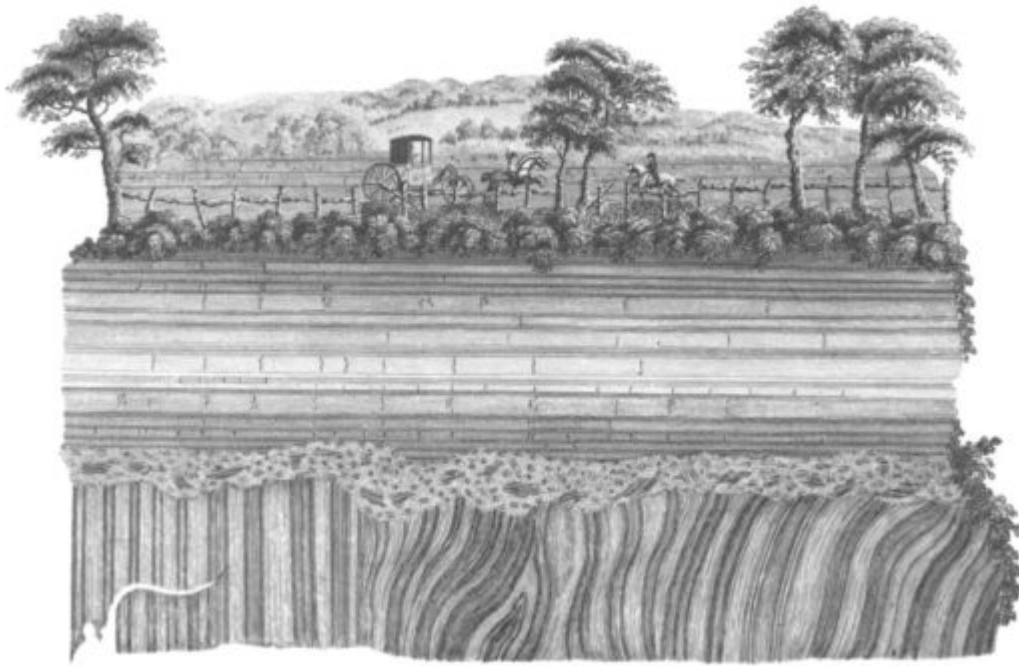


A PILGRIMAGE IN SEARCH OF DEEP TIME



Jedburgh, just off Dere Street, Scottish Borders.

On the Berwickshire coast at Siccar Point James Hutton found an exposure of the sandstone, shales and greywacke, with the strata of the sedimentary rocks lying at an angle to each other – what is now called an unconformity. Another, inland at Inchbonny by Jedburgh, is now known as the Hutton Unconformity. There was only one way that such configurations could be explained: one layer had been laid down horizontally on the ocean floor, then elevated, folded, and the tops of its folds eroded, subsequently sinking back into the ocean where it formed the base on which the sand was later deposited and consolidated. Such a sequence of events could only have taken place over an immense period of time.



Engraving after a drawing by John Clerk of Eldin (1787) of the unconformity at Jedburgh: Plate III in the *Theory of the Earth Volume 1*, by James Hutton (1795). Vertical Silurian greywackes and shales are unconformably overlain by Upper Old Red Sandstone basal breccia and overlying sandstones.

Hutton made a radical distinction between human comprehension and deep time, maintaining that the creation and metamorphosis of the land follows a temporality where, in Hutton's words, "we find no vestige of a beginning, no prospect of an end" (the famous phrase from his *Theory of the Earth*, published in the *Transactions of the Royal Society of Edinburgh* in 1788). The immensity of time and the character of the processes is such that it is time beyond human comprehension, sublime. Minds "seemed to grow giddy looking so far into the abyss of time" was the way John Playfair described it.

Hutton's time without limits, visible in the folding of a stratigraphic unconformity, is a different quality of time to the human histories folded into the landscape. Observations on the stratigraphy of rocks takes us to the edge of an abyss of time, deep time beyond human comprehension. This experience is of the abject, the sublime, a kind of experience that takes us over the edge, that is rooted in what cannot be contained, that exceeds any category intended to capture

its essence. The sublime was a key aspect of the landscape aesthetics of the eighteenth century: the experience of vast empty mountain ranges, of waterfalls and rapids, of landscapes that defy description of their physical qualities, that exceed the enumeration of their features.



Hutton's unconformity at Inchbonny, where he stared into this abyss of time, is overgrown. The sublimity of deep time is, of course, a confrontation with mortality – here I am a couple of hundred yards down Jed Water at Jedburgh Abbey –





A Roman inscription in the staircase up the west front of the Abbey (and with thoughts of the puzzling inscription from the Kaim of Kinprunes in Walter Scott's Antiquary)

