

BOOK REVIEW

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Rising from the Plains by John McPhee. Farrar-Straus-Giroux, 1986. 214 pp.

IF HISTORY IS the narrative of humankind on earth, geology is a longer tale—that of the foundations that allowed or succored human existence. Unfortunately we hear little about it. Blame its length or the boring technicalities of some of its chapters, but geology is perhaps the most excerpted tale ever told. In grade school we hear of the rise and fall of dinosaurs, the swamp vegetation that turned to coal and diamonds under the pressure of time, and the volcanic formation of mountain ranges, but we never get the whole picture and the science of geology is rarely applied to our own backyards. John McPhee has changed that.

The land—the landscape, the people, the history, and the geology—is the basis for this extended essay. McPhee shows in startling detail the hidden richness of the most barren plains by relating the events that produced the rocks he stands on and holds in his hands. Shunting the reader back and forth across the eons and shifting his perspective from that of the geology expert, to the freshly graduated schoolmarm, to the geologist raised on this landscape, he builds up his essay layer by layer like strata of accumulating sediment. McPhee follows a few pages of geology, with a couple of stories about the Love family ranch, an overview of life on these plains four million years ago, adds quotes from the master geologist telling of his personal experience with the geology of this land which in less skilled hands would have produced a shattered unfocused piece. Yet the closures and beginnings set up a natural cycle. From the opening paragraph he lays down the layers of his narrative. “This is about high-country geology and a Rocky Mountain geologist. I raise that semaphore here at the start so no one will feel misled by an opening passage in which

a slim young woman who is not in any sense a geologist steps down from a train in Rawlins, Wyoming, in order to go north by stagecoach into country that was still very much the Old West.”

Using the diary entries written by Miss Waxham, the “slim young lady,” as she rides the stagecoach from Rawlins into Fremont County to be its only educator, and quotations from her son, David Love, geologist for the U.S. Geological Survey, McPhee tells about the visual impact and the scientific implications of particular features of the landscape. By first mapping a set of key points he creates a portrait of the land in and around the Big Horn and Laramie Mountain Ranges.

Although this is a book about geology, it is geology humanized. The endless geological cycle of building, burying, and excavating that began twenty-five million years ago with the volcanoes, the wind, and the restless shifting of land masses is reflected on a scale in the settling of the new frontier and in the Love family fortunes on the ranch where they live. The composition of the soil and rocks determines which land will fatten grazing animals, which will have minerals for mining as well as where the railroads are laid (they followed seams of coal). Within that outline we learn of the prosperous and “calamitous” years on the Love ranch. Good years built the farmstead, the bunkhouse and the corral, bad ones buried the livestock under a sea of mud or brought drought and wind to scour the plants from the plains. McPhee treats his subjects with a reverence that approaches awe, but constantly applies the tough probe of the scientific mind—the mind that wants to understand the complex science of geology and its implications for the people who live on the land.

Rising from the Plains is the third in a series McPhee has written on geology. While reading *Basin and Range* and *In Suspect Terrain* would have enhanced the reading of this volume, the pleasure of it was not diminished by having missed them.