

that ecology was supposed to have precedence in policy decisions. First, there was the questionable transfer of the Parks Branch to the new Department of Canadian Heritage. Then, budgetary constraints devastated employee morale. (Here, interviews with former parks personnel would have been instructive.) Sadly, as Kopas notes, reorganization reached the point where superintendents and other supervisory personnel were not dedicated to one particular park and moved around like migratory animals. In retrospect, it appears that I was lucky to have worked at Parks Canada when I did.

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Londa Schiebinger, *Plants and Empire: Colonial Bioprospecting in the Atlantic World* (Cambridge, MA: Harvard University Press, 2004).

From the title and cover of Londa Schiebinger's engaging, provocative book, one would never guess that it was about abortion. Not that the title is misleading. Schiebinger provides a fascinating and well researched account of European and Creole botanical explorers in the western hemisphere, their interactions with indigenous experts, and the "linguistic imperialism" of Carl Linnaeus and his followers who imposed European names—often the names of prominent European botanists or patrons—on American, African, and Asian plants. But her story centers on a plant, commonly known as the pride-of-Barbados, also called the peacock flower (*Poinciana pulcherrima* L. or *Caesalpinia pulcherrima* ([L.] Sw), the slaves and Indians who used it and other plants as abortifacients, and the reasons why knowledge of its abortifacient properties did not become part of European medical botany.

Medicinal plants were big business in the eighteenth century, and a wide range of travelers sought them out. With the anachronism "bioprospecting" Schiebinger underscores the parallels between their efforts and modern pharmaceutical companies' attempts to find new drugs by exploiting indigenous knowledge. But no Rio Convention protected indigenous peoples' rights to their botanical products and lore in the eighteenth century; if some "biopirates" like Nicolas-Joseph Thiery de Menonville thought that natives should be compensated for the plants and knowledge he took from them—unless they were subjects of the enemy Spanish—few shared his scruples. Schiebinger introduces readers to a wide range of bioprospectors. She includes heroic "voyager botanists" such as Hans Sloane and Maria Sibylla Merian, on whom earlier historians tended to focus, but she introduces us to "type specimens" of others: mercenary biopirates, Creole naturalists, and traveling botanical assistants, like Jeanne Baret, the assistant and (probably) lover of Philibert Commerson, physician on Bougainville's circumnav-

igation of the globe. Armchair botanists in Europe collected and organized the plants and knowledge that these prospectors sent across the Atlantic.

In the Americas and in Europe, physicians tested these new drugs. Eighteenth-century medical theory held that the effects of a drug varied according to the patient's age, sex, weight, and 'complexion', or balance of humors. Physicians and medical students tested drugs on animals, criminals, orphans, and, if early trials were encouraging, on themselves; the healthy, trained (male) medical body was well suited, they thought, to identify the effects of a drug and distinguish them from those of illness. They could not auto-experiment with drugs that dealt with female maladies. But they did conduct a number of experiments on emmenagogues (menstrual regulators) and shared data widely.

By contrast, they gave little attention to abortifacients. Of course, as Schiebinger argues, the line between an emmenagogue and an abortifacient might be a matter of dosage. And physicians were expected to be able to induce abortions when necessary to save a woman's life, though some preferred 'the hand' to drugs. Savin, pennyroyal, and other indigenous European abortifacient plants were well known. But it is striking how, in a period when colonial explorers greedily sought indigenous medicinal knowledge and substances, the pride-of-Barbados's abortifacient properties did not become part of the European pharmacopoeia. Schiebinger frames her exploration of this question as a contribution to "agnotology," the study of "culturally induced ignorances" (3).

Europeans certainly knew the plant itself. A native of the Americas, it had been introduced to Africa, Asia, and European gardens by early European travelers. They occasionally used it for other medicinal purposes. And they could certainly have learned of its use as an abortifacient. In 1705, Merian described how pregnant slaves used the plant's seeds to induce abortion, thus sparing their children from being born slaves and suffering the cruelties to which they had themselves been subjected. Hans Sloane, too, reported with disapproval the use of the pride-of-Barbados as an abortifacient. Much knowledge of abortifacients remained within the slave community; male physicians rarely attended slave women's birthings, and slaves would have been chary of sharing such knowledge, which offered them a covert form of resistance. But the abortifacient properties of the pride-of-Barbados were in print. Why, then, did European physicians remain largely ignorant of them?

Here we reach the most interesting, but also most speculative, part of Schiebinger's account. The causes of culturally induced ignorance must be approached indirectly. Schiebinger identifies two main causes. In Europe, in the late eighteenth and nineteenth centuries, physicians and state authorities increasingly restricted women's control over reproduction. Instead of testing and improving native European abortifacients, physicians came to consider them either dangerous or ineffectual. And while early modern law and custom had made women the judge of when they were pregnant (when the fetus "quickened"),

allowing them to use emmenagogues or abortifacients before that point without legal repercussions, from the 1790s on states eliminated the distinction between abortion before and after quickening while outlawing abortifacient drugs. In this climate, there was little interest in exotic abortifacients. The second cause, though, involves the colonial enterprise itself. Administrators and bioprospectors, almost all men, were pronatalist. They had no interest in drugs that might reduce fertility; on the contrary, they were deeply concerned about the failure of colonial populations, especially slave populations, to reproduce themselves. They had little incentive to study abortifacients or to transmit knowledge of them to a European medical community that, in any case, had little interest in such knowledge.

I find this account convincing, if necessarily drawn with a broad brush. Schiebinger notes one instance in which knowledge of an exotic abortifacient was deliberately suppressed; in most cases it did not need to be. No grand conspiracy was needed to keep such knowledge away from European women. Social structures that embodied masculine, pronatalist interests generated the indifference that produced ignorance. But not complete ignorance. In the pages of Sloane and Merian—and today, in indigenous communities throughout the Caribbean—knowledge of herbal abortifacients has been preserved. Schiebinger ends with a lament for knowledge that might have been lost forever due to “state politics that enmesh innocent plants in their web” (241). But her tale admits a more optimistic reading. In the case of the pride-of-Barbados, that knowledge was not lost, merely neglected by European medicine. Today, ethnobotanists and bioprospectors are eagerly seeking out new drugs in indigenous communities and in the pages of old herbals. In the twenty-first century, whether such knowledge will be preserved or lost—and if preserved, whether its indigenous possessors will be compensated—seems less a question of state politics than of global capital: that is, whether pharmaceutical companies can find or create a market. Then and now, bioprospectors follow the money.

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Lawrence M. Lipin, *Workers and the Wild: Conservation, Consumerism, and Labor in Oregon, 1910-1930* (Urbana, IL: University of Illinois Press, 2007).

To some extent, while environmental historians struggle to connect the history of human relations with non-human nature to the history of social conflict, labour historians tend to overlook the role of non-human nature in reshaping social conflict. Two years ago, Liza Piper's short essay in *Left History* outlined some of the intersections and obstacles between left history and environmental history, seeking to highlight the possibilities for considerable overlap (11.1 2006: 41-46). Lawrence M. Lipin's study of the relationship between organized labour and early