

province closed its last vice-regal residence in 1937 and demolished it in 1961. No other residence has ever been provided. Alberta's Government House has become a conference and reception centre, and the Provincial Museum has been built on its grounds. Government House in Regina has now been restored to the style of the 1890s and is open to the public. Three of the four Atlantic provinces, however, still maintain their original mansions, as does Manitoba. Quebec's vice-regal residence from the 1860s, known as Spencer Wood or Bois-de-Coulonge, burned to the ground in 1966 with the lieutenant-governor himself perishing in the fire. British Columbia's residence also burned to the ground twice, but the province continued the tradition of an official residence after each fire.

There is no confusion in the author's mind as to whether the closing or abandonment of the surviving mansions was wise. It may have been politically expedient at the time but Canada's architectural and cultural heritage could not help but be diminished. Current efforts in some provinces to restore the historical fabric of these mansions, such as Saskatchewan and New Brunswick, and in the federal jurisdiction under the direction of the Official Residences Council, tend to support Dr. Hubbard's opinion. *Ample Mansions* is certain to be as valuable a resource to those involved in the care and restoration of the provincial residences, as was *Rideau Hall* to those involved in the long-term care of Government House in Ottawa.

## **Susan Sheets-Pyenson, *Cathedrals of Science: The Development of Colonial Natural History Museums During the Late Nineteenth Century***

VICTORIA DICKENSON

Susan Sheets-Pyenson. *Cathedrals of Science: The Development of Colonial Natural History Museums During the Late Nineteenth Century*. Montreal: McGill-Queens University Press, 1988. 144 pp., 20 ill. Cloth \$24.95, ISBN 0-7735-0655-1.

Susan Sheets-Pyenson has written a welcome addition to the slender body of historical literature on museums. Though there are a fair number of institutional and personal biographies (Edward Miller, *That Noble Cabinet*; Lovat Dickson, *The Museum Makers*; Gerald Killan, *David Boyle*; Edward Alexander, *Museum Masters*), few recent books have dealt with the examination of the museum as a social institution.

Sheets-Pyenson has two aims. The first is to document a "remarkable development"—the museum explosion of the last quarter of the nineteenth century, which as the author notes, has largely escaped the notice of historians of science and society (p. 3). Despite their enormous physical presence in cities and small towns, most historians have failed to study either the organization of the museum itself, or the role it plays within society. The author's second aim is to examine the development of colonial natural history museums as a case study in the relationship

between scientific activity in a metropolitan centre and in the hinterland. Sheets-Pyenson writes, "By looking at the development of colonial natural history museums...and by examining the role of their early directors, it becomes possible to delineate the nature of colonial science at close range" (p. 15).

The "hinterland" thesis is perhaps more familiar to Canadians in its economic form, so well expounded by Harold Innes in his books on the cod fisheries and the fur trade. Sheets-Pyenson's version of this idea is that used by the historians of science, particularly George Basalla, who defined the idea of "colonial science." Basalla states that the colonial scientist is educated abroad, depends on European books, laboratory equipment and scientific instruments, and like his counterparts in other industries, is the supplier of raw materials to his intellectual masters in the metropolitan museums who act as the theorists or gatekeepers of scientific knowledge. His thesis has been further developed to explore the relationship between imperialism and science, and in Lucille Brockway's book, *Science and Colonial Expansion*, cited by Sheets-Pyenson, the Royal Botanic Gardens at Kew are specifically seen as playing a key role

in the expansion and consolidation of the British empire through a kind of "biological imperialism" of plant breeding and plantation cultivation.

The comparative approach is characteristic of authors writing about the relationship between metropolitan centres and hinterlands, and Sheets-Pyenson's book adopts this approach. She examines the founding and growth of five museums, investigating their development to determine the role of natural history museums in colonial science, and as exemplars of the hinterland theory. She looks at the founders, the buildings, their staffing and financing and the means by which collections are amassed and preserved in Canada, Australia, New Zealand, and Argentina. The first three were, of course, within the British Empire; Argentina was included as part of Britain's "informal empire," a centre of heavy British investment.

Luckily for Canadian readers, she studies the Redpath Museum in Montreal and presents a detailed and fascinating picture of its founder, William Dawson, and of the museum's growth and relationship to Montreal and McGill University. Her examination of the Canterbury Museum in Christchurch, the National Museum of Victoria in Melbourne, the Buenos Aires Museum and the La Plata Museum allows readers to determine the place of the Redpath on an international scale.

Sheets-Pyenson's knowledge of her "test cases" is impressive and shows a wide range of scholarship and of obviously enjoyable research into the annals of the individual museums and the letter-books of their directors. She adds a great deal to our understanding of the tortuous routes by which these diligent and dedicated men acquired the vast collections on which the reputations of their institutions were founded. Their squabbles over money and staffing have a contemporary air, and some of their problems would not be unfamiliar to curators and directors at many museums today.

Sheets-Pyenson notes how the "new museum idea" of the mid-nineteenth century (synoptical collections for public education, and comprehensive study collections for scholarly research) was applied to the great museums in Britain, but that the colonial museums, poorer in resources, staff, and fixated on collecting, failed to realize this distinction in the arrangement of their collections. She goes on to point out that the international "museum movement" waned by 1900, and that resources, which had gone to

support the accumulation of vast collections, were refocussed on support for university research and the new disciplines of genetics and microbiology.

The colonial museums had to abandon their grandiose ideas about collection and education, and realize "a more realistic role as organs of higher education" (p. 100). She notes how all of them became affiliated with a university (the Redpath had always been a university museum), to the point that the Canterbury Museum "attracted" a university to Christchurch in 1873.

She concludes that the colonial museums in fact "militated against extreme scientific dependence," both by preserving local treasures in situ, and by forcing the metropolitan experts to travel to the colonies to examine the museum collections. They encouraged "the first steps to scientific independence" by training staff, and privileging local materials (p. 101). While these conclusions do appear to shed some light on the question of the nature of colonial science, it appears that some of her other conclusions about museums are less solidly grounded.

Admittedly, Ms. Sheets-Pyenson is not writing a book about the history of museums; rather she is attempting to place museums in the context of the development of science in the colonies. But by looking at museums through the lens of colonial science, Sheets-Pyenson has overlooked much of what is significant in the development of North American museums. While the "museum movement" in science might have been on the wane by 1900, in other respects a museum movement was just beginning. Looking only at Canada, while there is certainly a rise in museum founding in the 1870s and 1880s, and an interest in the role of museums for a young country in the 1840s and 1850s (such as Ryerson's Normal School Museum, the Canadian Institute, and Charles Fothergill's museum, all in Toronto; the New Brunswick Museum in Saint John; and the Nova Scotia Museum in Halifax), the great era of museum building in Canada is not in the 1880s, but just before World War I, when the National Gallery of Canada and the National Museums of Canada move into the Victoria Memorial Building in Ottawa, and the Royal Ontario Museum and Art Gallery of Toronto are founded in Toronto. In the United States, the 1870s and 1880s are a significant peak with the establishment of the American Museum of Natural History, the Metropolitan Museum of Art, the Boston Museum of Fine Arts, and others; but the "museum movement" would

appear to continue unabated, with the founding of the Field Museum in 1893, the Brooklyn Museum in 1895, and the Milwaukee Public Museum in 1898, to name only a few. In addition, almost all of these major museums undergo extensive renovation or even rebuilding by the 1920s.

Her understanding of the curators' earlier desires to assemble collections of exotics are better understood when the role of the museum in the community is examined. As she points out, the idea of the museum as "microcosm" of the universe, and as "the people's university" was an important credo of the mid-nineteenth century. But the turning to the role as educational institution in the early twentieth century was not only the result of a loss of scientific purpose, but also a renewed commitment to popular education, so important to the North American model of the museum. Although American museums and establishments are often referred to, it is unclear whether these are to be regarded as colonial or metropolitan museums. Certainly, Canadian museum workers did not always take their lead from their imperial colleagues and there is a long history of the important relationship between Canadian and American museums (compare John Macoun's reliance on Asa Gray, noted in his autobiography).

Finally, I am not sure exactly how useful the distinction between metropolitan and colonial museums proves to be in looking at patterns of museum development. Certainly there are, as Kenneth Hudson has pointed out, "museums of influence." The Victoria and Albert was one such, the British Museum of Natural History another. One might wish that the author had explored her thesis a bit further to discuss in more detail the relationship between the metropolitan model and its counterpart in the hinterland. After all, the metropolitan museums established patterns which were followed not only in the colonies but also in the provincial museums of Britain and in the urban museums of the United States. And what of institutions like the Smithsonian,

whose director, George Brown Goode, wrote a textbook of museum practice in 1895, which influenced the organization of the National Museums of Canada in the early 1900s. Does this adaptation of the American idea imply that Canadian institutions remain colonial in Basalla's sense? (Charles Currelly deliberately eschewed the imperial and European models in his planning of the Royal Ontario Museum in the teens.) Is it simply geography, the location of an institution in a large centre, which gives it authority? Or is its influence the product of a particular individual's interest and desire to publish his ideas, as Richard Owen, William Henry Flower and George Brown Goode did?

And how colonial was colonial science anyway? Is it fair to call William Dawson, who had an international reputation as a geologist and palaeontologist, a colonial? Certainly his reputation, like that of Philip Henry Gosse (author of *The Canadian Naturalist* and a well-known British naturalist) has suffered an eclipse, caused probably by their staunch anti-Darwinism. But is it fair to say that Dawson and Sir William Logan, head of the Geological Survey, were simply followers of the imperial lead? Natural history is now a science in eclipse, but in the nineteenth century, particularly when Charles Darwin published *The Origin of Species* in 1859, it was cutting-edge science. As Basalla points out, it may well have been the science best adapted to the colonial experience, but it was also the pre-eminent and most widely diffused scientific discipline of the time.

Sheets-Pyenson has given those who work in museums a detailed and interesting look at the origins of some institutions. The late nineteenth century provided us with a legacy of great museums—"cathedrals of science"—as Sheets-Pyenson so aptly names them. Monuments they may be to a superceded scientific vision, but the great museums have yet to become tombs to the propagation of the "museum idea."