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Essay review

The implications of human and other animal displays in U.S. based museums

Life on Display: Revolutionizing U.S. Museums of Science and Natural History in the Twentieth Century, Karen A. Rader, Victoria E.M. Cain. University of Chicago Press, Chicago (2014). 456 pp., Price $45.00 cloth, ISBN: 9780226079660

Bone Rooms: From Scientific Racism to Human Prehistory, Samuel J. Redman. Harvard University Press, Cambridge, MA (2016). 408 pp., Price $29.95, £22.95, ISBN: 9780674660410

A recent review of Samuel J. Redman's *Bone Rooms* by Karen Rader, co-author of *Life on Display*, while lauding the author's comprehensive primary research and attention to ethical considerations, cautions that it is

> less ambitious in articulating connections to science popularization (including the historical evolution of museum displays), the history of biology (evolution and eugenics feature prominently, but they are neither historiographically situated nor analyzed), and the intellectual history of scientific racism, especially the interwoven origins of physical and cultural anthropology in both of these fields' infancies. But while these aspects will likely make *Bone Rooms* frustrating for historians of science, Redman's work should also compel us to interrogate our notions of audience.[1]

It is possible to understand the reviewer's perspective, given the meticulous detail with which she and her co-author, Victoria Cain have addressed just those aspects that she felt that Redman has signally failed to do. Whether such attention makes or mars *Life on Display* is open to question, although Rader, to her credit, does speak about the audiences for which historians may be writing. More crucially, however, both books, the variant inflections in their approaches notwithstanding, address a functional shift from the collecting of objects to the manner of their display. Where Redman moves from the close of the Civil War in the United States to just shy of a century later, Cain and Rader span the twentieth century with liberal bleed to either side.

At the heart of *Life on Display* is the study of museums of natural history and latterly science, whereas in Redman's book, the world is more lurid, with the exhibition of human remains, bones to mummies, coincident with the rise of the discipline of physical anthropology. Narratives of individual museums are of course legion, ranging from accounts of cabinets of curiosities to descriptions of some of the most compelling museums we know in the field of natural history. [2] What is interesting about the two books under review, however, is that both cover museums across the United States. Although the Smithsonian and the American Museum of Natural History (AMNH) get pride of place in both instances, both books also look at many other museums. For instance, Rader and Cain spend considerable time discussing the Boston Museum of Science, the Milwaukee Public Museum and the Chicago Museum of Science, whereas the Army Medical Museum and the University of California in Berkeley play a key role for Redman. But the insistence on certain museums is significant for it allows for greater depth in research, even as the choices are employed as exemplary for larger points to be made. It is precisely to these points that I turn, examining each book for its claims and comparing them as well.

1. Life on Display

At the beginning of their book, Rader and Cain quote the British author Gilbert Keith Chesterton who had made the arresting observation: “We have passed from the age of monuments to the age of museums” (p. 1). Despite Chesterton's observation that he had glimpsed in the country “a stark symbol of modernity”, it was museums that had started to grasp the imaginings of such possibility in a nation still on the make. Such famous monuments as the Brooklyn Bridge, the Statue of Liberty, and the statues to a myriad fallen on either side at Gettysburg had already been built in the previous century. But there were also others in the incongruous setting of garden cemeteries, which found their genesis in the country in 1831. Mount Auburn Cemetery in Cambridge/Watertown, Massachusetts, Laurel Hill Cemetery in Philadelphia, Pennsylvania and Hollywood Cemetery in Richmond, Virginia are just some examples of garden cemeteries where eminent sculptors and architects plied their trade.

With the advent of the museum, artists, particularly sculptors, had a new home. But museums were more than mere repositories for contemporaneously created art. They also depended upon collections of a different kind, in which the objects, artistic or otherwise, were frequently the result of trade or pillage. These collections in turn assumed the hue of the exotic and people flocked to them. But collections without context could not sustain attention. And it was a feature of just that element of modernity—which would make manifest an inexorable evolution in museological exhibition—of which Chesterton despaired. As Cain and Rader observe: “In the early twentieth century, influential leaders came to believe that improving *displays*, not collections, was the best way to transform their institutions into important places for noncompulsory public education” (p. 2, emphasis added). The fundamental *raison d'être* for their effort was to chronicle “the prehistory and the legacy of the revolution Chesterton

[1] Rader, 2017.

[2] Please see for instance, Horst Bredekamp (tr. Allison Brown), 1995; Oliver Impey and Arthur MacGregor (eds.) 2001; Emma C. Spary, 2000; Susan Sheets-Pyenson, 1988; William T. Stearn, 1981; and Kevin Y. L. Tan, 2015.

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witnessed: how on-going efforts to create popular educational displays ultimately compelled public natural history and science museums in the United States to develop new institutional roles and identities, in both twentieth-century science education and American culture." The "New Museum Idea", a "détente between the two extremes" of museums being "temples or forums", sought for these institutions to reach the public through the simultaneous production and dissemination of knowledge. Using biological displays as points of departure, the authors contend that the history of such exhibitions illuminated "the nature and range of intellectual and institutional transformations that took place in the twentieth-century museums." A key aspect of this history was how the changing nature of museums and what were exhibited therein had "important collective effects on each other" (pp. 3–4).

Central to Rader and Cain's assessment is the place of the "museum men" in the whole process, an "infectiously enthusiastic faction of reformers," who "worked to … transform museums from a "cemetery of bric-a-brac into a nursery of living thoughts," in the words of George Brown Goode, assistant director of the National Museum (p. 9). Part of the concern was the fact that despite the fact that visitors were welcome, the displays were chaotic in the waning decades of the nineteenth century. The situation was not unique; museums elsewhere too were bursting at the seams with the weight of their collections admixed with a singular lack of creativity as to how to manage and display them as well as such structural difficulties as lack of space. Goode attempted to resolve the issue with a dual arrangement initiative where some of the best specimens were displayed and the others were stored away for study by specialists (pp. 11–12), a system that such places as the Harvard Museum of Natural History continue to follow to this day. Even as museum men continued to think about how best to conceive manners of display, clues abounded. "In the decades after the Civil War, educators, philosophers and scientists considered the structured exercise of eye and memory essential to the healthy development of human facilities" (p. 16).

The twentieth century would bring new angles to the public eye—ecology, animal behaviour and microbiology, economic nature where "food, coal, clothing and other essential goods" were foregrounded and public health through the life cycles of germs and the diseases they caused, "pneumonia, tuberculosis, syphilis, meningitis, and other 'such microscopic plants" (pp. 27–29).

Art played an important role as well, The incorporation of the 'Akeley method', named after preparator and inventor Carl Akeley, for example, enabled taxidermists to mount large mammals more convincingly than the past" (p. 38), resulting in fairly dramatic and arresting poses for the specimens.[3] Sometimes "museum men blurred science and art in order to meet – or exceed – popular expectations" (p. 39). But certain reformers were concerned that in an attempt to display perfected specimens, "interest in scientific fact would pale in the face of fascinating artistic accomplishment" (p. 40). In fact, art did indeed dominate certain places, e.g. the glass flowers at the Harvard Museum of Natural History exclusively created by the father-son duo from Bohemia residing in Dresden, Leopold and Rudolf Blaschka, between the 1890s and 1930s, and before that, marine invertebrates for several museums around the world.[4]

Increasing sophistication in display demanded more elaborate contexts and the result was the diorama (p. 51). Among the great advantages in this form of portrayal was that animal behaviour could be highlighted and employed by science teachers as visual reinforcement for students. "Curators intended dioramas to convey the very social and scientific lessons currently central to school curricula: sympathy for animals, the efficient conservation and exploitation of natural resources, successful adaptation to changing environments, and the physical processes by which life was organized and advanced" (p. 63). Another fascinating angle arose from drama. Dwight Franklin, a preparator, who would go on to become a leading prop artist in Hollywood told colleagues at a meeting of the American Association of Museums in 1916 that museums had much to learn from the theatre. "Many of the scenes which so delight us at the play, might, with a few changes, be translated into charming museum groups," he observed (p. 66). These museums, however, were often soaring paeans to Gothic architecture, akin to cathedrals.[5]

Not everything was hunky-dory in the evolution of the natural history museum. Researchers and museum men bickered and traded barbs. Some left the museum world entirely to assume positions in "universities, laboratories, or government surveys and field stations" (p. 86). But the contretemps would also drive increasing experimentation. Taxonomy and systematics began to hold sway in display even as the modern evolutionary synthesis found itself well underway (p. 96). Interwar display critics shared a vision of what topics museum-based displays of life science should address. Modern biological concepts—germs and genes, cells and structures, hormones and homeostasis—topped the list, while interest in ecology "mushroomed in the 1920s and 1930s" (p. 97). But one of the biggest innovations was motion. The retail magnate Julius Rosenwald, of the Sears Building fame in Chicago, noted the appeal of visitor-activated exhibits for his eight-year-old son at the Deutsches Museum in Munich and related it to his own absorption with similar displays at the Chicago 1893 World's Fair (p. 100). In the AMNH, experimental displays included excursions in ethology, where Franz Lutz turned the idea of the diorama inside out with visitors watching insect in their natural habitats instead of behind glass (pp. 106–107) even as Gladwyn Noble established a Hall of Animal Behaviour (pp. 107–108).

The most significant developments occurred, however, not in museums of natural history but in museums of science. It was these that drew most immediately from the exhibits from World's Fairs—which, as the authors cleverly point out, "used dynamic displays to make their medicine go down", a felicitous allusion to a much loved song from the musical *Mary Poppins*. Though natural history museums had long trafficked in displays from World's Fairs, in the 1930s they purchased fewer and fewer exhibits from exposition pavilions. Museums of science and industry, in contrast, snapped them up. "Their broader scope of scientific subjects, tolerance for corporate involvement, and enchantment with the new and the mechanized made the museums natural partners with interwar World's Fairs …" (p. 115). The birth of the science museum, the authors opine, likely derived from the recognition that natural history museums were in dire requirement of a revolution: "retrofitting displays was not enough" (p. 123). One major feature was that research and collecting programmes were allowed to go to seed, while content and display were privileged, even as some elements of the traditions of natural history were maintained. To this end, Rader and Cain offer more examples, resulting in a distinct feel of repetition of covered ground.

Museums such as the Buffalo Science Museum and the Boston Museum of Science find mention for points of innovation in such areas as "physics, and chemistry, astronomy, earth science, biology, evolution, heredity, and physiology" (pp. 124–125). Natural history museums began slowly, almost reluctantly, to adopt some strategies that the new kids on the block in the form of science museums were leveraging to their profit. The result was reasonably dramatic. Although museums continued to build them they became more flexible in their treatment—the dioramas remained pedagogically important but could be modified to accommodate new messages and convey different concepts. Thus as Rader and Cain say, "The age of the great diorama halls, those grand cathedrals of romantic nature, was at an end" (p. 134).

[3] For an excellent insight into the African Hall of Mammals at the American Museum of Natural History in New York under the Akeley Method, please see Donna Haraway, 1984–85.
[4] For instance, please see Elizabeth R. Brill and Florian Huber, 2016.
[5] Please see Alison Griffiths, 2008.