

Legal Statement

For personal use only. All rights reserved by Gillian Feeley-Harnik.

All parts of the document "Ravenala Madagascariensis Sonnerat: The Historical Ecology of a 'Flagship Species' in Madagascar" are for personal use only. They are owned in whole solely by Gillian Feeley-Harnik. All rights reserved. No part of these pages or parts thereof, either in text or image form, may be used for any purpose other than personal use. Therefore, reproduction, modification, storage in a retrieval system or retransmission, in any form or by any means, electronic, mechanical, or otherwise, for reasons other than personal use, is strictly prohibited without prior written permission.

Inquiries should be directed to:

Gillian Feeley-Harnik
Department of Anthropology
University of Michigan, Ann Arbor

Ravenala Madagascariensis Sonnerat: The Historical Ecology of a 'Flagship Species' in Madagascar"

"Living Eden" or "Island of Ghosts"?

Contradictory images of Madagascar and the Malagasy people pervade current debates about the island's environmental history and the conservation of its fauna and flora. "Madagascar: A World Apart" is among the world's "Living Edens" (PBS, 1999): a primeval paradise, long isolated from the African continent, filled with unique plants and animals. Yet Madagascar is also an "Island of Ghosts" (PBS, 1993), an "Island of the Ancestors" (PBS, 1987), "the Earthly Paradise of the Fall" (Tournier 1997: n.p. [viii]).ⁱ The Malagasy people whose profligate childbearing is supposed to have driven their fellow creatures into extinction appear preoccupied with funerals. Nocturnal lemurs, whom Linnaeus named after the Roman "spirits of the dead," seem to haunt the land where they once lived.

Madagascar is "vanishing before our eyes, being consumed from within, ... burning to death," according to the narrator of "Island of Ghosts." Yet the island is also depicted as a wounded body, bleeding into the sea. In 1972, the French zoologist and botanist Jacques Millot concluded the first major synthesis of data on the biogeography and ecology of Madagascar collected since the 1920s, with these words:ⁱⁱ

Destructive human activities sometimes create spectacles of diabolical beauty. The Betsiboka in flood can be seen to tear from its denuded banks so much red earth that its waters become as though stained with blood. Again, at the end of the dry season, the hills on the horizon around Tananarive are ornamented with an incandescent necklace of prairie fires which, for the sake of a slight seasonal advantage, prevent future regeneration. Educating the malagasy peasant in the need for forest protection ought to be the permanent concern of government policy (Millot 1972: 752).

"Le sang de la terre" is central to Hannebique's popular photo-essay, Madagascar: Mon-île-au-bout-du-

ⁱ1. "Madagascar: A World Apart," first televised in America in 1987, is among the "Living Edens" in the current catalogue for the PBS Home Video Series (October, 1999). "Madagascar: Island of Ghosts" was televised on PBS's "Nature" series in 1993. Barbieri's photographs, taken in 1994, were published in Italy (1994), the U.K. (1995), then in Germany (1997) for distribution throughout Europe, North America, and Asia.

ⁱⁱ Millot, a zoologist and botanist in Madagascar and Africa, was then Director of the Musée de l'Homme and a Member of the Académie des Sciences in Paris. Formerly he had been Director of the Institut de Recherches Scientifiques de Madagascar (1947-60) and President of the Académie Malgache and of the Association Scientifique des Pays de l'Océan Indien.

monde (1987), published 15 years later. Madagascar is introduced on the cover as a cluster of Ravenala trees, teetering bare-root on the edge of an eroded hillside, personifying the island-at-the-end-of-the-world. The island is next seen as the "Siren of the Indian Ocean," a Malagasy woman in coastal dress and decoration: "like her, the Great Island is a daughter of the sea, her insularity making her a veritable body floating unfettered on the infinite waves that surround her" (ibid.: 4, 5). Hannebique's third image portrays Madagascar from the air: the channels of the Betsiboka River spreading out below a plane heading to Antananarivo:

At 10,000 meters of altitude, in the plane which, from Europe, takes you toward Madagascar, well before seeing its shores, you are suddenly intrigued by a immense reddish spot, which stands out sharply against the blue water of the Mozambique, without mingling in it.... That red water, spurting out from everywhere like a fatal hemorrhage whose power forces the sea waves beyond the horizon, is **the blood of the earth** (ibid.: 8,9, his emphasis).

French and now American accounts since the late 1980s continue to elaborate on this verbal and visual imagery of death. A current photo-essay in National Geographic shows the Betsiboka River from a spaceship: "From space, astronauts could see Madagascar's red earth bleeding into the sea. Nearly all the environmental damage stemmed from poor agricultural practices ... and a growing population.... From the air much of Madagascar looks like a badly bloodied prize-fighter: Raw wounds of barren red earth cover the summits of nearly every hill and mountain" (Morrell 1999: 63-64, 68; 71).

Depictions of Madagascar as a "lost continent," a "world out of time" or "at the end of the earth," a "living museum," wounded by its human inhabitants, blind us to the complexities of Madagascar's ecological history (Goodman and Patterson 1997, Lourenço 1996). They obscure the political-economic relations that have transformed the island over time, for example, through the production and export of tropical food-crops to other countries, especially in the northern hemisphere, or through Madagascar's growing debt to foreign lenders, both related to its growing impoverishment (Dorosh and Bernier 1994, Tucker 1994). Educational programs focusing solely on Malagasy farmers support this vision of Madagascar as a "world apart," ignoring the cultural preoccupations of expatriates with long-standing interests in the natural resources of the island. In this paper I argue that we must broaden the social-historical field of our analysis if we are to make sense of the pervasive contradictions in contemporary debates about conservation in Madagascar. We must include not only what Millot (1972: 752) calls the "disastrous but deep-rooted customs" of the Malagasy, but those of the expatriates as well: not only

expatriates' knowledge of the natural or social sciences, acquired in their professional training, but also the broader cultural assumptions about life processes in humans, plants, and animals, from which these are derived.

One obvious difficulty with such a venture is precisely the complexity of the political, economic, and ecological relations involved. Conservationists in Madagascar are no more homogeneous than Malagasy farmers. My approach is to focus on the concern with trees and land they have in common. Drawing on ethnography from Madagascar, France, England, and the United States, I argue that people use trees — particular trees and images of trees — to orient themselves in place, to articulate their relations to other living things, including other people in a common landscape, and to establish and legitimate claims to land. To make the link between these widespread social practices and the particular activities of conservationists in Madagascar, I follow the lead of Conservation International in attending to a "flagship species": Ravenala madagascariensis Sonnerat, "a unispecific genus, endemic to Madagascar" (Dorr 1990:131). I argue that the ravinala plant, known to Madagascar's visitors since at least the early nineteenth century as the Traveler's Tree or Traveler's Palm, l'arbre du voyageur, der Baum des Reisenden, has been a powerful social agent in the historical formation of Europeans' and North Americans' contradictory vision of Madagascar as a living, bleeding Eden. I question how travelers came about their understanding of the tree, whether and how they shared their understanding among themselves and among long-time residents of the country. I conclude by suggesting how attention to Ravenala's range of habitats might help us integrate our understanding of the ecology and political-economy of Madagascar.

Botanic Imagery in Claiming Land

My approach to Madagascar's historical ecology grows out of my ethnographic and archival research on the role of burials in disputes over land, labor, and political loyalty among Malagasy and between Malagasy and French in the colonial and post-colonial periods (to 1989) in northwestern Madagascar (Feeley-Harnik 1991). Focusing on the reconstruction of a royal tomb, held in 1972-76 to complete the funeral of a local ruler who had died in 1925, I argued that the fatalism, which French colonial officials and many scholars during and after the colonial period attributed to Malagasy people, was an historical outcome of struggles between Malagasy and French over who would reproduce local political-economic relations and in what form. While Malagasy sought to restore dead or exiled

rulers of regional polities to political lifethrough reburials or through spirit possession, French colonial officials, and later their Malagasy successors in the national government, curtailed or outlawed such phenomena. The French hoped to limit the potential of the actual events to become occasions for open rebellion, as well as induce forgetting by reorienting people in new directions through a deliberate politique del'habitat.

Botanic imagery figured as a kind of lingua franca for debating conflicting views of the death and regeneration of political groups, as well as creating alternative social geographies. For inhabitants of northwestern Madagascar, the union of dead and living people in ancestries was conveyed materially through complex associations of corpses and living human beings, stones, earth, and water, dead and living trees — brought together in virtual tree-persons. Thus, the "politics of death" through which Malagasy and French struggled over political sovereignty was in no small part a politics of trees. In northwestern Madagascar, Malagasy ideas and practices concerning ancestral trees (togny) are still evident in the layout of rural villages, royal centers, and provincial capitals (Feeley-Harnik 1991: 183-87, 218-25, 320-36, 401-67). The trees associated with first settlers' and others' claims to land are not only "places of remembering" (tany fahatsiarovaña) and "asking" (fangatahaña), they are the geopolitical centers of communities organized around alternative ideas about land, labor and political loyalty; they are the creative outcome of those alternative relations. If "Island of Ghosts" has any social significance, this phrase most accurately describes a political pluralism not limited to Madagascar, in which earlier forms of governance persist alongside the colonial and postcolonial regimes that tried to eradicate them, in undiminished debate.

Archival data shows that French colonial officials had closely analogous ideas and practices about the historical significance of trees in orienting people to places, in articulating their relations to other living things, and in marking and legitimating claims to land (ibid.: 130-1, 231-4, 549-50, fn 7, 588-9, fn 31, 32). Thus, colonial administrators in Majunga (now Mahajanga), where the French invasion of Madagascar began in 1895, were quick to incorporate the port's ancient landmark -- a giant baobab -- into a new urban plan centered on the French Résidence (ibid.: 130-1).ⁱⁱⁱ The commonest "administrative tree par excellence" throughout Madagascar, as in Africa (Haeringer

ⁱⁱⁱ A German visitor to Majunga compared the "Wondertree" to "the thousand year old oaks in the Spessart [mountains] or the old rose tree at Hildesheim" (Schnack 1935: 15-17, plate; see 150-51, plate). The ancient baobab might have been planted as a landmark for a Muslim Arab port in the Indian Ocean trade extending from Africa to the Philippines (see Armstrong 1983).

1980: 290) was the mango (Mangifera indica), the same tree identified with Sakalava royalty in northwestern Madagascar, but also, as we shall see, with LaBigorne, an early French visitor to eastern Madagascar in the 1750s (Coppalle 1909-10: 21, 35).^{iv} Yet the Revolution had devastating effects on forests in France and its colonies in the Indian Ocean. Grove (1995: 259) argues that the conservationism developed by the French in Île de France (later Mauritius) was lost temporarily during this period because "the French Revolution and the resumption of the Anglo-French conflict between 1789 and 1815 resulted in a vastly increased demand being imposed upon forests both in metropolitan France and in its colonial possessions." Because the Revolution ended many customary restraints on forest use in France, it "exposed the forests to the full force of urban demands," as well as rural dissent, expressed in "frequent episodes of incendiarism," with "rapid and devastating" effects. French scholars' work on connections between deforestation, flooding, soil erosion, and dessication had a powerful influence in British and American scholars (like George Perkins Marsh) in subsequent decades (Grove *ibid.*).

Thus, Raymond Decary (1951: 278), writing in the decade before independence, looked to the future autonomy of Madagascar in botanical terms:

Evolution, but not revolution. The Malgache ought to progress in his personal path, in his traditions, while remaining 'himself'. The young Malagasy plant (la jeune plante madécasse) grows, protected by the shade of the French tree. Once adult, it will be a matter for her, not of autonomy, which is a brutal and definitive separation, but of autonomy in the best sense of the term. The political association which will then be envisioned can be no better compared than to the vegetable associations of botanists, in which varied plants prosper in a harmonious whole, but where the disappearance of one of them risks breaking the equilibrium and bringing in turn the extinction or at least the decline of the others.

In evoking "la jeune plante madécasse," Decary was generalizing from his ethnographic and botanical research in diverse regions of Madagascar to the entire country and future independent nation. A salient feature of the botanic idiom in Malagasy politics is precisely its sensitivity to place, conveyed in the very rootedness of trees in specific habitats, yet its potential for broader application derived from the trees' generic attributes, variously

^{iv} Haeringer (*ibid.*) describes the mango tree as the "chestnut tree of Africa," alluding to the emblem of French rural villages. Another important antecedent might be the oak, the favored choice for the Liberty Trees (les arbres de la liberté) of the French Revolution (Feeley-Harnik 1991: 549-50, fn 7). For Ozouf (1988: 145-6, 232-61), the Liberty Tree is the best example of how urban revolutionaries sought to expand their base of support by drawing on important festivals in rural popular culture for their iconography celebrating the Revolution. Gustave Courbet's "Oak Tree in Flagey, Called the Oak of Vercingetorix" (1864), is such a Liberty Tree, locally named after, and perhaps portraying in Courbet's painting, a Gallic general who led a battle there against the Romans in the reign of Julius Caesar in 49-44 B.C.E., and perhaps even Courbet himself, who had returned there to his birthplace (his father's birthplace) to live (Tinterow and Loyrette 1994: 72, 358-60).

understood. Baobabs grow in many parts of Madagascar, but the ancient baobab of Majunga is not merely a particular species, but a distinct individual. Mangos are a generic emblem of Sakalava royalty, but the togony of northwest Madagascar mark the location of historically specific communities of people. Mango trees were also a generic emblem of French imperial interests, but the mango seeds that La Bigorne planted marked exact places to which, he said, his French countrymen would return to claim the fruit.

These kinds of phenomena have been documented much more widely (e.g., Cosgrove and Daniels, eds. 1988, Rival, ed. 1998, Seeland, ed. 1997).^v In their rooting, branching, fruiting, seeding structures, trees lend themselves to the efforts of human beings to make connections between their immediate surroundings and their more extensive relations, as in the generational creation of a political-religious community (Bachelard (1994 [1958]: 182-210; Fernandez 1998). I will argue that trees also lend themselves to human efforts to grasp the political, economic, and ecological dimensions of "environments" extending far beyond the particularities of their own place and time.

A "Flagship Species": *Ravenala madagascariensis* Sonnerat

Conservationists' "flagship species," named by analogy to ecologists' "indicator species," provide a clue to how such efforts are organized. An indicator species is a plant or animal species whose occurrence is taken as evidence of the existence of specific environmental concerns. "Flagship species," according to Bill Konstant (1993: 3) of Conservation International, are "beautiful and unique species [used] as 'flagships' for biological inventories, protected area management, and public awareness campaigns, all to increase general interest in conservation within Madagascar and to focus greater international attention on the importance of this country in global efforts to conserve biological diversity."^{vi} Thus, lemurs have come to stand for the diversity of Madagascar's fauna, suggesting that ancient species of animals haunt the scene of their immanent extinction.

^v On England, see Daniels (1988: 43-45), who argues that by 1800, when England had become "one of the least wooded of all north European nations," planting trees became associated with laying claims to land and "the association of planting with property was enshrined in law." For one example of Americans' popular interest in trees as witnesses to land claims, see "Famous Trees" (Anon. 1870a), published in Appleton's Journal the year before their feature on Ellis's Traveler's Tree (discussed below); see also Cikovsky Jr. 1979, Kammen 1992, and Novak 1995.

^{vi} Russell A. Mittermeier, President of Conservation International, coined the phrase "flagship species" as a way of drawing attention to and advertising conservation issues (Meyers 1995).

Madagascar's flora is also characterized by great diversity and high levels of endemism. The number of species of vascular plants is estimated at 8500, including more than 200 families; the total number of plant species at 10,000 to 12,000 (Dorr 1989: 238). Yet one of these thousands — ravinala or Ravenala madagascariensis Sonnerat — has received so much attention that it is now an official emblem of Madagascar.^{vii} Here I trace the sources of this interest to the origins of environmentalism associated with French explorations in the western Indian Ocean in the seventeenth and eighteenth centuries. Beginning already in the 1660s, French naturalists began to list the seemingly inexhaustible plant and animal wonders of Madagascar. Gradually they began to see the singular *Ravenala* as the sign of a promised land for naturalists and for utopianists, including missionaries. We, in turn, may look to the changing imagery of the Traveler's Tree for clues to the changing geopolitical philosophies and practices associated with their "environmentalist" visions, through which Madagascar has been transformed. Even if *Ravenala* does not provide all the answers, an analysis focusing on the tree may give us some insights into the social-ecological changes, because the tree itself has long been a place where concerns about people, plants, and land come together.

Madagascar: "The Veritable Promised Land for Naturalists"

In his study of the origins of environmentalism in the Indian Ocean, Grove (1995: 223) argues that "early western ... environmentalism was, to a great extent, born out of a marriage between physiocracy and the mid-eighteenth-century French obsession with the island as the speculative and Utopian location for the atavistic 'discovery' of idyllic societies or the construction of new European societies."^{viii} Grove focuses on the work of Poivre, Commerson, and Saint-Pierre in Mauritius, then Île de France, in achieving the "convergence

^{vii} Ravinala (leaf of the forest) is one of several Malagasy names for what Europeans also called by a variety of names (e.g., *Ravenal(e)*, *Ravenala*, *Ravenalla*, *Raven*, *Dalembertia*, *Urania*). The dictionary compiled by Reverend Richardson (1885: 203, 466, 505-6) of the London Missionary Society includes: fontsy (possibly related to ontsy and otsy, "Betsimisaraka" and "Sakalava" terms for the banana plant); ravimpotsy (white leaf, "Betsimisaraka"); bemavo (perhaps after the yellow color of the fruits, "Provincial"); bakabia (fan-shaped, "Sakalava"); akondro hazo (banana tree, "Sakalava"). Richardson's entry for ravinala names the uses of the tree, including the provision of "pure water." L.M.S. Rev. Richard Baron gave Richardson "extensive botanical notes" for his dictionary (Dorr 1987: 40), perhaps including these. See Dorr (1990) on why *Ravenala* should be retained as the plant's generic name.

^{viii} Grove (1995: 224-6) contrasts Poivre's more "ecological" perspective, focused mainly on plant life, with Rousseau's and Commerson's more "environmentalist" perspective, in which the "paradise for naturalists" was combined with visions of tropical islands, uncorrupted by Europeans, as ideal sites for the creation of pure, virtuous societies. He notes briefly that dissenting Protestants contributed to these utopian visions.

between physiocracy and climatic and insular Romanticism" (ibid.). Yet Madagascar clearly played an important role in these developments. Flacourt 1995 [1661] had already provided francophone readers with a long account of the alimentary, medicinal and other uses of the animals and plants in the area around the ill-fated Fort Dauphin in southeastern Madagascar. If the Malagasy around Fort Dauphin had not prevailed against the Compagnie des Indes Orientales in 1674, then perhaps Poivre, Commerson, and Saint-Pierre would have gone there first. In a letter to the French astronomer and historian of science, Joseph Jérôme Lefrançois de Lalande, written in 1771 after a visit to Fort Dauphin in October-November 1770, Commerson described Madagascar in these terms:

What an admirable country is Madagascar! it is the veritable promised land for naturalists. It is there that Nature seems to have retired as into a special sanctuary, to work there on other models than those to which she enslaved herself in other countries. The Dioscoride of the North [Linnaeus] would find there the stuff of ten revised and enlarged editions of his *Systema Naturae*, & would doubtless finish by avowing that merely a corner of the veil that covers the scattered productions of nature had been lifted. (Cited in Monnier et al. 1993:11)

As it was, Île de France quickly became a staging ground for exploratory ventures into eastern Madagascar and a testing ground and point of transfer for the increasing numbers of plants and animals brought out of the country.

Ravenala, called fontsy around Fort Dauphin, appears in Flacourt (1995 [1661]: 160, 199) as "la plante du balisier" with seeds called voanfotsi or voadourou.^{ix} Flacourt describes its multiple uses. The stems and leaves make up the walls and roofs of houses; the young leaves serve as table settings: coverings, plates, spoons, and drinking goblets. He notes: "The plant is quite beautiful to see, because it grows in the form of a plume, and its fruit in a great trochet like dates." Nevertheless, his focus is on the seeds, their blue sheaths used to make oil, their pea-like grains ground to make a flour eaten with milk or chewed with slaked lime, like betel (ibid.).

When Commerson travelled from Île de France to Fort Dauphin in October, 1770, having read Flacourt's Histoire en route (Monnier et al. 1993: 121), he sought the plants Flacourt had described, including fontsy, which he might have seen in Île de France where it was taken around 1768 (Dorr 1990: 131). Commerson may have been the first to describe a capacity of the plant that became one of its most distinguishing features for French and British alike:

The tree called Ravenal resembles absolutely the banana by the configuration of its leaves, which differ only by their position, vertical and and in the form of a fan, yet presenting to the sky their entire upper

^{ix} By balisier, perhaps Flacourt was thinking of *Heliconia Bihai*, "Wild Plantain," still called balisier in plant catalogues in the late nineteenth century.

surface. These leaves, well suited by their immense size to receive a large quantity of rain water, transmit it by means of a channel, occupying the center right up to the pedicel [stalk] of the same leaf, thus the pedicel is very flat and wide, and clasps the stem very closely, yet in a manner as to make a quite ample capsule where water is held in [a] reservoir for the need of the plant, giving it a particular taste that is not at all without merit. This sort of reservoir can serve abundantly to quench the thirst of several voyagers by piercing the [stalk] in the lowest part (MS 887, II Y.L. 45, quoted by Monnier et al., 1993: 124)

Although Michel Adanson had classified the plant as "Ravenala" in his Familles des Plantes (1763, v. 2: 67), Commerson seems to have been inspired by its upward "heaven-seeing" leaves to rename it Dalembertia uranoscopa in honor of Jean Le Rond d'Alembert who was, with Diderot, one of the animateurs of the L'Encyclopédie (1751). D'Alembert's "Discours préliminaire" exemplified the way in which scholars, interested in the new botanical and other sciences and sceptical about received religion, were trying to rethink natural philosophy. Thus Ravenala may have personified for Commerson himself new speculations about what we now call the "environment."^x

Sonnerat (1782, v. 2: 223) completed the identification of Ravenala with Madagascar by renaming it Ravenala madagascariensis. Poivre sent Sonnerat to collect plants in southeastern Madagascar in September 1779-80, as part of continuing French efforts to subvert the Dutch spice trade (Dorr 1997: 355).^{xi} In his list of plants, Sonnerat (ibid.: 224-25) describes Ravenala as a "sort of palm ... crowned by a perfect and superb fan, which the leaves form by their disposition. The leaves of this singular tree resemble those of the Banana, but they are longer and thicker." It grows in marshes. He documents its use in housebuilding, but otherwise repeats Flacourt's earlier observations. In his chapter on Madagascar describing the use of Ravenala in house-building, he notes that savants write Malagasy in Arabic script on Ravenala leaves as well as on hand-made paper (ibid.: 57). Jacquin's (1797: 47-48) description of Ravenala in his Plantarum rariorum draws mainly on Sonnerat and Flacourt, so perhaps

^x Grove (1995:222-23) argues that the "Utopian naturalism" of Commerson and Saint-Pierre, heavily influenced by Rousseau, encompassed "ideas about nature and environmental change and also about science and society in general," and was thus "environmentalist rather than simply conservationist," like Poivre's vision.

^{xi} Sonnerat was in Fort Dauphin and Foulpointe (now Mahavelona), and perhaps travelled to some of the other "best ports" on the east coast, which he named as Tamatave (now Toamasina), l'Île Sainte-Marie, and Port Choiseuil in the bay of Antongil (ibid.: 56). He adds, "The west part is very little frequented because of the cruelty of the inhabitants of that coast, & by consequence it is very little known." The Compagnie Française des Indes Orientales established a post in Foulpointe in 1756, which replaced Port Choiseuil as its official center in 1758. Foulpointe was a key port in the slave trade between Madagascar and the Mascarenes until Tamatave became the Compagnie's center in 1800.

he had this observation in mind when he speculated that, if Ravensara means "Good leaf," Folium bonum (which is close to the Malagasy ravina tsara), then the term Ravenala might mean "Leaf of God," Folium Dei.^{xii}

Sonnerat also documented the use of Ravenala in a ritual of "les Madégasses," perhaps around Foulpointe. Before sailing, they give their boat "a sort of blessing." The sailor takes seawater in a piece of Ravenala leaf and addresses prayers to the sea, exhorting it not to harm his vessel, but bring it back safely and full of slaves. He gets into the water, walks around the canoe, asperging it with sea water; then returns to shore and makes a hole in the earth where he buries the piece of Ravenala. His passengers "sit all around, address prayers to the sea, launch their boat, and embark" (ibid: 64).^{xiii}

Ravenala madagascariensis, in three striking engravings of the plant, its flowers and fruits, stands for all the botanical wonders of Madagascar in Sonnerat's (ibid.: plates 124-6) account (**FIGURE 1**).^{xiv} Botanists and horticulturalists still celebrate Ravenala for its distinctive beauty. Although it looks like a palm, indeed a huge bright green palm-leaf fan, its leaves and other features link it to the Musaceae family of bananas and plantains; yet its yellow fruits look somewhat like dates, as Flacourt had observed. Adanson (1763, v. 2: 61) commented that "the Ravenala has the height of the greatest Palms," describing both as plants "foreign to Europe and particular to the warmest climates." For Jacquin (1797: 47), Ravenala is a "Planta maxime spectabilis & ornamentum."

^{xii} Wright (1999) questions whether Jacquin might have interpreted "ala" as "Allah," which he then translated as Dei. Sonnerat (ibid.: 56, 62-63) wrote that Madagascar was inhabited by three "races." The one around Fort Dauphin and along the east coast was descended from ship-wrecked Arabs and still practised customs like the use of Arabic script. Some called themselves "Muselmans," but Sonnerat noted only that "they joined to Mohammedism the most extravagant superstitions." Wright (ibid.) observes that Europeans were late to discover the wonders of palms, long revered among people living east and south of the Mediterranean, for example. How palms and other botanic wonders might have figured in the accounts of Arabic-speaking travelers to Madagascar, and in their settlements there, warrants further research.

^{xiii} By 1799, such slave-raiding expeditions had reached the Comores, forcing the construction of fortified towns; descendants of enslaved Comoreans still live in northeastern Madagascar (Wright 1999). When Wright and coworkers did archaeological research in the region of Mananara Avaratra in August 1983, they participated in prayers to the ancestors in which they offered rum in small cups made of folded Ravenala or banana leaves. Wright was told that the ancestors would not accept the prayers if other vessels were used (Wright 1999). Cotte (1946: 221), founder of the Prémontré Mission de Vatmandry-Mahanoro in 1920, wrote that people in this area of the east coast buried their dead in coffins made from the trunk of a Ravenala cut in half and hollowed out. Sonnerat (ibid.: 62) reports only the use of wooden coffins, as does Wright (1999), who notes that they were hard woods.

^{xiv} Commerson made a beautiful drawing of Dalembertia uranoscopa (reproduced in Monnier et al. 1993: 123). With the three thousand plants he sent to Jussieu, he included drawings, which Lamarck engraved for his Illustrations des genres (Monnier et al. ibid.: 12). However Lamarck's (1800: plate 222) illustration of Ravenala is a composite of Sonnerat's engravings.

British travellers to eastern Madagascar, ever more after the British possessed Île de France (renamed Mauritius) in 1814, made similar observations about the rare beauty of *Ravenala*, combining the attributes of palms and banana trees. As the L.M.S. Reverend James Sibree (1877: 330-31) said in an article devoted to the "Traveller's-Tree":

This tree belongs to the order Musaceae, although in some points its structure resembles the palms rather than the plantains. [*Ravenala* is now grouped with the genus *Strelitzia* in a separate family, Strelitziaceae.] It is immediately recognised by its graceful crown of broad green leaves, which grow at the top of its trunk in the form of an immense fan. The leaves are from twenty to thirty in number, and are from eight to ten feet long by a foot and a half broad. They very closely resemble those of the banana, and when unbroken by the wind have a very striking and beautiful appearance.... [The fruits] are oval in shape, about two inches long and yellow in colour, something like very large dates.

Ravenala's many uses seem to have been common knowledge by at least the early 1820s. When the painter, André Coppalle, traveled from Mauritius to Antananarivo in 1825-26 to paint Radama's portrait, he landed at Foulpointe. His list of useful plants around the port includes "ravina or ravenal," which he identifies as the plant with the fan-shaped leaves "forming in their common center a reservoir where the water the rains have put there is conserved in all its limpidity"; these same leaves serve the Betsimisaraka in house-building and tableware (1909-10:18-19, 28-29). Coppalle documents a phenomenon perhaps self-evident to most of his fellow European travelers: Europeans' interests in plants in Madagascar were not limited to their medicinal and other uses. Like the Malagasy around them, they used plants, especially trees, to mark their social-historical places in a common landscape. Coppalle notes how the former habitations of "Europeans," including a Frenchman named La Bigorne who was there in the 1750s, can be recognized by their symmetrical arrangements of "exotic trees," especially mangotrees, which are still standing. Indeed, "Bezouzounes" around Manakambahiny remember La Bigorne saying, when planting mangos, that "one day the French will come to get the fruit." Meanwhile, "the naturals have the greatest veneration for these trees and for all that recalls the memory of La Bigorne" (ibid: 21, 35).

Samuel Copland's contemporaneous History of the Island (1822) is based on published sources. Characteristically for British works of this time, Copland combines his accounts of the island's "natural productions" with its politics and religion, including an appendix on "the several attempts to introduce Christianity." His catalogue of plants (Chapter 23) culminates in the "Raven Palm," which he describes as "a kind of palm-tree peculiar to Madagascar" and a "chief favourite, as well as on account of its beauty, and the shade it afford, as for its

usefulness. "Indeed, the raven is "one of the most useful [trees] they have," providing an "incorruptible" wood and other materials from which houses are built; food and the utensils with which to eat it; as well as a gum "of an exquisite flavour, which may be termed natural honey" (ibid.: 15, 328; 80).^{xv}

Copland's account was inspired by the efforts of the London Missionary Society to introduce Christianity into Madagascar, beginning in the Merina monarchy of Radama I in 1818 and continuing into the reign of Ranavalona I, who succeeded Radama in 1828. Ranavalona responded to the Society's widening mission with edicts in 1831, 1832, and 1835 forbidding public services and rites of communion, baptism and marriage. In July 1835, the LMS missionaries buried "some seventy Bibles and several boxes of books and tracts" in the ground for their Malagasy converts and left the country. Reverend William Ellis led the Society's efforts to return to Madagascar in the mid-1850s, and again in 1861, culminating in the conversion of Ranavalona II and her court on 21 February 1869 (Gow 1979: 16-24). I will argue that William Ellis firmly established Ravenala as an icon of Madagascar by using the "Traveler's Tree" as an graphic statement of the Society's purpose "to take possession of [Madagascar] for Christ" (Ellis 1838, v. 2: 558), in circumstances where he could not make that claim openly in words.

"The Secrets of the Growth of Plants"

By his own account, William Ellis felt from an early age "a strong wish to work in an nursery garden, so that I might learn the secrets of the growth of plants" (cited by his son, J.E. Ellis 1873: 6). Born in 1794 (August 29), he was around four when his family moved from London to Wisbeach [Wisbech], Cambridgeshire, where his father worked in a candle factory. As he told members of Wisbeach's Working Men's Institute later in his life:

Not a hundred yard from this place, I first became conscious of that deep interest in those wonderful processes of nature, by which the germinating seed forces up the blade, the ear, and the full grown corn into the ear, until the valleys are covered over with grain. Here began, when I was scarcely five years old, that

^{xv} By "incorruptible," Copland might have been alluding to palms' famous ability to regenerate life out of death, like the legendary Phoenix, whence the name of the date palm, Phoenix dactylifera. Copland's account of Madagascar is compiled from various sources cited in his preface. He acknowledges that his list of plants may include errors, because his sources did not identify the plants by their "botanical names" in Latin (ibid.: 303). I assume that Copland's raven, or raven palm, refers to ravinala, because he lists separately "the Raven-sara" to which his ambiguous term might otherwise have referred in sound. Although Flacourt's description of the "la plante du balisier," with the seeds called voanfotsy, is virtually identical to what Copland describes of the raven palm, Copland lists the "Fonti" plant separately. Nor does he associate the raven palm with the "Urania speciosa — Traveller's Tree" on a list of plants then found in Mauritius, which he saw in Sir Joseph Banks' library (ibid.: 309; 325; 303, 329).

strong desire to understand the processes of vegetable life, and that unspeakable pleasure in meeting with new, rare, and beautiful forms of plants, flowers, and fruit, which through all the intervening changes of life, have been to me a source of pure, unmingled thankfulness and pleasure (ibid.: 7-8).

At eleven years old, he started working for a market-gardener in his neighborhood, and then as a gardener for two clergymen in the area. At eighteen, he went to London to work for Mr. Bassington, a renowned nurseryman in Kingsland, leaving after seven months to become the gardener for a family who attended Kingsland Chapel. Although his father urged him to hear a Unitarian minister, he joined the Kingsland Chapel in 1814. He began teaching in the Sunday school and in the neighborhood, and within a year decided to join the London Missionary Society, whose annual meetings were becoming increasingly popular in the area.^{xvi} He was accepted into the Society at the end of 1814, at the age of twenty, serving first in Polynesia in 1816-25, then in England in 1825-1853 (ibid.: 8-26 and passim). The London Missionary Society tried to send him to Madagascar in the early 1850s. He sailed to Tamatave in 1853, 1854, and 1856, before Queen Ranavalona finally allowed him to continue on to Antananarivo.

Like Copland's earlier work, Ellis's Three Visits to Madagascar combines the "natural history of the country and the present civilization of its people." Ellis's account was published in London in 1858 and in New York in 1859. As he explained, it was now "more than twenty years... since the last English missionaries left Madagascar, and during this period religious changes of the most decisive nature, and events of the highest and most sacred character, have occurred among the people," undoubtedly referring to Ranavalona's alleged persecution of Malagasy Christians in their absence. Ellis emphasizes "the imperfect, and, at times, conflicting accounts of these events received in England [whence] the desirableness of a personal visit." Because of the delicacy of the situation, he is quick to state that his visit was "one of friendship to the queen and people, not an official religious mission, though no objects were so deeply interesting to us as the religious state of the people." On this, he received "much valuable information from the people themselves; part of it exceedingly painful, on account of the sufferings it made known." Although "full of hope" for the future, he can say nothing of their suffering because "the profession of Christianity is not permitted by the present government of Madagascar," so his words could harm them (ibid.: vi).

^{xvi} The nondenominational London Missionary Society was founded in 1795 mainly by Independents, known elsewhere as Congregationalists (see Gow 1979: 32, n. 11). They were among the several Nonconformist groups then challenging the Anglican Church in England.

When Ellis returned to Madagascar in 1862-65, after the death of Ranavalona in August, 1861, he dedicated himself to revealing "the persecutions endured by the Christians, and their heroic sufferings" (1867) and the "Martyr Church" (1870) in his written works and in photographic portraits taken of the descendants of the martyrs in 1864-65, which were to have been the basis of a third book on the lives of the martyrs (see Peers 1995:13; plates 56, 57).^{xvii} During his visits in the mid-1850s, when he thought the Malagasy Christians were still in danger, he included some brief discussions about the martyrdoms, but stated: "In reference to the religion of the present, reasons which are obvious require silence" (ibid: 189-96, 466-71).

Clearly anticipating an account of the martyrdoms, the British Quarterly's reviewer (Anon. 1859a: 402-4) cites "the stern necessity for cautious reticence imposed on him, for obvious reasons," to explain why Ellis "gives to scientific subjects a disproportionate share of attention." Yet I would argue that "his botanical, zoological, ethnological, and linguistic enthusiasm" is precisely where Ellis expressed his hidden views, and nowhere more strikingly than in the Traveler's Tree, which he calls Urania speciosa.^{xviii}

Ellis praises "the beautiful heavenly one." Its "bright green gigantic leaves, spread out like a fan at the top of a trunk thirty feet high, presented a spectacle as impressive as it was to me rare and beautiful ... the prevalence of this tree [if not torn by the wind] would impart a degree of almost inconceivable magnificence to the vegetation of

^{xvii} Ellis returned to Madagascar in May 1862-July 1865 with funds to build four churches at Ambohipotsy, Ambatonakanga, Faravohitra, and Ampamarinana, memorializing the Malagasy martyrs, having received a special dispensation from the Merina monarch, Radama II, allowing him to construct them in stone, like royal buildings. In his account of this visit, published in 1867, he discussed openly, as stated in his subtitle to Madagascar Revisited, "the persecutions endured by the Christians, and their heroic sufferings." J. E. Ellis (1873: 250) says that when his father returned to Madagascar, "Among the first objects of interest that attracted the missionary's special attention were the martyr sites, which he took the earliest opportunity of visiting, and which he could now examine in the most open manner, very different from the jealous surveillance with which his casual glances that way were formerly regarded. He was glad to find them in every way eligible for the proposed places of worship." In a letter to Reverend Tidman of 10 December 1863 (SOAS LMS Archives, cited in Peers 1995: 13, 21, n. 7), Ellis said that he hoped "to take portraits of as many of the surviving near relatives of the martyrs as I can put them in a book," with captions including all the information he could get about the martyrs. He expected that "such a publication would be exceedingly acceptable and serviceable, perpetuating the feeling in favour of Madagascar and its martyrs."

^{xviii} Ellis (1858: 332) identifies Sonnerat as "ravinala[s] discover," but he classifies the plant as Urania speciosa, "the beautiful heavenly one," *Urania* also being the Greek muse of the science of astronomy. In this, Ellis follows his countrymen, Sir Joseph Banks (in Copland 1822:329), as does Wallace (1876, v. 1: 279). According to the Index Kewensis, the name originates in Carl Ludwig von Willdenow's Species Plantarum (1799, v. 2: 7), perhaps as an alternative to Commerson's Uranoscopia dalembertia. Both names celebrate the celestial beauty of the plant, but use their new scientific classifications of its status to honor different human genealogies.

the country." Yet surprisingly the Tree is "most celebrated for containing even during the most arid season a large quantity of pure, freshwater, supplying to the traveler the place of wells in the desert" (ibid.: 334-35, his emphasis). A woodcut, based on an ink and wash sketch, illustrates the event that dispelled his doubt about this claim: "one of my bearers struck a spear four or five inches deep into the thick firm end of the stalk of the leaf, about six inches above its juncture with the trunk, and, on drawing it back, a stream of pure clear water gushed out, about a quart of which we caught in a pitcher, and all drank of it on the spot. It was cool, clear, and perfectly sweet" (ibid: 335-6). **[FIGURES 2, 3].** This scene, abstracted from the forest in which it is set, is embossed in gilt on both covers of his book.^{xix}

Ellis's vivid account of the virtues of the Traveler's Tree established this plant as an icon of the beauty, strength and resourcefulness of the country and its people. A description of the Tree, almost always pictured, became a set-piece of later travel accounts, even if the writer had never to Madagascar, but was eager, as Campbell (1889: 5) says, "to give the impression of eyewitnesses".^{xx} Yet Reverend Ellis is so discrete in his praise that we could easily interpret his enthusiasm as the justly admiring words of a man who has loved plants since he was a child. Ashe notes, "I had seen water drawn by Sir William Hooker from one of the specimens in the palmhouse at Kew" (ibid.: 336).^{xxi} His precise descriptions of the plant's "natural reservoirs" and its local uses for builders, rather than travelers, are presented to correct his own and others' suppositions about its anatomy and social importance. So why should we suspect that the image has any further implications? And what relevance would these have to contemporary Madagascar anyway?

My argument is that Ellis's use of visual imagery in Three Visits was motivated not only by a concern for

^{xix} The unsigned, undated ink and wash sketch of the Traveler's Tree, is now in the Reverend William Ellis Collection (944x72.106), Royal Ontario Museum, Toronto, Canada.

^{xx} Sibree (1877), who worked as Ellis's architect for the memorial churches, then became an L.M.S. missionary, devoted an article in a Christmas issue of The Antananarivo Annual to confirming, like a Doubting Thomas, the truth of Ellis's account of the Traveler's Tree. Sibree mentions the Tree in almost all of his widely read books, for example, 1870: 70-72 (illus.), cover; 1880: 91-92; 1896: 5, 8, 120, 353 (illus.), 369; 1915: 49-50, 257-8, 260 (illus.), 263). See also Wood 1868, I: 773; Anon. 1871: 388; Wallace 1876, v. 1: 279; Campbell 1889: 12-14; Osborn 1924: 415; Swingle 1929: 179, 183, 204; Lhande 1932: 24-25, 86-87; Schnack 1935: 65-66; Hutchinson 1940: 449; Almasy 1942: 798-800; Morrell 1999: 68; among many other accounts, most illustrated.

^{xxi} Ellis (1858: viii) thanks Sir W.J. Hooker in his Preface for having "direct[ed] my attention, previous to my departure from England, to the botanical treasures which Madagascar was known to contain."

scientifically precise observation, but also by a biblical vision of bearing witness, and that Ellis's biblical vision of Madagascar, picked up by others, still influences the way that today's travelers, and perhaps some residents, see Madagascar today.^{xxii} Ellis (1858: 330-31) mentions that he didn't have his photographic apparatus available during the early part of his journey from Tamatave to Antananarivo in August 1856. The ink and wash sketch of the Tree seems carefully posed, as were many of his photographs. While witnessing was an ancient practice in Christianity, going back to New Testament times, the proliferation of illustrated Bibles and Bible dictionaries in the nineteenth century suggests that Christians' emphasis on visual testimony grew when the biblical account of Divine Creation was being challenged. Visual imagery helped to realize ongoing processes of God's Works, perhaps obscured by industrialization in Europe and North America, but still evident elsewhere, in the original heartland of the Bible in the Middle East and in the natural wonders of mission lands, like Madagascar.

In the case of Ellis's Traveler's Tree, we may still ask: visualization of what? One answer to this question can be found in the history of European botanic gardens since the explorations of the sixteenth century, which were motivated in part by the effort to recreate Paradise in Europe, if not also find it abroad (Prest 1981, Grove 1995). Prest argues that once Europeans started making these gardens and filling them with plants, they started speculating about which trees might be the original tree of life. For two centuries, their choice for the tree of life was the palm tree, especially the date palm and the coconut palm, both of which were imagined to answer every human need. The few who speculated about the Tree of the Knowledge of Good and Evil identified it with the banana tree (Prest *ibid.*: 78-81).

Goodhugh's Pictorial Dictionary of the Holy Bible (1845), Sears's Pictorial Illustrations of the Holy Bible (1845), and Gosse's Sacred Streams and Rivers of the Bible (1852) exemplify the persistence of this vision of Paradise in anglophone Christian literature in Ellis's lifetime (**FIGURE 4**). The date palm is "one of the noblest trees

^{xxii} The British Journal of the Photographic Society for December 21, 1858, cited Three Visits as being, with one exception, "the first book of travels illustrated for the most part by photographs" (in Bull and Denfield 1970: 57, 55). Reviewers picked up on Ellis's efforts to use the camera to make his observations as exact as possible: "The volume will at once take rank with those travels which derive their value from the narrative of substantial facts and not from the high-colored pictures of the imagination (Anon. 1859b: 692). See Bull and Denfield (1970: 55-58) and Peers (1995) for discussions of Ellis's intense interest in daguerreotypes, calotypes, and the collodion process still new in the early 1850s. Peers (*ibid.*: 18) notes that Ellis's interest in using his photography to "improve the communication of a message" concerning "the usefulness of the missionary work," for example, could lead him to alter the woodcuts made from his photographs.

that adorn the solitary waste, and the most useful that man has converted to the purposes of nutriment and comfort [and] an unerring sign of water; hence the weary Israelites found water where they found palm-trees." The palm has a "majestic trunk ... a magnificent crown of leaves ... eight to twelve feet long, shining and tapering... a bright lively green" (Sears 1845: 27). Gosse (1852: 6) depicts the "Oriental Vegetation" of "Eden, the Garden of God" as a grove of banana plants.^{xxiii} Thus the Traveler's Tree, combining the attributes of palms and banana plants, could have evoked for Ellis and his readers, that primeval land.

Ellis's Tree, pierced by a spear, assuaging the thirst of travelers in a dry land, might have given readers of the New Testament a vision still more precise: Christ's cross, and possibly even the crucifixion. Five passages in Acts (5:30, 10:39, 13:29), Galatians (3:13) and 1 Peter (2:24), compare the cross to a tree, alluding to the doctrine of the resurrection, and thus transforming the cross into a tree of life. Since the Reformation, many Protestants made the image of Christ "Throned upon the awful Tree" central to their hymns (Davies 1988: 42). Shortly after Ellis published Three Visits, the London-based Quarterly Review surveyed "Sacred Trees and Flowers," noting that Christians have speculated for centuries about the tree of the cross, its kind and origin. Many trees and flowers, formerly associated with "heathen rites and deities," are now identified with "holier names, and not infrequently with the events of the Crucifixion itself." The author concludes: "The cross of our blessed Lord may be said to fling its shadow over the whole vegetable world" (Anon. 1863: 118-19).

Ellis's image of the Tree could have recalled Christ's crucifixion as described in the gospel of John (19:34): "But one of the soldiers with a spear pierced his side, and forthwith came there out blood and water." The flow of blood and water is commonly taken to be a sign of Christ's humanity, his offering of the cup of the new covenant in the last supper, and sometimes also the institution of baptism. That some Malagasy were hearing such doctrines from L.M.S. missionaries may be evident in a letter that Malagasy Christians sent to the L.M.S. in 1839, describing Jesus Christ as "the exhaustless and unchangeable fountain of blessings" (letter of 10 October, cited in Freeman and Johns (1840:290).^{xxiv}

^{xxiii} See also Goodhugh 1845, v. 2: 1006-8; the long discussion of the date palm as the ancient Tree of Life in "Sacred Trees and Flowers" (Anon. 1863: 110-112), published in London and New York; and Gubernatis (1882, v. 2: 279) who affirms that "the palm is considered one of the great cosmogonic and anthropogonic trees."

^{xxiv} Images of "the Lord, the fountain of living waters" (Jeremiah 2.13; see Jer. 17.13, Psalms 36.9) in the Christians' "Old Testament" were applied to Jesus Christ in the New Testament, especially in the gospel of John (for

Finally, I think Ellis identified the Traveler's Tree not only with the Garden of Eden, the Tree of Life, the cross, and the crucified Christ, but possibly with the Malagasy Christians themselves, especially the "martyrs" who were publically executed for continuing to affirm Christianity after Ranavalona prohibited commemorations of the last supper, baptisms, and meetings in the 1830s. As portrayed on the title page of Freeman and Johns' Narrative of the Persecutions of the Christians in Madagascar (1840), Rasalama, the first martyr, was speared to death on August 14, 1837 (See **FIGURE 5**). A generation earlier, Samuel Copland had characterized the Malagasy people as "the children of Abraham," corrupted by the European exploiters who preceded the missionaries, and thus like "the beloved child that 'was lost, but is found'" (1822:368). Copland felt that the L.M.S. missionaries, and through them "our country" of Great Britain, "had thus taken by the hand, and raised, as it were, from the dead, a noble and generous, but abused, insulted, and betrayed people..." (ibid.: 369). Since the first century C.E., when Christians adopted Roman iconography to express their doctrines, the palm was a symbol of Christian martyrs' triumph over death (Brown 1837:902), as well as Christ's victorious entry into Jerusalem, when the people "took branches of palm trees and went forth to meet him" as described in the gospel of John (12:12-13). Thus Ellis's Traveler's Tree might have stood for "the Martyr Church of Madagascar" (1858: 185), which he found hidden but alive.

For Ellis and fellow Christians, the palm-like Traveler's Tree, or Traveler's Palm, would have been a graphic reminder that Malagasy Christians were martyrs to their faith, that is, prophetic "witnesses" to the truth of Christ's death and resurrection, in the original sense of the Greek term applied to the martyrs of the Church in the second century C.E. (see Goodhugh 1845, v. 2: 835). Now they were to be raised from the dead through the regeneration of Christianity soon to be inaugurated through Reverend Ellis's triumphal entry into the new Jerusalem of Antananarivo. "The righteous shall flourish like the palm tree: he shall grow like a cedar in Lebanon. Those that be planted in the house of the Lord shall flourish in the courts of our God," so states Psalms (92:12-13). Indeed, for Ellis's reviewer in the British Quarterly, the martyrdoms of the Malagasy Christians, occurring after the British missionaries left, show that

the Kingdom of God ... like seed ... will soon, if we trust it, become naturalized on any soil.... [In Madagascar] now for a quarter of a century, it has been growing up self-sustained, free from all undue Anglicism, but racy [sic] of the soil watered with the blood of so many martyrs. It is no longer a foreign, but a home religion.... It is now, we repeat it, a home religion, interlaced inextricably, like Madagascar's

example John 4.14).

own beautiful Ouvirandra, with the most secret fibres of the budding national life of a new historical people (Anon. 1859:406-7, 417, his emphasis, referring to the famous "Lace-Leaf Plant" that Ellis introduced from Madagascar into England, where it quickly became a common house plant).^{xxv}

"The Seed of Divine Truth ... Watered with a Martyr's Blood"

The water of the Traveler's Tree, the doctrine of the L.M.S. missionaries to Madagascar, the blood of the Malagasy martyrs, and the growth of the Church — Ellis nowhere states their connections in words. Yet they are spelled out in Townsend's later account of Madagascar: Its Missionaries and Martyrs (ca. 1892), published on the eve of the French invasion of Madagascar. The Traveler's Palm filling the cup of the Malagasy traveler who has speared its side is embossed on the spine of the book's bright red cover, just below the gilt title. The front cover portrays "Malagasy Christians reading the scriptures secretly" (ibid.: 79, **FIGURE 6**). Townsend's purpose is to describe some "eighteen years of intolerance, bloodshed and murder" from the late 1830s into the late 1850s, focusing especially on the martyrdoms in 1839-43 and in 1849-52. Here, he explains the botanical imagery which is central to the representation of death and resurrection in the New Testament and "the growing kingdom of the Lord Jesus" (ibid.: v) through its missionaries and martyrs in the present day.

Townsend identifies "The Introduction of Christianity" with the Merina King Radama I and his contributions to "the growth of the people in civilisation," cut short by his untimely death. The image of the speared Traveller's Palm, marking the end of this chapter, seems to confirm Townsend's concluding words, that Radama's early death was "a mysterious dispensation of Providence, and the Mission was now to enter upon a chequered history of repression and persecution, and then upon a course of triumphant success" (ibid: 46). With "The Gospel Rooting Itself — Gathering Storm" on the facing page, he begins to chronicle the martyrdoms in the reign of Radama's successor, Ranavalona I. She is described as a usurper "quite willing to wade through slaughter to a

^{xxv} The obituary for William Ellis in The Gardener's Chronicle and Agricultural Gazette (Anon. 1872: 806) lists his principle introductions as Ouvirandra [now Aponogeton] fenestralis and several orchids (species of Grammatophyllum and Angraecum, including two named after Ellis); see also Sodikoff 1999a on the introduction of Ouvirandra into England. How the making of gardens contributed to the "planting" of doctrines and the creation of kindred places is worth further research. In 1839 (May 13), the Society's paper, The Patriot, admonished its readers to "remember that foreign and home operations, like the branches and root of the oak, are inseparably united" (cited in Fletcher n.d. [1995]: 10). Ellis later photographed the L.M.S. "Hospital at Analakely in Antananarivo with the cattle market and oak tree planted by the missionaries from an acorn brought from the Cape of Good Hope, 1865" (plate in Wisbech and Fenland Museum).

throne" by having Radama's son and heir killed (ibid.: 48). Here, he finally reveals the paradoxical secret of the bleeding Palm, that death is the source of new life:

The end of the persecution left the Christians more pure and devoted, more united to each other and attached to Jesus than when it began, and, marvellous to relate, the blood of the martyrs had become the seed of the Church, and the number of believers had steadily increased as the fiery trial had passed upon them (ibid.: 109).

Now the death of Ranavalona, who "earned for herself the title of 'the bloody Mary' [Tudor] of modern days," inaugurates "The Dawn of Freedom and Prosperity." In his illustration of "The banished ones joyfully mingled with their families again," the Traveler's Palms stand out against the sky (ibid.: 110-13).

The source of Townsend's human-botanic imagery may well have been Ellis's History of Madagascar (1838), which he acknowledges as the most important of the several works he consulted (ibid.: v-vi).^{xxvi} But Ellis (1838:531-2) himself drew on the report of Reverend Baker who, with Reverend David Johns, buried Bibles in Madagascar before leaving in July 1835. Baker was invoking the ancient Church Fathers, Tertullian and St. Jerome, when he wrote: "If the blood of the martyrs is the seed of the church, we may trust that Rafaravavy [Rasalama] will not have died in vain. She died directly and exclusively in defense of the Gospel" (in Ellis ibid.).^{xxvii} This phrase entered English life with Foxe's Actes and Monuments (1563) and Fuller's Church History of Britain (1655), which compared the English Protestants burned as heretics in the reign of Mary Tudor (1553-58) to the Christians martyred in the reign of the Roman emperor Diocletian (284-305). New editions of both works had just been published in London in 1837, undoubtedly because of their relevance to the debates between Nonconformists and Anglicans also reflected in later reviews of Ellis's work (e.g., Anon. 1870b).^{xxviii} Fletcher (n.d. [1996]) argues that the L.M.S. benefitted in 1839-42 from the presence of six Malagasy refugees to Britain, including Rafaravavy, whom they

^{xxvi} This collaborative work was originally intended to be a "History of the Protestant Mission in Madagascar," based on the written and oral reports of the L.M.S. missionaries who had worked there, including Jones, Griffiths, Baker, Freeman, and others. Ellis, who had not yet been to Madagascar, compiled earlier historical accounts with reports on the martyrdom of Rasalamain 1837, eventually making it a History of Madagascar (1838).

^{xxvii} Tertullian's Apologeticus [ca. 197 C.E.], 50: semen est sanguis christianorum, commonly translated in English as, "The blood of the martyrs is the seed of the Church"; St. Jerome [ca. 342-420], letter 82.

^{xxviii} Fuller (1837, v. I: 41) uses botanic imagery to describe the growth of the Church in the reign of Constantine (306-37) who succeeded Diocletian: "The Gospel, formerly a forester, now became a citizen; and leaving the woods wherein it wandered, hills and holes where it hid itself before, dwelt quietly in populous places. The stumps of ruined churches, lately destroyed by Diocletian, grew up into beautiful buildings."

mistakenly thought killed. The converts' testimonies at public meetings helped the Society pay off their debts without cutting funds for their overseas missions. Fletcher argues further that nonconformist evangelical missionaries critically influenced British ideas about race and empire during the 1830s and 1840s.

Thus Ellis, like Baker, was drawing on well-known imagery to show why Nonconformists' foreign missions were so important for the growth of Christianity, when he concluded his two-volume history by saying: The scriptures have been extensively circulated in the island; the seed of divine truth has thus been scattered widely over the country — that country, now the sacred deposit of a martyr's ashes, thus taken possession of for Christ, must ultimately become his inheritance; that seed is incorruptible seed, and, now watered with a martyr's blood, must issue in a rich and abundant harvest (Ellis 1838: 558).

Ellis's words, turning the body and blood of Rasalama into the source of Madagascar's future growth as a Christian country, were striking enough to be repeated in contemporary reviews, for example, in Tait's Edinburgh Magazine (Anon. 1839: 236): "Some of the native disciples had assumed the duties of spiritual teachers, and the missionaries retain the hope that their labours will not have been in vain, and that a seed of truth has been posited in Madagascar, which will yet flourish and bear good and abundant fruit. One female convert [Rasalama] has already with her blood watered this little seed." Freeman and Johns concluded their account in the same vein: The cause of God will prevail.... There are more hearts on the side of Christ at this moment in Madagascar than there ever were. And there is hope for the future. The blood of the martyr is there, the pledge of the Saviour's watchful care, and the seed of the church. The prayers and tears of many water it. The harvest will come and Madagascar will be added to the Kingdoms of our God and of his Christ (1840: 297, their emphasis).

Ellis (1858: 467) repeats these words in Three Visits, referring to "the invincible constancy of those who fell, and the subsequent fruits of the imperishable seed which was scattered in the martyrs' blood"; and these words are echoed again in the reviews of his books (for example, Anon. 1859a: 404-6, 416). While the British Quarterly (ibid.), described Ranavalona as the "she Diocletian of our days," referring to the Roman persecutions, several others, like Reverend Cousins (1871) took their parallels from the English persecutions, calling Ranavalona "the 'Bloody Mary' of Madagascar."^{xxix} Belle McPherson Campbell (1889: 57), bringing Americans up to date on missionary

^{xxix} This characterization of Ranavalona was also in keeping with the description of Madagascar as "the Great Britain of Africa," common among anglophone writers (e.g., Anon. 1839: 237; McLeod 1865: 1; Sibree 1870: 17; Campbell 1889: 10). Francophone writers referred to Madagascar as "La Grande Terre," taking the perspective of French Creoles in the Mascarenes (Keller 1901: 1). Missionaries' negative views of Ranavalona powerfully influenced how she was seen by later historians (see Berg 1995: 74). Berg (1999) notes that assessing the number of people who died is difficult because the numbers grow with repeated retellings, "giving the impression of far more

activities in Madagascar for the Women's Presbyterian Board of Missions of the Northwest, repeats once again Ellis's words in History (1838) that "the blood of the martyrs was the seed of the church." These words, or references to Madagascar's "baptism of blood," are echoed again and again not only in Townsend (1892: 109), but also in the later work of the L.M.S. missionaries T.T. Matthews (1904: 45, 65, 76, 380), Hurst (1949: 42 and passim), Hardyman (1950: 16); the American Lutheran missionary Halverson (1973: 42-43); and the recent work of Joseph Benoit, Catholic missionary to the Diocese of Farafangana (1997: 45).

Buried Bibles

Did Malagasy Christians see their history in terms of these links between trees, people, and land, and if so, how? Ellis's own account in Three Visits shows that he never explored the potential connections between his biblically inspired views of God's works and the Malagasy views of trees and land that might have revealed some common ground. For example, later on August 14, the day he tested the truth of the Traveler's tree, the procession passed by "a large heap, as much as one or two cart-loads, of withered branches lying in the middle of the way," bordered here and there by stakes of bamboo to which pieces of "foreign cloth" had been attached. Ellis noticed how "each of the bearers, as he approached the place, plucked a large branch, or pulled up a plant of the heath, and uttering, apparently in a laughing manner, a few words, cast the branches on the pile as he passed by." He learned that the heap was "the accumulated offerings of travelers," to which the men in his group had added their own "to insure a safe journey to the party," an act that he attributes to "superstitious feelings" (ibid.: 340).

In the center of Mahela, the village where they stayed that evening, Ellis saw, as he had elsewhere, a group of standing wooden posts, branched at the top, together with one tall standing stone and a smaller round stone.

"These, I was told, were objects of worship — in fact, the idols of the village." Although he illustrates this account with an image of a small "idol," he concludes by saying:

knowing that the adherents to the superstitions of the country were exceedingly sensitive on the subject, and averse to all inquiry or questioning, especially by foreigners ... I had generally abstained from all remarks on the subject to the people around" (ibid.: 341).^{xxx}

deaths than took place ... a handful of people who continually ignored Ranavalona's repeated warnings about public ceremony, though in fact the Queen tolerated Christian ceremony in private."

^{xxx} In addition to other such observations, Ellis also made some photographs, for example, "A montana tree, often planted around tombs" (1862-65, plate in Wisbech and Fenland Museum, reproduced in Peers 1995: 59). Ellis

Pastor Rabary's Ny Maritiora Malagasy, written when he was a professor at the L.M.S. College at Ambohipotsy, and published in 1910, and again in 1913, through the L.M.S. Press (Sibree 1911: 123), is the first major historical account of the martyrdoms in Malagasy.^{xxx} Rabary's work has been reprinted many more times since 1910; my copy, published by the Imprimerie Luthérienne in 1957, was their seventh printing. Mondain (1920) included a French translation for francophone readers. Rabary (1957 [1910]: 111) echoes the same language of the other L.M.S. pastors: "The blood of the martyrs is already spilled there, that is the seed from which the Church will grow, and guarantee that the Saviour will care for it. The tears of the many and their prayers will water it" (his emphasis).^{xxxii} Yet the detailed account of Ellis's journey in August 1856 from Itoamasina (Tamatave) to Antananarivo, which Rabary includes in his later work, Ny Daty Malaza (1961 [1929], v. 1), gives no indication that he was drawing on the same botanic imagery that gave the bloody seed its life in the anglophone accounts. In his entry for 8 August, which covers the journey, he comments on Ellis's pleasure at the beauty of the rare plants he saw along the coast and in the forest. In contrast to "one French botanist" who merely described plants, Ellis actually brought some back to England, for example, the ouvirandran, now growing in Kew, Dublin and Edinburgh (ibid.: 169). Pastor Rabary's main point is that Ellis is most pleased by the welcome he gets from Christians in Imerina, their letters and visits, which by Ellis's own account begin when he reaches Angavo on the eastern edge of the highlands (ibid.; see Ellis 1858: 361-75). Finally, Pastor Rabary draws on Matthew (7: 24, 27), but perhaps also his own vision of trees and stones, to describe what fills Ellis's heart with joy on this visit to Madagascar: "He sees that the Malagasy Church is founded upon the Rock of Christ, so whether the rain comes down, or the waves rise up,

might have been hampered in learning more by his knowledge of Malagasy which was "very limited" (Sibree 1924: 24).

^{xxx} See Raison-Jourde (1991: 188-193, 603-5) for an analysis of the open secrecy of Christian conversion and martyrdom from the perspectives of Merina in the 1840s and 1850s, and the virtual silence about them within Madagascar in 1869-83, by contrast to accounts of the martyrdoms in British and American popular media during this period. Raombana, the *Officier du Palais* in Ranavalona I's court and historian of Imerina, whom Rabary (1961 [1910]: 170, 77) credits with teaching English to the three Merina Christians who escorted Ellis to Antananarivo on August 25 [26], 1856, and with saving the life of one of the martyrs, was nevertheless very reticent about the martyrdoms in his own work (see Ayache 1976: 107-12).

^{xxxii} Efa raraka tao ny ran' ny maritiora, ilay voa hitsimohan' ny Fianganana, sady antoka fahiahy azy ny Mpamonjy. Ny ranomason' ny maro sy ny fivavahany no rano antondraka azy.

or the winds blow hard, the house will not fall, because it is founded there upon the Rock" (ibid.: 176).^{xxxiii}

"The Blood-Red Island"

So far I have argued that early French and British travelers in Madagascar singled out the palm-like Ravenala, with its "incorruptible wood" and nourishing leaves, as an image of beneficence, a refund Tree of Life on an island envisioned in Commerson's words as a "veritable promised land for naturalists," and also for missionaries. Through Ellis's work, the Ravenala came to be identified with the missionaries' planting of Christianity in Madagascar and the Malagasy Christians' naturalizing of the seed. Ellis associated the arboreal well in the desert with the "fountain of living waters" of the crucifixion. The mixture of blood and water that flowed from Christ's wounds, nourishing the faithful in the cup of the Last Supper, was replicated in the blood of the Malagasy martyrs that watered the seed of the Church. Perhaps Ellis was predisposed to such imagery by his love of plants. But he also drew on a botanic imagery of martyrdom that was widespread in England at this time, flourishing in the work of his contemporaries and taken up again by many of their successors in the L.M.S. and now more broadly (Benoit 1997:45; Hübsch, ed. 1993: 236).^{xxxiv}

The L.M.S. missionaries, English and Malagasy taught natural history and science — botany, geology, zoology, physical geography (including the geography of the Holy Land), astronomy, and chemistry — as well as the Bible, theology, and church history, "to show our men how God has a revelation to us not only in His Word, but also in His wonderful works" (Sibree 1924, cited in Dorr 1988: 178; see Dorr 1987). The malagasy word zavaboary, "created things," which is now used to translate "environment" or "nature," probably derived from these teachings, but how, for whom, and in what relation to current forms of Christianity and environmentalism in

^{xxxiii} See Bloch 1998, Feeley-Harnik 1980, 1991: 401-59, for discussions of connections between trees and persons in Malagasy architecture.

^{xxxiv} For the Malagasy and French contributors to a recent "ecumenical history" of Christianity in Madagascar (Hübsch, ed. 1993: 236, 488-507), Ellis sees the Malagasy Christians who have survived the persecutions as a "Living church strengthening itself, extending itself, and a day will come when it will be a great tree whose multiple branches will extend over the entire country." Photographs of Ravenala and standing stones mark the head and foot of the final chapter, "Madagascar et le Christianisme (vue d'ensemble)," illustrating the main point: "in Madagascar as a whole, the Christian Churches, become one of the elements of national life, are now closely linked to the history of the country" (ibid.: 507).

Madagascar, are all subjects requiring further research.^{xxxv}

Many different factors undoubtedly contributed to the process by which the tree imagery I have described was generalized from the activities of British Protestant missionaries to phenomena having nothing ostensibly to do with Christian theology or Christian popular culture. By 1900, Ravenala was so widely identified with Madagascar in Europe and North America that the French colonists of Madagascar, who were not pro-British, printed their first stamps with a portrait of the tree, flanked by small animals, a ring-tailed lemur and a zebu. By strengthening the position of French Catholic and Protestant missionaries, before turning anticlerical (with Augagneur's Governor-Generalship in 1905-10), colonial administrators undercut the importance of British Protestantism in Madagascar and the martyrdoms on which it was based.

The French invasion of Madagascar through Majunga reoriented transportation patterns. By 1924, Majunga was the main entry by sea (Powell 1924: 240; Lhande 1932: 48). By 1934, the founding of the Tananarive-Broken Hill (Rhodesia) airline made western Madagascar the main approach by air (Decary 1935). Once the French occupied all of Madagascar, their accounts, and those of other travelers, were no longer limited to the areas where the Merina had tried to confine foreigners, but extended throughout the island. Ravenala trees are occasionally spotted by travelers coming into Madagascar from the west, but mainly they appear at the opening of an article or book, to serve as a generic introduction to the country as a whole.

Thus, in Marcel de Coppet's (1947) Madagascar et Réunion in the *Encyclopédie de l'Empire Français*, "Le Visage de Madagascar," its "face," is still the beautiful Ravenalamadagascariensis embossed on the dark green covers of the two volumes and further illustrated in the text and watercolor inside (the only plant illustrated), but now the focus is on "les Grandes Régions naturelles" from the perspective of the political capital of the island in Tananarive, beginning with the "Région Centrale" (1947, v. 1: 31, 34ff; see also Platt 1937: 303).^{xxxvi}

^{xxxv} Rajemisa-Raolison's Rakibolana Malagasy (1985: 1056) defines zavaboary as "all things that have been created, but did not make themselves," as illustrated in the phrase, "Angels and living people are the highest of all created things," and more generally as "everything seen around one, like the sky, the water, the trees," as in "he was lost in contemplating his surroundings that morning."

^{xxxvi} Baron, the L.M.S. botanist, was the first to divide the island into regions according to vegetation, distinguishing "East" (savoka and forest), "Center" (prairie), and "West" (savanna) as if they were natural types. Coppet's regions derive from Humbert (1927: 15-18), who makes it clear that his repartition of the "natural regions" of Madagascar follows from a different theory of the ecological history of the island. According to Humbert, Baron did not recognize "the artificial origin" of the savoka, the prairie, and the savanna in the human-made fires of

Similarly, visions of the blood in the earth are no longer restricted to memories of the martyrs, but extended to the country as a whole, as if the island itself were a body. The L.M.S. missionaries did occasionally make such general references, for example, Price (1989[1875]:101), complaining about the path from Tamatave up to Antananarivo: "In one descent the work was simply frightful. The men were nearly up to their waists in soft sticky blood-red earth; there were no rocks for footholds, nothing but this shifting, slimy soil." Reverend A.M. Chirgwin (1933: 294) describes the "wilderness of hills" on the way from Antananarivo south to Ambatolampy, marked by "relic[s] of half-forgotten religious rites and other old, unhappy, far-off things. On every hand the mountains were scarred and ripped with gullies and ravines like blood-red gashes in human flesh." Beginning in the 1930s, such language is found in a wide range of work. Boudry's (1936: 23-4) "Chant Malgache" evokes a "land of cattle, land of tombs, land bitten by caimans, the blood of your plateaus flows from the wounds of your rivers and reddens the sea that supports you." Platt (1937: 301) describes western Madagascar from the air as "a tortured landscape, lavaka, deep gashes cut in the bare red flesh of the land.... ruddy coastal waters carrying a last souvenir of the 'Red Isle'."

Madagascar's red lateritic soil may be more striking to travelers entering Madagascar through the open plains of the west rather than through the forested east.^{xxxvii} Yet Madagascar's shifting geo-political relations, the source of the travelers' changing itineraries, must also have contributed to their changing perceptions of the island's face and body. Here I will argue that the invasions of Madagascar, by the French in 1895, and by the British in 1942, were critical not only in determining the direction of those shifts, but in reforming the arboreal imagery associated with their claims to the land. As the participants in these events sought information about Madagascar, they invariably drew on the histories of the British missionaries in the nineteenth century. Their depictions of Madagascar in wartime show how the sacrificial blood of the Christian martyrs associated with the Traveler's Palm was linked to the bloodshed of warfare and generalized to the island as a whole.

Aubanel (n.d. [1895]), writing before the separation of church and state in France in 1905 and still close to

tavy agriculture.

^{xxxvii} Wright (1999) notes that soil erosion may have increased in the late nineteenth and twentieth centuries, though "surprisingly there is no solid evidence on this."

the bitter disputes between French Catholics and British Protestants following the conversion of Ranavalona II to Protestantism in 1869, makes an explicit link between Christian theology and warfare. Like his French and British predecessors, Aubanel (ibid.: 23, 33-35) introduces Madagascar through its natural history. But for him, "the sodden land of clay is like a vast cloaca of bloody mud, or, burned by the sun, resembles a frightful leprous wound crawling with unclean animals." The forests contain "absolutely incalculable" numbers of plants, including the Ravenala, supplying the traveler with fresh and limpid water. Yet he concentrates on the man-eating tree, the "monstrous, fantastic tree, which is at the same time a subject of terror and veneration for the natives" and the bloody human sacrifices with which they serve it.^{xxxviii}

Aubanel is so contemptuous of the "politics" of the British missionaries that he never mentions the martyrdoms of the Malagasy converts to Protestantism in his brief history of the island. Yet he uses similar language to justify why so many French soldiers died to possess Madagascar as a colony (ibid.: 56-7, 224, 262-3; see 171-267). Almost half of his account is devoted to the invasion, from the port of Majunga to Antananarivo, following the Betsiboka and Ikopa Rivers almost half the way. "Malgaches" are said to be "waiting until 'the blood of the French fertilizes the plain and the mountains and leaves the ineffaceable red imprint of their defeat on the land of the ancestors'," as if he were quoting their words (ibid.: 224). In his closing homage to the soldiers who have already died, Aubanel responds:

Because Christ died for humanity, because the blood which gushed from his divine wounds, fertilized the soil where the germ of the Idea [of love] was thrown, sublime in its generousities. The soldier on the field of battle, falling under the blows of the enemy, dies for la Patrie, the blood that runs from his wounds fertilizes the soil that saw him born, in which grows also an ideal: that of patriotism. Christ saves the world, he regenerates it.

The soldier defends la Patrie, he glorifies it (ibid.: 262-3).

Just how many of Aubanel's compatriots shared or disputed his sentiments remains to be seen. Yet it should be noted that Gandy's recent novel, *Le sang des colons* (1988: 345, 17, 346) uses exactly this idiom to describe French colonists' convictions that their right to land in Madagascar is rooted in their wartime sacrifice. Thus, a third generation settler, whose grandfather fought in the invasion of 1895, returns to her family's plantation in the

^{xxxviii} Rumors about a "man-eating tree" in Madagascar had been circulating in anglophone and francophone publications since the early 1800s (Hardyman 1938, Poisson and Decary 1962). This subject will be discussed elsewhere.

Sambiranoregion rather than follows her children to France after the change of regime in Madagascar in 1975, because this is "her land ... the land that the blood of her [kin] had fertilized." Although the Malagasy in charge of the new government may "take in the harvest," they are but "sowers of ruin"; on the contrary, "it is we [French] who have sown the seed."

The anglophone Allied troops who invaded Madagascar in 1942 knew little about the place or its people.

According to Gandar Dower's account of the King's African Rifles who landed in Majunga:

Madagascar was in 1941, to British and even to East African ears, an island off the coast of Africa, and very little else. A few geographically minded persons knew that the French possessed it: a few zoologically minded persons knew that there was something strange about its fauna, but its products, its potentialities, and its strategic value meant nothing whatever to ordinary men. It was not until it was suddenly caught up in world-war repercussions that Madagascar took on definite shape as the fourth largest island in the world (n.d. [1943a]: 7).

Like the Majunga operation, the assault at Diégo-Suarez, known as Operation Ironclad, or Ironclad Snowdrop, was a secret mission. Officers did not know they were going to Madagascar until March 1942; the British troops were told they were going to Rangoon (Colby 1953: 235; MacVicar 1971: 166-7). When the Library of Congress (Conover 1942), anticipating the participation of American troops in Operation Ironclad, hurriedly put together a bibliography on Madagascar, they found that Osborn's travel account, Madagascar: Land of the Man-Eating Tree (1924), was the "only full-length book, aside from those of scientific or missionary interests, published in the United States on Madagascar." Judging by MacVicar, the Traveler's Tree and the Man-Eating Tree were the most memorable subjects of the "little books" that British troops finally got a few days after their ships left Durban en route to Diégo-Suarez:

Madagascar, it appeared, was the fifth largest island in the world.... Though officially Christian, the various tribes were highly superstitious and obsessed by the spirits of the dead. Its vegetation was lush and in some cases rather odd. The Traveller's Tree, for example, stored water in its leaves, while the pitcher-plant, the legendary Man-eating Tree of Madagascar, had a sticky, poisonous liquid in its vase-shaped pink flowers and could capture and absorb any unfortunate insect venturing too close. Its animals were equally strange. A few of them, according to our little books, were evolutionary survivors from fifty million years ago.... (1971: 160).

Reginald Colby (1953: 235) was Chief Information Officer for Operation Ironclad and throughout the occupation of Madagascar, "the officer responsible for the propaganda part of the operation," as he describes it. When he finally learned his destination — "Madagascar? I knew nothing at all about it, absolutely nothing" — he went out to buy a book. Sibree's Madagascar before the Conquest (1896) was all he could find. Colby emphasizes

that "it was Madagascar as it was today, not the Madagascar of the last century viewed through the eyes of a missionary, that I had to get to know," so he spent the voyage reading intelligence reports. Nevertheless, his account of the invasion, like those of Croft-Cooke and MacVicar, show that "now" was inflected by "then." Unlike Aubanel, these men were oppressed by the pointless killing of the battle, which they generalized through their perceptions of the history of Madagascar to the whole of the island.

Gandar Dower (1943b: 107) describes the advance of the King's African Rifles' from Majunga to Tananarive as a steeplechase, "certainly more than an exercise but very much less than a war," because of the trees and stones the French laid across the roads to bar their way, 3000 roadblocks in 650 miles. The operations around Diégo-Suarez took more lives, because the Vichy French, in their insistence on "honor," refused to surrender right away, making it "one of the most superfluous battles of the war," an "ugly and bloody little battle and six months in a foul climate" (Croft-Cooke 1953: 39, 228). Colby (1953: 243-4) comments: "Looking back on the campaign it is sadly ironical to think that British and French blood should have flowed in Madagascar so long after any cause for rivalries had disappeared." Those rivalries dated back to "the bad old days of Queen Ranaivo the Cruel, who lived a hundred years ago [when] Christian martyrs were hurled to their death.... The evil Queen revelled in blood.... It has been calculated that a million deaths were due directly or indirectly to barbarous usages and wars during her reign of terror, and that a hundred thousand were simply slaughtered (ibid.: 246-47).

Colby (1953:248) makes an abrupt about-face and concludes his bloody history of Madagascar with a portrait of the Traveler's Tree "which must be mentioned when writing about Madagascar, as it seems to sum up this friendly and hospitable country." For Croft-Cooke (1953:87) the Traveler's Tree is a sign of the lazy "Malgache" wanting nothing but "a few boughs of his national tree with which to construct his simple home." While the Hovas who perpetrated the "long and bloody rule of the Malgaches" are now serving as government clerks (207, 225), all of Madagascar has become so saturated with blood in his memory that even a sunset in Tananarive merges with "ancient cruelty and cunning." The Blood-Red Island is embossed on the cover in bright red letters, edged in yellow, entwined in green vines, and set against a backdrop of deep-green vegetation entirely covering the boards.^{xxxix}

Croft-Cooke explains:

^{xxxix} J.T. Hardyman's copy has the original covers (Hardyman Madagascar Collection, Library, School of Oriental and African Studies, University of London).

The first I saw of Madagascar, and the last after adventurous months ashore, was the eerie colour of its soil. It gave to the sky, the vegetation and the people a strangeness, even a deathliness which still shadows my recollections of the island. For the soil and the dust which rose from it to cake our skins and clothes, our eyelids and nostrils, was not quite brick-coloured or terra-cotta but the colour of dried blood (ibid.: 9)

Only MacVicar (1971: 166-7) is still haunted by the "moral shambles" to which he unthinkingly contributed by leading his troops across the ancestral burial ground of a Malagasyman he had gotten to know; "the carrier-tracks had torn up the dry earth and scattered many of the bodies."

Could the Malagasy revolt against French colonial rule in 1947-48 have evoked memories of the blood of the Malagasy martyrs for the Malagasy who tried to reclaim their land just five years later? Hurst (1949: 46, 48, 72) suggests that Malagasy Christians refused to cooperate with the rebels and that still in May-August 1948, Christians were being persecuted by their neighbors for having refused to cooperate and for following a religion "for white folk and not for Malagasy," as well as by the French who suspected some Protestants of being rebels.^{xi} He says, "In this land ... as all the world knows, the blood of the martyrs was indeed the seed of the Church.... To this I could link the fact that some Christian workers, their number may yet be known, have chosen death rather than join in the butchery and folly of the rebels." Yet if "the rebellion has been used as an opportunity to work off opposition to the Christians," Hurst must also acknowledge that one of the main leaders of the rebellion was the pastor of an important church associated with the L.M.S. in Tananarive (ibid.: 42-43, 48, 72). While Malagasy in and outside of Protestant churches still debate whether Christianity supports the political and intellectual independence of Madagascar or its subordination, some evangelical groups, calling themselves as Tafika Masina ("Holy Armies"), have adopted the metaphor of war to describe their efforts to claim all of Madagascar for Christianity, which some equate with political reform (Ramambason 1995, Ramanandraibe 1987:15, Tehindrazanarivo 1999).

Ramanandraibe (ibid.: 75) may be unusual in singling out "the tree" as the national patrimony that a sound Malagasy government should protect.^{xli} Yet most reformers since the 1820s have been agreed in their concerns

^{xi} A Malagasy scholar who grew up in a largely Protestant community in Bezanoan country told Wright (1999) that French authorities in 1948 rounded up young men there because they were Protestant. The men included his uncle, a school teacher, who was never seen again, nor was his body returned.

^{xli} Le livre vert de l'espérance malgache of Ramanandraibe (1987), a former treasurer of the ecumenical Isan'ny Enim-bolanan'i Merina, is directed against Didier Ratsiraka's Boky mena, or Livre rouge. Among the several references of her title is this point: "Stalin said that for him the Revolution was electricity; for the new government of Madagascar, the safeguard of the national patrimony, it is the tree. Historically, that is how it will be judged" (ibid:75).

about the protection of Madagascar's natural resources, and more generally, land, especially about whether foreigners could own or lease land in Madagascar, and if not, how their use of land in Madagascar is to be recognized.^{xlii} The "land question," as it was called in the mid-nineteenth century, involved not only English and French travelers to Madagascar, but also Americans. Colonel W. W. Robertson, who served as Consul to Madagascar for the U.S. Department of State in 1875-1885, spent one and a half-times his annual salary to purchase the rights to use a vanilla plantation in eastern Madagascar for twenty years. Much of his work in Madagascar, especially his negotiations over the Americo-Malagasy Treaty of 1881, concerned land rights for foreigners (Lake 1993).

Some Malagasy see land rights as the most critical political-economic issue in Madagascar today. In Antananarivo in April 1995 to participate in a conference on "La Définition des Priorités de Conservation de la Diversité Biologique à Madagascar," sponsored by Conservation International, I met Malagasy in the university and business communities whom I had known for some twenty-five years.^{xliii} They found the disjunction between the focus on biodiversity at the conference and the social issues of everyday life in Madagascar to be virtually inexplicable. It was "a paradox," as one repeated, that such vast amounts of money were being spent on these matters precisely at a time when so many other current events demanded explanation.^{xliv} This talk merely distracted attention away from the "real reason" for the coincidence of these events — foreigners' appropriation of Malagasy land and resources, even their very bones.

^{xlii} The reviewer for Ellis's *History of Madagascar in Tait's Edinburgh Magazine* (Anon. 1839: 235) was already aware that no foreigner could own land, while leases were limited to ten years. See Shaw (1885) for a useful account of "the land question" at the time of the Franco-Malagasy war of 1883-85, when French claims to the "ancient rights of France in Madagascar" (ibid.: 4) were their alleged reasons for starting the war.

^{xliii} The concerns of one Merina couple illustrate the complexity of the relationship between Christianity and political reform in Madagascar. Their families have attended the same L.M.S. church in Antananarivo for generations. They decided to become deacons of the church in 1991 because of changes in the national government, which they feared could lead to corruption. In April 1995, they wondered whether "Malagasy are too Christian." They believe so strongly; they read the Bible; they are very devout; yet precisely their devotion contributes to the current political situation. "Do you know there is no word in the Malagasy Bible for 'right', as in 'You have the right'? There is only 'You are obliged'." They attributed this language to the L.M.S. missionaries who had translated the Bible from English into Malagasy, arguing that their translation subordinated the very minds of the Malagasy people, making them "fatalistic."

^{xliv} Independently, a biologist at the conference, having calculated the combined budgets for the Integrated Conservation-Development Programs in Madagascar since 1989-90 at 4.5 million dollars, was wondering why the proceedings had nothing to show for it.

The appropriations they discussed included long-standing, as well as recent problems: black market trades in endangered species, plants (including medicinal plants), precious stones, and human bones, stolen from graves to make prostheses and false teeth in Europe; major speculations in vanilla in the northeast, driving up land prices and inducing local farmers to pay others to do their farming so they could grow vanilla; major land sales to foreigners in eastern Madagascar, in which vazaha circumvented the law against foreigners' buying land by contracting mariages blancs with Malagasy women; the efforts of a well-known representative of the World Bank to use his official position to get the Malagasy government to change laws concerning land ownership, so he could buy land to start a ranch — a case that was still in the courts; the proliferation of free trade zones (zones franches) for foreign businesses, not only on the coasts, but in the highlands, where the only benefit for Malagasy were low-paid jobs; the use of such zones to grow khat for an international trade, perhaps also connected to the proliferation of villas in the northeast; family planning programs and an overall increase in the sale of alcohol, contributing to "racial genocide."

How could we integrate our political-ecological perspectives on environmental change in Madagascar? One possible answer to this question may be found by returning to where Ravenala madagascariensis grows on the east coast of Madagascar.

"Sketch of Route from Tamatave to Antananarivo"

Most travelers to Madagascar in the nineteenth century came from Mauritius to the east coast port of Tamatave, then south along the coast to Andovoranto, where they turned inland to climb up to Antananarivo in the highlands. In July 1862, when Radama II reopened relations with foreigners following the death of Ranavalona I in August 1861, Lieutenant S.P. Oliver of the Royal Artillery made a "Sketch of Route from Tamatave to Antananarivo," indicating the distances in miles and successive elevations from sea level in feet [FIGURE 7]. As Sibree (1896:2) later commented, this was always the main route into Madagascar. The only time he deviated from that path was when the French blockaded it during the Franco-Malagasy War of 1883-85.

By comparison to the sea journey from Mauritius to Tamatave, the difficulty of the land journey from Tamatave to Antananarivo was infamous. As Campbell explained to American readers:

The neglect [of the route] has been intentional on the part of the rulers of Madagascar... The Malagasy have justly considered that the difficulty of the route into the interior would be a formidable obstacle to an invasion by a European Power, and have deliberately allowed the path to remain as rugged as it is by nature.... It is even said that the route from Tamatave to the capital was altered during the reign of the late Queen Ranavalona, and diverted to a more difficult part of the country, in order that the few Europeans who

did penetrate to the capital might be impressed with an idea of the great difficulties to be overcome in reaching the center of Hova authority. This is very probably correct (1889: 22).^{xlv}

Radama's claim that he relied on Generals Hazo and Tazo — Forest and Fever — to protect him from foreign invasion was repeated again and again in British, French, and American accounts (Ellis 1858: 352). While Tazo dominated the marshes along the coast, Tazo and Hazo joined forces in the great primeval forest believed to encircle the whole island. By entering this forest, travelers crossed over into the interior of Madagascar. Oliver says of Beforona just inside their combined domain:

The place is notorious for fever; when Lambert and the celebrated Ida Pfeiffer were sent away from the capital to the coast by the old Queen, whom they had conspired to dethrone, their escort had orders to detain them for eighteen days in this place, in the hopes of their dying of fever. Ida Pfeiffer ultimately died of the effects of it, and Lambert suffers severely to this day (1865: 29; see also Ellis 1858: 346).

The "Limit of Travellers Palm or Ravenala" marks the boundary, as Oliver's map clearly shows. Up to the end of the Ravenala trees, English travelers compared the Malagasy countryside to English park land. Traveling along the coast from Trano Maro to the Hivondro River, Oliver (*ibid.*: 17) comments: "The path still continued as broad as an English highway, and covered with beautiful turf. The scenery altogether reminded me of a shrubbery or wilderness in some lovely park in England and we could almost have expected to see at the next turn a beautiful mansion, with lawns and gardens; instead of which, however, we only passed the squalid huts." For Sibree (1870: 54) too, "the combinations of wood and water [on the coast] present a series of pictures which constantly recalled to me some of the loveliest landscape that English river and lake scenery can present." Heading inland on the Iharoka [Iaroka] River, "the 'traveller's tree' became very plentiful, and soon gave quite a peculiar character to the landscape" (*ibid.*: 70). But once inside "the great forest ... the region of fever" (Ellis 1858: 349), the traveler is in a foreign world, like "no forest such as I had known ... none of the airy freedom of European woodlands, for there was a cathedral air about it ... the gigantic trees, engaged for centuries in a life-and-death struggle to find light and air at one another's expense" (Croft-Cooke 1953: 211-12).

Ravenala marks a border, or a transition zone, that is not simply ecological, but also political and economic, virtually a national border, critical to the definition of the island as a whole, and now shifting in response to international as well as local changes. Ellis (1858: 332) depicted the Traveler's Tree in the "richly wooded fertile

^{xlv}

Tehindrazanarivelo (1999) questions whether "the bad roads of today" might have the same intent.

country" of the uplands west of Ranomafana perhaps because he, like Commerson and Sonnerat, identified the tree so closely with his vision of Eden. Oliver (1865:26-7) shows how "the ravenale (*Urania speciosa*), bamboos, and the dark useful rofia palm, were the characteristic trees and filled up all the marshy and swampy bottoms between the downs, most of which were bare of vegetation" (**FIGURE 8**). Sibree (1880: frontispiece) shows how the Traveler's Tree thrives with the Rofia Palm in the higher, more open and arid areas as well (**FIGURE 9**).

Gradually naturalists seem to have come to the conclusion that Ravenala is not a forest plant at all, but rather one of the few plants that can thrive in the savoka, secondary scrub growth where forests have been cleared. Indeed, the Traveler's Palm proves to be not very palm-like after all. On the contrary, as Hannebique (1987: cover) shows, it has become a sign of a "degraded" environment, indeed a particular kind of savoka à Ravenala (François 1937: 15, plate V; Battistini and Richard-Vindard 1972: 23, 164; Koechlin et al. 1974: 93, 162, 407-8, 556; Dransfield and Beentje 1995: 6-7). According to a Malagasy development agent working on development projects with Betsimisaraka living near the forest, where Ravenala is "one of the most important resources for villagers," Ravenala seeds need fire to germinate; thus tavy farming contributes to its spread (Sodikoff 1999a).

In current conservation programs, Madagascar's nature reserves are taken to be the oldest parts of the island, surrounded by farmers portrayed as if they and their agricultural techniques were archaic holdovers from an earlier stage of life. These enclosed reserves create a temporal, as well as spatial "encasement," as Sodikoff (1999b) has argued, contributing to the image of Madagascar as a place out of time, like the conservatories of botanic gardens in the north, but also ironically like the Wardian cases which, since the 1840s, have facilitated the movement of tropical plants all over the world.^{xlvi} A more accurate social-geographical representation of long-term human-environmental change in Madagascar would not be restricted to these reserves, encapsulating land, animals, and plants in falsely ancient times separated from human political and economic life. Rather, we would do well to examine a long-traveled route, like the "route from Tamatave to Antananarivo," transformed from path to road to rail-line. The rail-line passes from Andasibe through Anivorano and Vohibinany (Brickaville), before turning down to the coast, but the road still follows the old route with few deviations.

^{xlvi} A Wardian case is a box with glass sides and a close-fitting glass top, in which plants can grow in earth, light and humid air. Named for its English inventor, N. B. Ward (1842), the case enables plants to travel for weeks unattended.

This is a route of long-time Malagasy commerce between the interior and the coast; a nearly route of collectors of Malagasy flora and fauna; the route of missionaries and martyrs; the route of persistent efforts of Europeans to take over Madagascar and Malagasy efforts to block them; one of the main routes for the spread of the Rebellion of 1947; and, for ecologists, the route through the "forest belt" allegedly circling, if not covering the island, a route against which the depletion of forests throughout Madagascar is now measured. Thus, such a study would encompass not only the fields of subsistence farmers, but also the écoles forestières, concessions des huiles industrielles, exploitations forestières, exploitations de graphite, dépôts de bois, dams, and other water-works; vanilla, coffee, cocoa, cloves, bananas, sugar-cane, cotton, and rice plantations; sugar-mills and distilleries, with which they have coexisted for at least two centuries in eastern Madagascar, thus providing us with common grounds for studying the intersection of political-ecological relations.

Conclusion

The common image of Madagascar as a tropical Eden, raised up by missionization or since fallen from grace, hardly differentiates this place from all the other places that Europeans and Americans explored and later colonized (Prest 1981, Grove 1995). Yet, as Kirsch (1997: 58, 61, 65) notes of the closely related search for the "lost tribes" of ancient Israel: "Though stories about lost tribes are strikingly similar in structure and content, radically different historical processes underlie their creation." The generic story obscures precisely the "differences in colonial histories as well as contemporary power relations" that have contributed to the isolation supposedly marking their lostness. The salience of the Traveler's Tree in marking Madagascar's place relative to Europe and North America confirms these points. Indeed, this tree could be said to stand as an arboreal memorial to a complex history of European-Malagasy geopolitical relations fully comparable to the mangos, baobabs, tamarinds, oaks and chestnuts with which Malagasy and Europeans have marked and commemorated their separate and intersecting domains.

In this paper, I have focused "human-centered" perceptions and explanations of environmental change, concluding with a suggestion for how we might explore "synergetic relations" that would give us a fuller understanding of historical-ecological processes in Madagascar (Whitehead 1998: 36-38). In so doing, I have tried to contribute to the growing number of studies showing that we need to see trees and people alike as social actors, in

keeping with their intimate interrelations (for example, Kaufmann 1998, Middleton 1999, Rajaonah 1990, Walker and Dorr 1998). I have examined how processes of visualization, through which people identify trees as social actors, provide clues to understanding views of life and death processes that may be generalized to other domains. We would do well to explore further the "family resemblances" among theories of life processes that enable people through trees to communicate about such matters as reproduction and conservation.

Acknowledgments

This work draws in part on ethnographic research in Madagascar in 1989 and 1995, funded by the Wenner-Gren Foundation for Anthropological Research. Many thanks to Jean-Aimé Rakotoarisoa and Manassé Esoavelomandroso for their collegial support. I am grateful to James Trenchard Hardyman (1918-1995) for meeting with me in London in June 1995 to talk about Madagascar and his work there. Thanks to the staff of Archives and Manuscripts at the School of Oriental and African Studies, especially Simon Wilson, for help in June 1995 and October-November 1998; and to Angela Raljić of the Royal Ontario Museum for help in May-November 1999. I am indebted to Laurence Dorr for sending me a copy of de Cordemoy (1868), and for introducing me to the scholarly resources at the Hunt Institute and the New York Botanical Garden. My thanks to Jeff Kaufmann, Pier Larson, Lesley Sharp, and Andrew Walsh for their comments on a presentation of an early draft in November 1998 and to Jeff Kaufmann for getting us together then. Special thanks to Gerry Berg, David Meyers, Simon Peers, and Genesé Sodikoff for their insights on particular points; to Karl Eggert, Jeff Kaufmann, John Middleton, Tehindrazanarivelo Emmanuel, and Henry Wright for their careful readings of a later draft; and to Alan Harnik for reading many subsequent drafts.

Endnotes

REFERENCES

- Adanson, Michel
1763 Familles des Plantes. 2 vols. Paris: Vincent.
- Almasy, Paul
1942 Madagascar: Mystery Island. The National Geographic Magazine 81: 797-830.
- Anonymous
1839 Ellis's History of Madagascar. Tait's Edinburgh Magazine n.s. 6 [April]: 221-37.
1859a Art. IV—Three Visits to Madagascar ... By the Rev. William Ellis.... British Quarterly 29: 397-417.
1859b Literary Notices. Harper's New Monthly Magazine 18: 691-92.
1863 Sacred Trees and Flowers [Art. VII]. Quarterly Review 114: 109-29. London: J. Murray, New York: Leonard Scott and Co.
1870a Famous Trees. Appleton's Journal 4(88): 674-75.
1870b Art. VIII. The British Quarterly Review 51 [April]: 474-85.
1871 Varieties.—Museum. Appleton's Journal 5(95): 61-66.
1872 Obituary [W.E. Ellis]. The Gardener's Chronicle and Agricultural Gazette, June 15, p. 806.
- Armstrong, P.
1983 The Disjunct Distribution of the Genus *Adansonia*. L. The National Geographical Journal of India 29(3/4): 142-63.
- Aubanel, Napoléon
n.d. [1895] La France civilisatrice. Madagascar. Paris: Gaston Decombjean.
- Ayache, Simon
1976 Raombana l'historien (1809-1855): Introduction à l'édition critique de son oeuvre. Fianarantsoa: Ambozontany.
- Bachelard, Gaston
1994 [1958] The Poetics of Space. Boston: Beacon.
- Battistini, R. and G. Richard-Vindard
1972 Biogeography and Ecology of Madagascar. The Hague: Dr. W. Junk B.V.
- Benoit, Joseph
1997 Le peuple des pirogues et le Diocèse de Farafangana. Paris: L'Harmattan.
- Berg, Gerald M.
1995 Writing Ideology: Ranavalona, the Ancestral Bureaucrat. History in Africa 22: 73-92.
1999 Personal communication, October 30.
- Bloch, Maurice E.F.
1998 The Resurrection of the House amongst the Zafimaniry of Madagascar. In How We Think They Think, pp. 85-99. Boulder, CO: Westview.
- Boudry, Robert

- 1936 Chant malgache. *Revue de Madagascar* 14: 23-34.
- Brown, J. Newton
1837 *Encyclopedia of Religious Knowledge*. Brattleboro, VT: Brattleboro Typographic Company.
- Bull, Marjorie and Joseph Denfield
1970 *Secure the Shadow: The Story of Cape Photography from Its Beginnings to the End of 1870*. Cape Town: Terence McNally.
- Campbell, Belle McPherson
1889 *Madagascar. Missionary Annals. (A Series.)* Chicago: Women's Presbyterian Board of Missions of the Northwest.
- Chirgwin, A.M.
1933 Pioneering on the Malagasy Uplands. *The Missionary Review of the world* 56: 294-97.
- Cikovsky, Nicolai Jr.
1979 'The Ravages of the Axe': The Meaning of the Tree Stump in Nineteenth-Century American Art. *The Art Bulletin* 61: 611-26.
- Colby, Reginald
1953 Postscript. In *The Blood-Red Island*, Rupert Croft-Cooke, London, Staples, pp. 235-48.
- Conover, Helen F., under the direction of Florence S. Hellman
1942 *Madagascar: A Selected List of References*. Washington, D.C.: The Library of Congress, Division of Bibliography.
- Coppalle, André
1909, 1910 *Voyage à la capitale du roi Radama, 1825-1826 (Journal de A. Coppalle)*. Christian G. Mantaux, ed. *Bulletin de l'Académie malgache* 7, 8. (Reprinted: Antananarive: Association malgache d'archéologie: Documents anciens sur Madagascar, I.)
- de Coppet, Marcel
1947 *Madagascar et Réunion*. 2 vols. Paris: Encyclopédie de l'Empire Français.
- Copland, Samuel
1822 *A History of the Island of Madagascar*. London: R. Clay for Burton and Smith.
- Cosgrove, Dennis and Stephen Daniels, eds.
1988 *The Iconography of Landscape: Essays on the Symbolic Representation, Design and Use of Past Environments*. Cambridge: Cambridge University Press.
- Cotte, Paul V.
1946 *Regardons vivre une tribu malgache: Les Betsimisaraka*. Paris: La Nouvelle Édition.
- Croft-Cooke, Rupert
1953 *The Blood-Red Island*. London and New York: Staples Press.
- Cousins, William E.
1871 *A Brief Review of the London Missionary Society Mission in Madagascar from 1861 to 1870*. Antananarivo: The London Missionary Society's Press. Brochure.
- Daniels, Stephen
1988 *The Political Iconography of Woodland in Later Georgian England*. In *The Iconography of Landscape*. Dennis Cosgrove and Stephen Daniels, eds. Pp. 43-82. Cambridge University Press.
- Davies, Douglas
1988 *The Evocative Symbolism of Trees*. In *The Iconography of Landscape*. Dennis Cosgrove and Stephen Daniels, eds. Pp. 32-42. Cambridge University Press.
- Decary, Raymond
1935 *Tananarive-Broken-Hill en avion*. *Revue de Madagascar* 12: 27-84.
1951 *Moeurs et coutumes des malgaches*. Paris: Payot.
- Dorosh, Paul and René Bernier
1994 *Staggered Reforms and Limited Success: Structural Adjustment in Madagascar*. In *Adjusting to Policy Failure in African Economies*. David E. Sahn, ed. Pp. 332-65. Ithaca, NY: Cornell University Press.
- Dorr, Laurence J.
1987 Rev. Richard Baron's *Compendium des Plantes Malgaches*. *Taxon* 36: 39-46.
1988 *A Nineteenth Century Botanical Text-book in the Malagasy Language*. *Archives of Natural History* 15: 171-183.

- 1990 Proposal to Conserve the Spelling 1320 Ravenala (Strelitziaceae). *Taxon* 39: 131-32.
- 1997 Plant Collectors in Madagascar and the Comoro Islands. Kew (Surrey, UK): Royal Botanic Gardens.
- Dorr, Laurence J., Lisa C. Barnett and Armand Rakotozafy
 1989 Madagascar. In *Floristic Inventory of Tropical Countries*. D.G. Campbell and H.D. Hammond, eds. Pp. 236-50. Bronx, NY: New York Botanical Garden.
- Dransfield, John and Henk Jaap Beentje
 1995 The Palms of Madagascar. Kew (Surrey, UK): Royal Botanic Gardens and the International Palm Society.
- Ellis, John Eimeo
 1873 Life of William Ellis, Missionary to the South Seas and to Madagascar. London: John Murray.
- Ellis, William, comp.
 1838 History of Madagascar. London: Fisher.
 1858 Three Visits to Madagascar, during the years 1853-1854-1856. London: John Murray. [New York, Harper Bros., 1859]
 1867 Madagascar Revisited. London: John Murray.
 1870 Martyr Church: A Narrative of the Introduction, Progress, and Triumph of Christianity in Madagascar. London: Snow.
 1876 Faithful unto Death: The Story of the Founding and Preservation of the Martyr Church of Madagascar. London: Snow.
- Feeley-Harnik, Gillian
 1980 The Sakalava House. *Anthropos* 75:559-85.
 1991 A Green Estate: Restoring Independence in Madagascar. Washington, D.C.: Smithsonian Institution Press.
- Fernandez, James W.
 1998 Trees of Knowledge of Self and Other in Culture: On Models for the Moral Imagination. In *The Social Life of Trees*. Laura Rival, ed. Pp. 81-110. Oxford: Berg.
- de Flacourt, Étienne
 1995 [1661] Histoire de la Grande Île de Madagascar. Édition annotée et présentée par Claude Allibert. Paris: INALCO/Karthala. [Paris: Gervais Clouzier]
- Fletcher, Alison
 n.d. [1996] 'God Shall Wipe All Tears from Their Eyes': Refugees from Madagascar in Britain, 1839-1842. Paper in General Seminar, Institute for Global Studies in Culture, Power, and History, Johns Hopkins University, Baltimore, MD, April 23, 1996.
- Foxe, John
 1837-41 [1563] The Acts and Monuments of John Fox. 8 v. London: R.B. Seeley and W. Burnside.
- Fuller, Thomas
 1837 [1655] The Church History of Britain. 3v. London: T. Tegg and Son.
- François, Edmond
 1937 Plantes de Madagascar. *Mémoires de l'Académie Malgache* 24: 1-75.
- Freeman, Joseph J. and David Johns
 1840 A Narrative of the Persecution of the Christians in Madagascar; with details of the escape of the six Christian refugees now in England. London: Snow.
- Gandar Dower, Kenneth Cecil
 1943a The King's African Rifles in Madagascar. Nairobi, Kenya: East African Command.
 1943b Into Madagascar. London/New York: Penguin.
- Gandy, Alain
 1988 Le sang des colons. Paris: Presses de la Cité.
- Goodhugh, William
 1845 The Pictorial Dictionary of the Holy Bible. 2 v. London: H.G. Bohn.
- Goodman, Steven M. and Bruce D. Patterson, eds.
 1997 Natural Change and Human Impact in Madagascar. Washington, D.C.: Smithsonian Institution Press.
- Gosse, Philip Henry
 1852 Sacred Streams; or the Ancient and Modern History of the Rivers of the Bible. New York: Stringer and Townsend.

- Gow, Bonnar A.
1979 *Madagascar and the Protestant Impact: The Work of the British Missions, 1818-95*. New York: Africana Publishing Co.
- Grove, Richard
1995 *Green Imperialism: Colonial Expansion, Tropical Island Edens, and the Origins of Environmentalism, 1600-1860*. Cambridge: Cambridge University Press.
- de Gubernatis, Angelo
1878-1882 *La mythologie des plantes, ou légendes du règne végétal*. 2 vols. Paris: C.Reinwald.
- Haeringer, Philippe
1980 *L'Arbre dans la ville. Lecture sociale en quatre tableaux du couvert végétal dans la ville africaine*. In *L'arbre en Afrique tropicale: la fonction et le signe*. Paul Plissier et al., eds. Pp. 289-308. Paris: Cahiers O.R.S.T.O.M., Srie Sciences Humaines, XVII, 3/4.
- Halverson, Alton C.O.
1973 *Madagascar: Footprint at the End of the World*. Minneapolis, MN: Augsburg.
- Hannebique, Jacques [texte et photographies], avec la collaboration de Robert Boudry, Flavien Ranaivo, Jean-Aimé Rakotoarisoa et Eugène Toulet
1987 *Madagascar: Mon-île-au-bout-du-monde*. Laval, France: Éditions Siloë.
- Hardyman, James Trenchard
1938 *Madagascar and the Man-Eating Tree*. Notes and Queries, April 9, p. 264.
1950 *Madagascar on the Move*. London: The Livingstone Press.
- Hübsch, Bruno, ed.
1993 *Madagascar et le Christianisme*. Paris: Agence de coopération culturelle et technique; Antananarivo: Éditions Ambozontany; Paris: Karthala.
- Humbert, Henri
1927 *La destruction d'une flore insulaire par le feu. Principaux aspects de la végétation à Madagascar*. Mémoires de l'Académie malgache 5: 1-78.
- Hurst, Leonard
1949 *There Blossoms Red*. London: Livingstone.
- Hutchinson, J.
1940 *The Flora of Madagascar*. Nature 145(3673): 448-51.
- Jacquin, Nicolai Josephi
1797 *Plantarum rariorum horti caesarei Schoenbrunnensis, descriptiones et icones*. Vienna: C.F. Wappler.
- de Jussieu, Antonii Laurentii
1789 *Genera plantarum secundum ordines naturales disposita, juxta methodum in Horto regio Parisiensi*. Paris: Viduam Herissant.
- Kammen, Michael G.
1992 *The Old House and Elm Trees*. In *Meadows of Memory: Images of Time and Tradition in American Art and Culture*. Pp. 133-81. Austin: University of Texas Press.
- Kaufmann, Jeffrey C.
1998 *The Cactus Was Our Kin: Pastoralism in the Spiny Desert of Southern Madagascar*. In *Changing Nomads in a Changing World*. J. Ginat and A.M. Khazanov, eds. Pp. 124-42. Brighton, Sussex Academic Press.
- Keller, C.
1901 *Madagascar, Mauritius and the Other East-African Islands*. London: Swan Sonnenschein.
- Kirsch, Stuart
1997 *Lost Tribes: Indigenous People and the Social Imaginary*. Anthropological Quarterly 70:58-67.
- Koechlin, Jean, Jean-Louis Guillaumet, and Philippe Morat
1974 *Flore et végétation de Madagascar*. Vaduz: J. Cramer.
- Konstant, Bill
1993 *Lemurs of Madagascar: An Action Plan for Their Conservation (1993-1999)*. Lemur News 1: 3.
- Lake, Alison Marie
1993 *American and European Commercial Interests in Madagascar: One American's View*. Ms.
- de Lamarck, Jean Baptiste
1791-1823 *Tableau encyclopédique et méthodique des trois regnes de la nature*. Botanique. 7 vols (22e partie: An VIII de la République [1800]). Paris: Panckoucke.

- 1783-1808 Encyclopédie méthodique, ou par ordre de matières. Botanique. 8 vols (vol. 6:An XII de la République [1804]). Paris: Panckoucke.
- Lhande, Pierre
1932 Notre épopée missionnaire, Madagascar, 1832-1932. Paris: Plon.
- Lourenço, Wilson R., ed.
1996 Biogéographie de Madagascar. Paris: O.R.S.T.O.M.
- MacVicar, Angus
1971 Salt in my Porridge: Confessions of a Minister's Son. London: Jarrolds.
- McLeod, Lyons
1865 Madagascar and Its People. London: Longman, Green, Longman, Roberts & Green.
- Matthews, Thomas Trotter
1904 Thirty Years in Madagascar. 2nd ed. London: The Religious Tract Society.
- Meyers, David
1995 Personal communication, April 14.
- Middleton, Karen
1999 Who Killed 'Malagasy Cactus'? Science, Environment and Colonialism in Southern Madagascar (1924-1930). *Journal of Southern African Studies* 25: 215-48.
- Millot, Jacques
1972 In Conclusion. In *Biogeography and Ecology in Madagascar*. R. Battistini and G. Richard-Vindard, eds. Pp. 741-54. The Hague: Dr. W. Junk B.V.
- Mondain, Gustave
1920 Un siècle de mission protestante à Madagascar. Paris: Société des Missions Évangéliques.
- Monnier, Jeannine, Anne Lavondès, Jean-Claude Jolinon, and Pierre Élouard
1993 Philibert Commerson, Le Découvreur du Bougainvillier. Chatillon-sur-Chalaronne: Association Saint-Guignefort.
- Morrell, Virginia, with photographs by Frans Lanting
1999 Restoring Madagascar. *National Geographic*, February, Pp. 60-71.
- Novak, Barbara
1995 Nature and Culture: American Landscape and Painting, 1825-1875. Rev. ed. New York: Oxford University Press.
- Oliver, Samuel Pasfield
1865 Madagascar and the Malagasy, with Sketches in the Provinces of Tamatave, Betanimena and Ankova in 1862. London: Day and Son.
- Osborn, Chase Salmon
1924 Madagascar: Land of the Man-Eating Tree. New York: Republic.
- Ozouf, Mona
1988 [1976] Festivals and the French Revolution. Alan Sheridan, trans. Cambridge, MA: Harvard University Press.
- Peers, Simon
1995 The Working of Miracles. William Ellis: Photography in Madagascar, 1853-1865. London: The British Council.
- Platt, Elizabeth
1937 Madagascar: Great Isle, Red Isle. A Bibliographical Survey. *Geographical Review* 27:301-308.
- Poisson, Henri and Raymond Decary
1962 Trois légendes botaniques malgaches. *Revue Générale des Sciences* 64: 135-60.
- Powell, E. Alexander
1924 Through the Land of the Malagasy. *The Century Magazine* 109: 237-47.
- Prest, John
1981 The Botanic Garden and the Re-Creation of Paradise. New Haven, CT: Yale University Press.
- Price, Charles T.
1989 [1875] Missionary to the Malagasy: The Madagascar Diary of the Rev. Charles T. Price, 1875-1877. Arnold H. Price, ed. New York: Peter Lang.
- Rabary, Pastor
1957 [1910] Ny Maritiora Malagasy. Tantaran'ny fanenjehana mangidy niaretan'ny kristiana teto Madagasikara tamin'ny "tany maizina." 7th ed. Antananarivo: Imprimerie

- Luthérienne.
 1961 [1929] Ny Daty Malaza, na ny Dian' i Jesosy Kristy Teto Madagasikara. Book 1. 2cd ed. Tananarive: Imprimerie Iarivo.
- Raison-Jourde, Françoise
 1991 Bible et pouvoir à Madagascar au XIXe siècle. Invention d'une identité chrétienne et construction de l'État. Paris: Karthala.
- Rajaonah, Voahangy
 1990 The Sacred Trees of Madagascar. Unesco Courier 43: 42-43.
- Rajemisa-Raolison, Régis
 1985 Rakibolana Malagasy. Fianarantsoa: Ambozontany.
- Ramambason, Laurent Willian
 1995 The Merina/Sakalava Encounter in the Region of Analalava: 'Self-Sacrifice and Betrayal in a Non-Western Enterprise'. In Cultures of Madagascar: Ebb and Flow of Influences / Civilisations de Madagascar: Flux et Reflux des Influences. Sandra Evers and Marc Spindler, eds. Pp. 207-19. Leiden, International Institute for Asian Studies.
- Ramanandraibe, Lucile Rasoamanalina
 1987 Le livre vert de l'espérance malgache. Paris: L'Harmattan.
- Richardson, John
 1885 A New Malagasy-English Dictionary. Antananarivo: London Missionary Society.
- Rival, Laura, ed.
 1998 The Social Life of Trees: Anthropological Perspectives on Tree Symbolism. Oxford: Berg.
- Schnack, Friedrich
 1935 Auf Ferner Insel: Glückliche Zeit in Madagascar. Berlin: Deitrich Reimer/Andrews and Steiner.
- Sears, Robert
 1845 Pictorial Illustrations of the Holy Bible, and Views in the Holy Land. New York: Sears & Walker.
- Seeland, Klaus, ed.
 1997. Nature Is Culture: Indigenous Knowledge and Socio-cultural Aspects of Trees and Forests in Non-European Cultures. London: Intermediate Technology Publications.
- Shaw, George A.
 1885 Madagascar and France, with some account of the island, its people, its resources and development. London: The Religious Tract Society.
- Sibree, James
 1870 Madagascar and Its People. London: The Religious Tract Society.
 1877 Notes on the Traveller's-Tree. The Antananarivo Annual 3: 330-32.
 1880 The Great African island. London: Trübner & Co.
 1896 Madagascar Before the Conquest: the Island, the Country, and the People. London: T. Fisher Unwin.
 1911 Ten Years' Review of Mission Work in Madagascar, 1901-1910, with notices of the preceding decade. Antananarivo: The London Missionary Society's Press.
 1924 Fifty Years in Madagascar. London: Allen and Unwin.
- Sodikoff, Genese
 1999a Personal communication, April 18.
 1999b The Case of the Lace-Leaf: Nineteenth-Century Natural History and the Containment of Malagasy Species. Michigan Discussions in Anthropology. In prep.
- Sonnerat, Pierre
 1782 Voyage aux Indes orientales et à la Chine. 2 vols. Chez l'auteur, Paris.
- Swingle, Charles
 1929 Across Madagascar by Boat, Auto, Railroad, and Filanzana. National Geographic Magazine 56: 178-211.
- Tehindrazanarivelo Emmanuel Djacoba
 1999 Personal communication, July 24, December 15.
- Tinterow, Gary and Henri Loyrette
 1994 Origins of Impressionism. New York: Metropolitan Museum of Art, H.N. Abrams.

Tournier, Michel

1997 The Grey Matter of Madagascar. In *Madagascar: The Photographs of Gian Paolo Barbieri*, n.p. [vii-ix]. Köln: Taschen.

Townsend, William J.

n.d. [1892] Madagascar: Its Missionaries and Martyrs. London: S. W. Partridge.

Tucker, Michael

1994 A Proposed Debt-for-Nature Swap in Madagascar and the Larger Problem of LDC Debt. *International Environmental Affairs* 6: 59-58.

Walker, Wendy and Laurence J. Dorr

1998 A Note on Indigenous Uses of *Dypsis decaryi* in Southern Madagascar. *Principes* 42:136-39.

Wallace, Alfred Russel

1876 The Geographical Distribution of Animals. 2 vols. New York: Harper and Brothers.

Whitehead, Neil

1998 Ecological History and Historical Ecology: Diachronic Modeling versus Historical Explanation. In *Advances in Historical Ecology*. William Balée, ed. Pp. 30-41. New York: Columbia University Press.

Wood, James G.

1868, 1870 The Natural History of Man. Vol. 1: Africa. Vol. 2: Australia, New Zealand, Polynesia, America, Asia, and Ancient Europe. London, New York: George Routledge & Sons.

Wright, Henry

1999 Personal communication, May 25, November 16.