INTRODUCTION

he title of this book is meant to signal at the outset its confines, both its inclusions and what is beyond its scope. This volume does not stand alone, neither in splendid nor terrifying isolation, but as the third volume in a trilogy meant to be a commentary on the botanophilia that captured the literate public in 18th-century France, the very time that botany was becoming established as a science independent from medicine and herbalism.

Even though the components of that phenomenon have been examined individually by earlier scholars, a synthesis of them, founded upon a reliable command of the history of botany, has been wanting. In the two prior volumes, I discussed the discovery of plant sexuality; the foundation of a uniform nomenclature for plants and a stable, if artificial, classification by Linnaeus; the subsequent search for a more natural classification; Buffon's contribution to the popularization of natural history; the growing skepticism about the medicinal reliability of all too many herbal prescriptions that lacked experimental verification; the appeal of the senses as the key to an individual's knowledge and perception of beauty; the first publication of regional, popular floras; a burgeoning of learned societies and public libraries, primarily at the instigation of laymen committed to the cultivation of an enlightened public; the rage for the English, natural garden after the long predominance of the formal, French classical garden; the apogee of elegant flower painting; and the vigorous protests against ruinous deforestation by both botanists and agronomes. The emergence of such wide-randing natural-historical activities in France after 1750 provided enthusiastic public support for any governmental initiative likely to expand botanical knowledge. Readers seeking a more detailed account of that new cultural climate will find it in the second volume of this trilogy: Botanaphilia in Eighteenth-Century France: The Spirit of the Enlightenment.

The immense curiosity about the natural world beyond Europe, and the vast number of unknown plants that had as yet escaped classification, are the subject of this third volume on botanophilia. Accounts of overseas exploration have always attracted an avid audience. It happens that several of the expeditions toward the end of the 18th century have been reexamined with commendable scholarly com-

petence in recent years.¹ One may not only recommend such general accounts as the background for the present volume, which features only the botanists' experience on such voyages, but indicate why it has become unnecessary to reiterate anything beyond an abbreviated context. The reader interested principally in maritime, nautical, or astronomical detail will not find it here, where the emphasis is upon the botanists' response to exotic vegetation and to aboriginal peoples: their medications, their health, and their culture. Those were men who, in that day, had been first exposed to a classical education before receiving instruction in the natural sciences; and that was generally obtained during study for the doctorate in medicine. The latter combination accounts for the general assumption that the study of man was simply a part of the study of Nature. They were men who epitomized the liberalism and humanitarianism of that age with its faith in human reason and in the emancipatory powers of scientific knowledge. The latter is what they meant by liberty; and also what they meant by useful knowledge. Through them, we get insight into the mind of the Enlightenment.

That mission, as well as that of the recent more general studies noted above, is substantially at odds, in both spirit and purpose, with the fashionable, new history of science, called more precisely *sociohistory* by some of its practitioners. One of them has described traditional studies of overseas exploration for new botanical material in the 18th century as "rather precious and antiquarian in character, as having ultimately scientific rather than historical purpose, being concerned to use history in the service of systematics." Instead of which, he adds, we have "a notion which potentially unites studies of evolving natural historical practice with the social history of imperial science."²

That premise is made even clearer in a second contribution to the collection. Although acknowledging that Sir Joseph Banks revealed enormous enthusiasm for the discovery and identification of new species of plants, this author concentrated exclusively in his chapter on Banks as an agent of the British Empire, the implication being that 18th-century science, far from being liberal or humane in intent,

John Dunmore. 1965. French Explorers in the Pacific, 2 vols. Oxford: Clarendon Press. Amiral Maurice D upont. 1983. D'Entrecasteaux: rien que la mer, un peu de gloire. Paris: Editions Maritimes et d'Outre-Mer. Catherine Gaziello. 1984. L'Expédition de Lapérouse 1785-1788, réplique française aux voyages de Cook. Paris: Comité des Travaux Historiques et Scientifiques. Hélène Richard. 1986. Le Voyage d'Entrecasteaux à la recherche de Lapérouse. Paris: Comité des Travaux Historiques et Scientifiques. Frank Horner. 1995. Looking for La Pérouse, d'Entrecasteaux in Australia and the South Pacific 1792-1793. Carlton, Victoria: Melbourne University Press. Brian Plomley and Josiane Piard-Bernier. 1993. The General: the visits of the Expedition led by Bruny d'Entrecasteaux to Tasmanian waters in 1792 and 1793. Launceston: Queen Victoria Museum.

David Philip Miller. 1996. "Joseph Banks, empire, and 'centers of calculation' in late Hanoverian London." D. P. Miller and P. H. Reill, eds. Visions of Empire; Voyages, Botany, and Representations of Nature. Cambridge: Cambridge University Press, p. 27.

connived with wickedness and oppression. We are given no insight into Banks as a botanist with scientific views.³ One could even conclude from the chapter that the author does not have a technical command of botany, nor does he believe that such a knowledge is necessary either to write the sociology of science or about the political uses or abuses of botany.

Such an approach may well pass muster as respectable social history. But any approach that dwells upon Banks' connivance with the promoters of imperialism and colonialism, obscuring his immense and generous services to international botany during the forty years he presided over the Royal Society, and which was anything but imperial in spirit, is quite unfair to the man and to the whole truth of the record. Such an emphasis obscures the critical association of botany with the spirit of the Enlightenment: not only the passion for new knowledge, but a knowledge to be employed for the well-being and liberation of mankind.

There is explicable reason why historians of Hanoverian Britain, rather than historians of France, should be susceptible to the imperial format. Britain was a maritime and trading nation within which a colonial policy developed quite naturally. France was continental, European in outlook, certainly interested in finding sources of precious metals, spices, timber and furs. Yet, during the later decades of the ancien régime, there was virtually no thought about finding territories overseas where surplus population could be settled. When envisioned at all, the idea of permanent settlement in distant colonies was limited to the very poor or the criminal. French navigators of that period, consequently, were not driven by a search for colonies overseas, and they had little influence on the patterns of later colonization in the 19th century. It has been too easy, and a mistake in retrospect, to equate French with British interests overseas, thus concealing the insatiable search for knowledge that imbued the French expeditions of the Enlightenment.⁴

John Dunmore publishing in 1965, could study the evidence about colonialism more dispassionately than has become customary in more recent decades. He could recognize why it had made no sense for the Old Regime, after the shocking territorial losses of 1763, to envision a resumption of imperial expansion in the face of such dominant British naval power. Only at the end of 1800, when Bonaparte regained Louisiana from Spain, did a prospectus for overseas empire reappear. The resumption of war with Britain in 1803 made the defense of Louisiana hopeless and recommended its sale to the United States. The antagonism to colonial

³ David Mackay. 1996. "Agents of Empire: the Banksian collectors and evaluation of new lands." Ibid., p. 49.

⁴ Dunmore. 1965. French Explorers in the Pacific. 1: 354-355.

conquest, inherent in the French Enlightenment mentality, will become manifest during our explorersí visits to Dutch and Spanish colonies.

It was well understood among botanists in the 18th century that botanical exploration on the high seas was much safer and more practical than was overland exploration on the continents. But virtually none of them could have provided the capital to outfit and man a vessel capable of sustaining an extended voyage to little-known or unknown parts of the globe. Some forty years ago, Bernard William Smith emphasized that naval vessels, whatever may have been their deficiencies, combined the value of a fortress with a traveling laboratory. Not only could the botanist travel in relative safety on a naval ship; but, when going ashore with his collecting equipment, he could enjoy the company of armed marines in the event of encounters with uncongenial aborigines, no matter that the social theory of that day predicted only high-minded, noble behavior. The naturalist could even carry a small research library on board, which facilitated the identification and preparation of specimens during the long hours between ports of call.⁵

Janet Browne was also quite aware that sea travel had accommodated naturalists more efficiently than long overland expeditions, and she quoted from Darwin's correspondence as an illustration: "I find to my great surprise that a ship is singularly comfortable for all sorts of work.—Everything is so close at hand, & being cramped, makes one so methodical, that in the end I have been a gainer...If it was not for sea-sickness the whole world would be sailors."

Can there be a spoilsport so malicious as to offer an alternative to the portrayal of the Banksian plant collectors in compliant concubinage to the promoters of empire overseas? Namely, that there was no other route open to the naturalist fired with the desire to explore unknown country than to accept service on a ship of a royal navy: a free ride that paid an annual stipend, often leading to a further governmental subsidy when it came to publishing newly-discovered species and genera, along with the expensive plates that necessarily illustrated such publications.

Despite the naturalists' zeal to be appointed to such positions, it was recognized that savants and mariners, in close confinement on board ship, made poor companions. Especially on board French naval ships, the issue of whether an aristocracy of birth merited precedence over an aristocracy of brains seems never

Frans A. Stafleu. 1967. Adanson, Labillardière, De Candolle. Lehre: J. Cramer, p. 19. See B. W. Smith. 1985. European Vision and the South Pacific, 1768-1850. 2nd ed. New Haven: Yale University Press, a work of great distinction, originally published in 1960.

⁶ Janet Browne. 1995. Charles Darwin Voyaging. A Biography. Princeton: Princeton University Press, p. 192.

to have been conclusively resolved; but no one should be surprised that, of the two parties, the savants were the more skillfully obnoxious. Even so, the mariners greatly outnumbered them, so that the pursuit of knowledge at sea, in sum, became a perilous venture entailing heroic dedication.

The successful ideas of the French Enlightenment in the 18th century were, in fact, the culmination of ideas that had been increasingly pervasive in the intellectual culture since the 16th century: a growth of independent thinking among scientists and philosophers as a reaction against the domination of authority in prior centuries. With independent thinking came the assumption of the priority of reason over belief, accompanied by broad interest in all the natural sciences. Nature became the key word in the 18th century, Nature representing objectivity. Nature meant the rational: that Nature is open to reason. Whereas the supernatural meant that which is either above reason or contrary to reason. Because the deference to the natural grew out of distrust of traditional patterns of thought, that deference encouraged the search for new knowledge that could be tested as natural or rational. The essential liberalism of the Enlightenment derived from that passion to be free from traditional authority, whether theological, philosophical, or political.⁷

When one characterizes such ideas as pervasive within the intellectual culture, a cautionary proviso must be inserted that a substantial portion of the French population remained either illiterate or semi-literate and was not counted among the public by the measurements of that day. With that exclusion, the assertion by one especially qualified observer in 1797, Milet-Mureau, that there was general public interest in the progress of the physical and natural sciences, seems undeniable.

As for those who read the reports about overseas expeditions in that day, individual motives varied greatly. Some read only for diversion. Others simply took pride in the comparisons between European practices and manners with those of the aborigines, confident in the superiority of civilized man over all others. Only the learned, especially the scientists, studied such materials solely for the purpose of extending their knowledge. The learned are instinctively drawn to anything new or extraordinary, beyond which the reports allowed them to share the perils, the difficulties, and the pleasures met by the navigators along with the marvelous objects collected over vast distances. True intellectual excitement!⁸

⁷ Stafleu. 1967. Adanson, Labillardière, De Candolle, pp. 6-7.

⁸ Louis-Antoine Destouff, baron de Milet-Mureau, ed. 1797. Voyage de La Pérouse autour du monde. 5 vols. Paris: Imprimerie de la République 1: xvii-xviii.