

naissance of physics during periods of boom and bust and argues that academic physics rode out the Depression surprisingly well.

Finally, two contributors address part of the sea change that occurred between science and the federal government during and after the Second World War. Carroll Pursell's all too brief essay on the Office of Scientific Research and Development raises the important question of the continuities and divergences between the pre- and postwar scientific establishments; Harvey Sapolsky's short essay, "Academic science and the military," illuminates the skeleton in academic science's closet. He traces the roots of each group's search for isolation, a situation that serves, the author says, neither the nation nor its defense.

This collection is doubtless valuable to the historian; whether the essays within

it separately or collectively are "unmistakable harbingers of a vastly altered history of science" is less clear. Garland Allen's paper, "The rise and spread of the classical school of heredity, 1910-1930," goes some distance in attempting to integrate the conceptual and the social; Rosenberg's paper and to some extent Kohler's provide useful pointers as well. But even the best of the others have little to say about the disciplinary component of the scientific enterprise. Their contribution remains within the still "externalist" tradition of the history of American science. One need not be a seer, however, to predict that Reingold's hopes for an integrated, "contextualist" approach are coming to realization.

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An Institution for Rational Amusement

Mr. Peale's Museum. Charles Willson Peale and the First Popular Museum of Natural Science and Art. CHARLES COLEMAN SELLERS. Norton, New York, 1980. xiv, 370 pp., illus. \$14.95. A Barra Foundation Book.

When in 1786 Charles Willson Peale, portraitist of the Founding Fathers, announced in the newspapers that, "ever desirous to please and entertain the Public," he would convert a part of his Philadelphia house into "a Repository for Natural Curiosities" where citizens might observe "the Wonderful Works of Nature," he assumed a new career. But

he was only championing the republican experiment in a new way. With his exhumation five years later (in the country's first organized paleontological expedition) of the very nearly complete skeleton of a mastodon, and its mounting and display, the museum came to be, with Niagara Falls, one of the nation's great attractions. Eleven feet at the shoulder, the skeleton stood as the New World's refutation of the Old World's slander that the American climate was deleterious to life. But the "mammoth" only heightened the patriotic note conveyed in the museum's depiction of the

inalterable laws of nature that underpinned the new political system.

Peale was at pains to exhibit his specimens in a reconstruction of their natural habitats and to arrange them according to the Linnaean system. These innovations, which, taken with his practice of exchanging specimens, made him the father of the modern natural history museum, offered entertainment enough. Public curiosity thus piqued, public education might begin, for *rational* amusement was the aim. In the euphoric years of early republicanism, how could Peale foresee that learning and amusement would not forever jog along together in harmony?

Three abundant generations of Peales and assorted relations labored at the museum, and with relish. The swelling flood of donations and exchanges pushed it into ever larger quarters until in the magnitude of its collections it had no peer at home or even, it might be said, abroad. In his lifetime Peale succeeded in holding to the scholarly course he had laid down and brought out the five-legged, six-footed, two-tailed cow giving milk to a two-headed calf only on special request. Fearful of entrusting his educational enterprise to his talented but miscellaneous sons, in old age he sought to sell it to government. When federal, state, and local declined in succession and on his death in 1827 the sons took over after all, the unusual cow predictably appeared with increasing frequency and P. T. Barnum stood by to pick up the pieces. In more ways than one Peale's museum thus established the pattern that natural history museums in America would follow in the future.

But for 40 years the long rows of glass cases, the gaslit illumination of the laws of nature, had been a national wonder. Late in his career Joseph Henry recalled his first youthful visit to Mr. Peale's museum "with a vividness which will be among the last to be obliterated by advancing years." That Henry also had firmly, if futilely, opposed burdening the Smithsonian with a museum suggests that he had followed with interest Peale's attempt to educate an equalitarian people in science.

Written with authority, sensitivity, and humor, *Mr. Peale's Museum* is a handsomely illustrated biography of an institution that amused, amazed, inspired, even educated a generation of Americans, not least the family who created and maintained it.

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First ticket to Peale's museum, etching by C. W. Peale, 1788. [Elise Peale Patterson de Gelpi-Torro; reproduced in *Mr. Peale's Museum*]