

Large engraved map with fine contemporary hand colour, in four sections dissected and laid on linen, separate key dissected and mounted on linen, together with, 8vo., xi, 29pp., booklet, original brown paper wrappers, title to upper cover, all housed in original brown cloth slipcase, with manuscript label.

GREENOUGH'S RIPOSTE TO SMITH IN THE BATTLE OF THE GEOLOGICAL MAPS

A Physical and Geological Map of England and Wales By G.B. Greenough Esq. President of the Geological Society of London. At its Establishment and at subsequent periods: President of the Royal Geographical Society of London &c. First Edition No. 1st 1819. Second Edition Novr. 1st 1839. [together with]: Memoir of a Geological Map of England, to which is added, an Alphabetical Index to the Hills, and a List of the Hills Arranged according to counties. By George Bellas Greenough F.R.S.

Author
GREENOUGH, George Bellas

Publication date
1839, and 1840.

Publisher
Published by the Geological Society,

Publication place
London,

Physical description
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Dimensions
1950 by 1670mm (76.75 by 65.75 inches).

Notes
Second edition of George Bellas Greenough's geological map of the United Kingdom, here with the rare Memoir (introduction) to accompany the map.

First published in 1819, four years after, and in response to, William Smith's seminal map on the same subject, and a key milestone in the history geology.

Greenough (1778-1855) was the first President of the Geological Society, and was later President of the Royal Geographical Society. The Geological Society was founded in 1807, but Smith never became a member, although his geological work that was the basis of the map was well underway by then. Greenough had actually been shown a copy of an early version of Smith's map by the surveyor John Farey in 1802, who later attacked Greenough in the press for his "unhandsome conduct" in the matter (Philosophical Magazine). There were probably two reasons for this: personally, Smith probably could not afford the membership fee; and professionally, he advocated a method of differentiating between strata using the fossils in each layer. This theory went against the prevailing scientific method of inductivist reasoning, and was viewed with suspicion by most of his contemporaries. Greenough and other Society members visited Smith to look at his collection of fossils and the progress of his stratigraphical map, and were unconvinced by Smith's method, his claims to have done the field work for the map himself, and probably unimpressed by his plain lodgings (Herries Davies).

Greenough decided (as he claimed later) that Smith did not have the resources to complete the project and initiated the production of an official map on behalf of the Geological Society. Greenough's map, with the financial backing of the Society, benefited from expert draughtsmanship and engraving, which Smith could not afford. Unlike Smith, however, Greenough did not conduct field work himself. Instead, he relied on the work of other geologists, including Smith – both he and the Society are on the list of subscribers to Smith's map – creating much debate as to the extent to which his map is derived from Smith's. It is clear that Greenough's work drew on Smith's method of delineating strata, and he does not credit Smith at all for this. There are, however, several stylistic differences between the two: Greenough uses a scale of 6 miles to the inch rather than 5; retains the topography whereas Smith removes it; and uses flat areas of colour rather than the fading watercolour washes employed by Smith.

Greenough's map, and its lack of fieldwork, was met with a scathing reception by some. The geologist Thomas Webster called it "so very defective and inaccurate that I was obliged to begin de novo" (Winchester). It sold, however, by virtue of being produced under the auspices of the Society and because it was cheaper than Smith's work, which has been suggested as a deliberate ploy on Greenough's part (Winchester). Greenough was forced to defend his actions later, arguing that the similarities between his and Smith's work came about because both works were correct. Eventually, the 1868 edition of Greenough's map credited Smith for the first time, but by then it was too late. Smith had died in 1839, heavily in debt.

The present second edition has been greatly revised and updated by Greenough, and come here with the rare 'Memoir' (Introduction), in which Greenough sets out the various improvements to the maps design and the numerous sources on which he drew. One of the most striking differences is in the

use of colour and pattern (something of a pet project of Greenough's) to represent different geological information, in order, "to make the [ie colours] of a geological map speak to the mind as well as to the eye". (Memoir, p. viii).

Rare OCLC records five institutional examples, of which two have the accompanying Memoir: Natural Environment Research Council, Nottingham, with Memoir; Delft University with Memoir; University of Illinois; and BNF. COPAC records a further three examples of which two have the Memoir: Royal Society; Bristol University with Memoir; Natural History Museum with Memoir.

Bibliography

John Farey, Philosophical Magazine, 3 May 1815; Whatever is Under the Earth: G. L. Herries Davies, The Geological Society of London 1807-2007 (London: Geological Society of London, 2007); Simon Winchester, The Map That Changed the World: A Tale of Rocks, Ruin and Redemption (London: Penguin, 2002).

Provenance

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