of the consolidation of geology as an independent science. That he could write well and with facility about his subject topped off a career that began in ordinary circumstances as a barber's son. M.A. Taylor's article in this volume casts light on an early period about which Geikie

The exploration of NW Scotland and what came to be known as the Moine Thrust served to advance the early stages of Geikie's career. A Scottish field trip in the company of Sir Roderick Murchison in 1860, forensically explored by Butler and his co-authors, provides an addition to David Oldroyd's (1990) incomparable account of *The Highlands Controversy*. Geikie supported Murchison's interpretation of a simple sedimentary succession close to the western edge of Scotland, and must have been complicit in dismissing contrary views. It is hard to avoid the conclusion that a young man on the make was not going to contradict the dominant and domineering presence in British geology, and Geikie assuredly benefited from the association with Murchison later in his career. It could be said that he eventually made amends when he was in charge of the Survey by commissioning Ben Peach and John Horne to produce one of the great works in British geology (Peach *et al.* 1907) that fully

From: BETTERTON, J., CRAIG, J., MENDUM, J. R., NELLER, R. & TANNER, J. (eds) *Aspects of the Life and Works of Archibald Geikie*. Geological Society, London, Special Publications, 480, <https://doi.org/10.1144/SP480.22>

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vindicated Callaway and Lapworth in their observations of thrust tectonics. But it is as well to remember how inaccessible these critical areas were in the nineteenth century, and Geikie's observation that stout legs were as important as sharp eyes may account for at least some of the perfunctory work by the young man and his famous mentor: they were in too much of a hurry to be done with it.

In later controversies Geikie showed consistent judgment and certainly did not skimp on the fieldwork. Although subsequently overshadowed as a glaciologist by his brother James, Archibald was himself a pioneer in interpreting the 'drift' in opposition to Lyell's view that it could be explained by deposition from floating icebergs, as Colin Summerhayes and Peter Worsley explain. Geikie even went to Arctic Norway – quite an undertaking until the middle of the last century – to observe till in the making, and to assert the direct action of glaciers in the Ice Age deposits in northern Britain. Geologists then could evidently turn their attention to anything that took their fancy, if they had the means. Geikie espoused igneous petrology and field exploration on the island of Skye, where the intrusive relationships between gabbro and granite bodies were in dispute. He roundly condemned the account of John Wesley Judd, a pioneer of the use of thin sections in petrology, but the intemperance of their exchanges in the Geological Society, dutifully recorded in the discussion in the 'QJ', is quite shocking to modern eyes – stuff like that still happens in common rooms, but not in public. I am old enough to remember the Geological Society when it still had the 'parliamentary'-style meeting rooms and open confrontation seemed to be built into its very structure. On this occasion careful fieldwork won the day for Archibald Geikie, and Judd retired bruised. Many critical geological sites were illustrated by Geikie himself, and helped in his geological debates. The Geikie archive in the Haslemere Museum houses a fine collection: art could align with science when it was needed.

I also remember a stool in the ancient lift in the Sedgwick Museum, Cambridge, in the 1960s. The same stool was that sat upon by G. L. 'Gertie' Elles in her latter years, when the renowned graptolite expert had become rather stout. I was delighted to learn from C.V. Burek that Archibald Geikie

(eventually) came to be helpful to female geologists, Elles among them. Elles' friend Ethel Wood (later Dame Shakespeare) was another woman who gained approval from Geikie, and her drawings for the *Monograph of British Graptolites* (Elles & Wood 1901–18), published by the Palaeontographical Society, are still admired a century later. Indeed, this work continues to be used as a research tool, which is testimony to its singular merits. When I began work in the Ordovician of South Wales with Robert Owens of the National Museum of Wales, a paper by Misses Crosfield and Skeat published in 1896 was the reference we used to get into the local geology of the Carmarthen area – a very competent piece of work. I learned that these pioneering women field geologists were also encouraged by Archibald Geikie to pursue research.

This volume of papers may help to bring back Archibald Geikie into the consciousness of some geologists who maybe only know him as a familiar name. Who could fail to be impressed by the compass of his energy? The only comparable geologist I can think of (his very approximate contemporary) is Charles Doolittle Walcott, who somehow combined running the Smithsonian Institution in Washington, D. C. with a prodigious research career. They don't make them like that any more.



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September 2018

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