



# **SACRED LEAVES OF CANDOMBLÉ**

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**AFRICAN MAGIC, MEDICINE,  
AND RELIGION IN BRAZIL**

**ROBERT A. VOEKS**

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## NOTE ON ORTHOGRAPHY

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The Candomblé lexicon is derived from the Portuguese, Yoruba, Ewe, Ijesha, Kimbundu, and, to a lesser extent, Tupi languages. For spelling and diacritics of terms specifically related to Candomblé, I follow Olga Cacciatore's *Dicionário de cultos Afro-Brasileiros* (1977). Note that she employs a Portuguese orthography of African lexemes. As a supplemental source for African terms not covered in her dictionary, I rely on Ruy Póvoas's *A Linguagem do Candomblé* (1989). Spelling of Portuguese vernacular plant names follows for the most part L. A. Silva, G. Lisboa, and T. Santos, *Nomenclatura Vulgar e Científica de Plantas Encontradas na Região Cacaueira da Bahia* (1982). General Portuguese words follow A. B. de H. Ferreira's *Pequeno Dicionário Brasileiro da Língua Portuguesa*, while Tupi orthography conforms to T. Sampaio's *O Tupi na Geografia Nacional* (1955).

For clarity, the origins of terms—Portuguese, African, or Tupi—are distinguished by type style throughout the text. Portuguese terms are underlined; African terms, regardless of the specific linguistic group, are **boldfaced**; and Tupi terms are ***italicized and boldfaced***. Botanical binomials are in *italics*. Word origins follow Megenney's *A Bahian Landscape* (1978), Mendonça's *A Influência Africana no Português do Brasil* (1935), and various other sources.

## PREFACE

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The once politically innocent field of nature-society relations finds itself increasingly caught in a vortex of competing intellectual and political agendas. Ethnobotany, the study of plants and people, is no exception. This change is due at least in part to the prevailing view that the earth is in the midst of a biological and cognitive cataclysm of unprecedented proportions. As the last native forests and fields are bulldozed or burned, the potential contribution of native plants to the development of new foods, fuels, fibers, and medicines is forever eliminated. As the last traditional societies are seduced by the Western worldview, the accumulated plant knowledge of unknown millennia is forever forgotten. Nature-society discourse is also caught in the emerging consensus—too long in coming—that the strategies and ultimate objectives of environmental conservation in the developing world are inexorably tied to cultural survival. According to this view, nature conservation efforts will be successful in the long term as a result of, not in spite of, local participation and guidance. Such grassroots-directed efforts challenge the standard “top-down” imposition of temperate-zone models of conservation, such as the creation of parks and reserves that treat locals as conservation liabilities rather than assets. At least in the tropical realm, understanding the time-tested linkage between plants and people constitutes the linchpin upon which the long-term success of these efforts turns.

*Sacred Leaves of Candomblé* is a study of Candomblé ethnobotany—the source, diffusion, use, classification, and meaning of Afro-Brazilian sacred leaves. This work traces its origin to a seemingly insignificant field observation. While collecting data in a second-growth forest in Bahia, Brazil, I noticed a patch of an unfamiliar herb along a path. I asked my friend, a local botanist, if he knew the name of the plant. He glanced at it, told me the name, but suggested by his tone that it wasn't a terribly interesting species. "It's not a native," he noted, but rather "just a weed from Africa." Most importantly, he went on to say that it was used to do **macumba**, or African black magic, by followers of Candomblé, an Afro-Brazilian religion in the region. I filed this nugget away for several years, convinced that this innocuous little weed someday would have a story to tell.

Originally expecting to document the origin and use of a few African plants in Brazil, I discovered in short order that the story of the Candomblé flora not only was rich and complex, but was in many respects a metaphor for the African American diaspora. Neither can be comprehended without understanding the subtle interplay between history, geography, culture, and political economy. Neither has been examined to the extent that its complexity and continuity would warrant. And neither can be interpreted as an orthodox expression of African traditions and beliefs or an anachronistic residue of neo-European domination.

While much of this book is descriptive in nature, at least three themes emerge that are at variance with prevailing streams of thought in the biological and human sciences. First, this book is not about the highly touted medicinal potential of pristine tropical rainforests. Rather, it underscores the intrinsic medicinal worth of *peopled* tropical landscapes, of *disturbed* forests and fields and the healing flora they harbor. Like the territories from which African forced immigrants were uprooted, the world in which they arrived had witnessed centuries of exploitation—some destructive, some not. Their ethnobotany was never born exclusively of West Africa's primary forests, nor was it to be so in Brazil. Rather, their plant knowledge was based on the fruits of human-derived landscape change, an ethnobotany adapted to and modified by fire, machetes, cattle hooves, and monoculture. The sacred leaves of Candomblé are, with few exceptions, sacred shrubs, sacred weeds, and sacred cultivars. Depending on your perspective, this feature either undermines any botanical interest in the Afro-Brazilian pharmacopoeia or, on the contrary, suggests that a significant portion of the "tropical pharmaceutical factory" should be sought in disturbed as opposed to primary forests.

Second, this book is not about victims of the African slave trade, men and



women forever hobbled by the chains of historical oppression. It is about victors, empowered African slaves and their descendants who steadfastly refused to succumb to European cultural dominance. In no case are their successes more visible than in the area of religion and healing. Faced with seemingly insurmountable obstacles—economic, political, and geographical—New World Africans somehow managed to sow and nurture the seeds of their traditional beliefs in an alien landscape. The eventual outcomes of these efforts vary from region to region. Nevertheless, African-derived systems of religion, medicine, and magic exhibit a remarkable degree of consistency and continuity, and their practitioners maintain a striking sense of self-esteem and pride.

Third, this book is not about African religious orthodoxy, nor does it in any way support the notion that syncretic Afro-Brazilian belief systems are somehow less pure than those of their Yoruba forebears. Rather, it is about the inevitable osmosis of ideas and innovations between cultures in intimate and extended contact. In Brazil, Africans and their descendants were able to forge a successful New World belief system exactly because they were willing to absorb, eagerly and without apology, relevant spiritual and folk medicinal practices from their European captors and their Amerindian coworkers. Given the limitations of geography and the harsh reality of slave existence, rigid adherence to immutable beliefs and practices was neither feasible nor advantageous. Most importantly, African traditions and beliefs were retained as oral knowledge—compendia of hero legends and healing recipes passed from person to person, from generation to generation. Perhaps ironically, it was the inherent flexibility and fallibility of oral transmission that allowed Africans and their descendants to accommodate what was new and alien, to bend with the winds of social domination, but not break. Rather than a weakness, this malleability proved to be a potent defense against spiritual obliteration. The results, both in Africa and the Americas, were bodies of wisdom perceived by adherents to be religiously conservative, but at the same time supremely adaptable to new cultural and physical environments.

Field research for this project was carried during June–August of 1988, July 1990–January 1991, July–August 1991, and January 1992. I worked in and around the cities of Salvador, Ilhéus, and Itabuna, Bahia. My primary methods included extended interviews and participant observation, as well as field excursions to spiritual gardens, vacant lots, secondary habitats, and primary rainforest. I witnessed dozens of ceremonies and healing rituals and was spiritually cleansed myself on several occasions. Acceptance into Candomblé circles, which is generally closed to outsiders, was greatly facilitated by the friendships



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# 1 INTRODUCTION

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The conquest and colonization of Brazil (and of most of the rest of the Americas, for that matter) found inspiration and justification in Christian religious doctrine. The New World provided hoards of pagans to be proselytized, vast new territories to be brought under the domain of the Christian cross, and a golden opportunity to cleanse the medieval church of long-entrenched decadence and corruption. It is true, of course, that this ecclesiastical agenda was decisively undermined by economic and political interests, and that conversion of the native population translated in short order to ethnic genocide of continental proportions. But however steep the price in lives and cultures, these spiritual objectives were ultimately realized on a hitherto unprecedented scale: Iberian Catholicism prospered throughout tropical Middle and South America, while Protestantism came to predominate in temperate North America.

The principal exception to New World Christian hegemony, to total spiritual monopoly by one or another of the monotheistic religions of salvation, occurs not among the descendants of the conquering Europeans, nor among the scattered remnants of the indigenous population, but rather among the least willing of the numerous waves of Old World immigrants to arrive in the Americas—African slaves and their descendants. In spite of the horrific conditions of the Middle Passage, the brutal and dehumanizing influence of plantation existence, and the imposition of an alien and oppressive social structure, Afri-



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edly products of place. In order to continue practicing their vocation in the New World, African priests and their descendants were forced to recreate their healing pharmacopoeias in an alien landscape. By one means or another, they were obviously successful. Notwithstanding the generally low esteem afforded their healing capabilities by outsiders, African Americans managed to incorporate a vast list of plant species into their healing ceremonies and rituals.<sup>5</sup>

It is this process, the means and ends of an ethnobotanical reconstruction that was centuries in the making, the recreation of the Yoruba healing system within the limits imposed by an alien flora and a restrictive European civilization, that is the principal topic of this book. It is a lesson in the dynamic biogeography of culture. I begin near the beginning, before Africans were forced across the sea, when the continents and floristic assemblages of Africa and South America were beginning their separate voyages.



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riods of extreme spatial constriction. The result, predictably, was massive biological extinction.

South America suffered environmental changes that were similar, although apparently less severe than Africa's, and the biological outcome may have been quite different. Various lines of evidence suggest that South America experienced climatic changes during the ice ages, although the environmental evidence has never been as strong as for Africa. Jürgen Haffer, noting the mounting evidence that South America experienced a series of arid cycles during the Pleistocene, has reasoned that regions that are especially wet today would have constituted islands of Pleistocene moisture. Haffer boldly proposes that, unlike the case in Africa, where biodiversity was exterminated by climatic change, South America's climatic fluctuations in fact stimulated Amazonia's species diversity. Surrounded by a sea of savanna and dry forest, island-like Amazonian refuges provided the geographical isolation necessary for taxonomic differentiation.<sup>8</sup> From this point of view, the ice ages in South America were biologically creative rather than destructive.<sup>9</sup>

Following their protracted separation, Africa and South America traveled in different circles, making geological associations that contributed significantly to the later faunal and floral make-up of each. Africa came to be attached to Eurasia, and was thus both a recipient of and a contributor to the great Old World biotic revolutions. Angiosperms took charge, placental mammals appeared, and then, some three million years ago, hairy bipedal hominids showed up. All were major movers in shaping Africa's bioscape, and all would not arrive until much later in South America's prehistory. For its part, South America, as it drifted off toward the west, retained a sporadic relationship with a preglacial Antarctica. This contact allowed for an indirect migratory connection between the New World and such distant lands as Australia and New Zealand, with which South America still shares biotic affinity. Within the last five million years, the Americas, North and South, finally linked up via the Isthmus of Panama, creating a land bridge between these long separated landmasses. The resultant Great American Interchange—perhaps more appropriately termed the First North American Invasion of the South—led to massive marsupial extinction and, ultimately, replacement by their newly arrived placental cousins. Humans, who would go on to modify so much of the Old World's biological landscape prior to the Age of Discovery, arrived in the New World quite late, probably no more than thirty to forty thousand years ago. Clearly, the recipe for both Africa's and South America's biotic assemblages was inventive rather than deterministic. Their biogeographical patterns were the results, in large part, of a pinch of this and a measure of that.<sup>10</sup>



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ruary, seldom exceed 30°C. The locals speak with evident discomfort of the chilly Bahian winters, but temperatures in fact seldom drop below 20°C. Even the daily rainfall fails to interfere with human actions, falling with greater frequency after the sun has set.<sup>19</sup>

For a region extending from 12 to 18 degrees south of the equator, coastal Bahia's annual rainfall pattern is remarkably aseasonal. From Valença south to beyond Porto Seguro, the mean annual precipitation of 1600 to 2000 mm falls with reasonable regularity from one month to the next. February usually registers the highest monthly rainfall, and August the least.<sup>20</sup> Summer moisture is derived from water vapor traveling from Amazonia toward Brazil's coastal regions, drawn by the southerly descent of South America's low pressure zone. Reaching as far north and east as Salvador, this moisture is the source of consistent convective rainfall that falls throughout much of the summer. During the winter, the line of tropical convergence migrates to the north, and the coast of Bahia comes under the influence of cold fronts emanating from southern South America. Cold only by equatorial standards, these winter fronts are associated with days upon days of drizzly rainfall activity.<sup>21</sup>

Coastal Bahia stands as an island of tropical moist climate, hemmed in to the north, east, and south by increasingly arid and seasonal conditions. Toward the north, moisture deficits occur as summer rainfall fails to match evaporation and transpiration. Summer drought is the rule. Moving toward the west, away from the marine influence and the coastal cold fronts, winter drought becomes more common. Even further toward the interior, the climate experiences year-round aridity. Below Porto Seguro, high pressure reaches landward from the South Atlantic to block the effects of incoming fronts, resulting in considerably diminished rainfall figures, particularly during Bahia's winter.<sup>22</sup>

### *Vegetation and Soils*

Responsive to the moist tropical climate, Bahia's thin coastal strip, from the table mountains to the sea, is mantled with a verdant layer of evergreen rainforest (Fig. 2.3). Part of a north-south belt of forest stretching from Rio Grande do Norte to Rio Grande do Sul, the Atlantic coastal forests once covered upward of 1 million square kilometers. These tropical forests are now reduced to tiny remnants, many of which occur in southern Bahia. With less than 1 percent of its original forest intact, the Atlantic coastal biome represents one of the most endangered tropical rainforests in the world (Fig. 2.4).<sup>23</sup>

Homogeneously green to the undiscerning eye, Bahia's forested landscape is in fact a mosaic of structurally and floristically distinct vegetation types. Where



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vegetation, as are 80 percent of the primates and nearly 40 percent of the mammals.<sup>28</sup> These curious biogeographical patterns, as well as the unusually high occurrence of plant groups with primitive characteristics, such as bamboo, led many researchers to conclude that the Atlantic forests had been carved up into island-like refuges during the ice ages, surrounded on all sides by a sea of grassland and dry forest formations. Geographically separated during these protracted arid cycles, the flora and fauna of each forest patch had the time and isolation believed necessary to differentiate into new taxa.<sup>29</sup> Although the validity of the refuge theory is open to question, particularly since Pleistocene arid landforms have been mapped in the middle of what are purported to have been moist forest islands,<sup>30</sup> the uniqueness of the life forms that exist here is not.

By most orthodox measures of biogeographical similarity, Africa and South America have little in common. The combined effects of nature's devices—continental vicariance, 100 million years of geographic isolation, climatic and geomorphic change, and taxonomic divergence—add up to relatively little evidence for a shared floristic ancestry, certainly at the rank of species. African immigrants, by this reckoning, would have been as little familiar with this floristic landscape as if they had they been transported to the Canadian tundra.

There is a serious shortcoming to this system of biological accounting, however—namely, that the botanical products of human intervention are purposely culled from the biotic ledger. As the poor and rather vulgar kin of nature's divine creation, crop plants, medicinals, potherbs, ornamentals, and weeds are routinely trimmed from the list of intercontinental relations. Five centuries of navigating the Atlantic, of advertently and accidentally homogenizing the floras of Africa and South America, are ignored by such a method. As agents of change in the distribution of plants and animals, people are generally judged to be spoilers and destroyers. Yet, however perceived, humans were perhaps the major factor that shaped the biogeography of coastal Bahia, a land that would ultimately play host to an African diaspora and their Old World ethnobotany.

### *Indigenous Land Use*

The sylvan South American landscape that incoming African slaves were obliged to call home had long felt the effects of humans—perhaps not to the degree of the Old World, and certainly not for the same duration, but significantly nonetheless. When fortuitously encountered by Pedro Alvares Cabral on 22 April 1500, the forests of coastal Bahia were inhabited by slash-and-burn



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bridge the ocean barriers that had long separated them. The effects were startling and without biogeographical precedent. Within a century, most major crop plants and medicinal species—not to mention livestock, fowl, and beasts of burden—had been transplanted to the far corners of the tropical world. Although all the maritime powers would ultimately get involved in the botanical exchange, many of the first introductions were made by the Portuguese. Aside from their South American holding, they pioneered and for a time dominated the trade routes from Asia and Africa to Europe and South America. Their trading posts included Mozambique, Mombasa, Goa, Malacca, and Macao, where for a period they were able to control the international trade in pepper, cloves, nutmeg, mace, ginger, and other highly sought-after spices.<sup>53</sup> Intercontinental transfers of cultivated plants were successful in part because so many of the Portuguese outposts were in tropical latitudes with similarly warm and ever-wet climates. Moreover, long-distance transfer away from their place of domestication allowed cultivars to escape many of their coevolved predators and pests. The botanical similarity of West Africa and eastern Brazil was about to increase dramatically.

Judged by the glacial momentum of most biogeographical processes, the pace of floristic exchange between Brazil and the Old World can be reasonably described as frenetic. Only the rejoining of the South American and African plates could have more effectively neutralized the floristic differences than the changes that were set in motion by the European efforts at exploration and colonization. In his first view of Bahia's vegetation, Padre Nóbrega found the flora strange and alien; the plants he encountered were "many and different from those in Hispana. . . ." <sup>54</sup> In 1557, Frenchman John de Léry offered a similar opinion, noting that "there are no trees, or herbs and lastly no fruits, which are not unlike to ours, except these three plants, purslane, basil royall, and fearne." <sup>55</sup> But this situation changed quickly. By the end of the sixteenth century, the abundance of newly arrived domesticated plants and animals of Old World origin moved Padre Fernão Cardim to state that, at least in terms of its biota, "This Brazil is already another Portugal." <sup>56</sup>

The first wave of introductions were destined for the kitchen gardens and plantations of the sugar barons and the Jesuits. Judging by the tone of their correspondence, the Portuguese were bent on replicating their Iberian agrosystem in Bahia, however impractical the goal. Soon Padre Nóbrega could boast that several species of fruit were acclimatizing well, including grapes, citron, oranges, lemons, and figs, and that there were plenty of cattle, sheep, and chickens.<sup>57</sup> Friar Vicente de Salvador in the 1560s could speak of the abundance of European food in Bahia, including wheat, rice, and yams.<sup>58</sup> Gabriel Soares de Sousa, who owned a sugar mill south of Salvador, noted the successful cul-



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In West Africa, crop plants traditionally served both food and medicinal purposes. Grains, fruits, and tubers served to sustain the body, while leaves, bark, and roots from the same plants were employed to heal it. Because so many crop plants retained medicinal properties, the introduction of Old World food plants to feed a burgeoning African slave population inadvertently supplied bondsmen with an array of familiar medicinals. The South American peanut is a good example. Naturalized by the Portuguese in West Africa, peanuts were incorporated into various African ethnomedical systems. Later, it made its way to the Caribbean, where it continued its dual function as food and medicine for captive African slaves.<sup>81</sup> Likewise the lemon, originally brought from Southeast Asia, ultimately found its way to Africa and South America, where it served more as a medicinal than as a food product.<sup>82</sup> Okra, an African domesticate introduced as a staple food for the slave population, was employed as an abortifacient by African slaves in eighteenth-century Guyana.<sup>83</sup> Other early introductions of medicinal food crops included winged yam, pigeon pea, sorghum, oil palm, watermelon, akee, and black-eyed pea, all of which were exploited for both medicinal and consumptive ends.<sup>84</sup>

Species were also introduced purely for their medicinal and liturgical value.<sup>85</sup> Imported spice plants from Africa and Asia, such as cinnamon, ginger, pepper, and cloves, were common constituents of early European pharmacopoeias. Their use in medicinal recipes is traced at least to the ninth century.<sup>86</sup> The African kola nut (*obí*) is a case in point. Belonging to two tree species, *Cola acuminata* and *C. nitida*, kola nuts have long been prized as stimulants. Native to West Africa, the kola nut formed the mainstay of the twelfth- to sixteenth-century Arab trade route from the Gulf of Guinea across the Sahara to North Africa.<sup>87</sup> These kola caravans, moving their product by camel from the orchards of Ghana to the markets on the Mediterranean, were controlled by the Muslim Hausa in the seventeenth through nineteenth centuries.<sup>88</sup> Sucking the juice out of the nuts, seventeenth-century Africans and Europeans used kola as a type of "African betel," according to William Bosman.<sup>89</sup> Kola was used extensively by West Africans in the early nineteenth century,<sup>90</sup> and this demand stretched across the Atlantic to the New World African population. Frederic Welwitsch reported from Angola in the mid-1800s that the nuts represented a lucrative item of export to South America, being "much sought out by the slaves there imported from Africa."<sup>91</sup> This enterprise was also pursued by slaves who had bought their own freedom, such as José Francisco do Santos. Returning to Whyda, Dahomey, from Brazil, he carried on a successful business from the 1840s to the 1870s shipping slaves and later palm oil and kola nuts to Bahia.<sup>92</sup> Seeds were undoubtedly planted during the latter part of the



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2.6 **Dandá** (*Cyperus rotundus*) for sale in Salvador herb stand. Magical powers are associated with chewing the rhizome. (Photo: Janira Voeks)



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Native Americans certainly suffered from illness prior to the arrival of Europeans. Syphilis, for example, was clearly endemic to the Americas, and its unintentional transference to the European interlopers represented a vengeful gift of considerable significance. And, judging from present-day indigenous pharmacopoeias, tropical forest dwellers must have suffered a host of common maladies—skin disorders, snake bites, fevers, and sundry fungal infections. But by most estimates, the New World was relatively contagion-free. This favorable situation must have been fostered by the dispersed nature of many New World populations. In the Atlantic forests of Brazil, the pre-Portuguese population density was only 0.3–0.4 persons per square kilometer, hindering the spread of infectious disease. For the local Tupinambá and Tupinaquim, incessant warfare and cannibalism were probably more decisive implements of population regulation.<sup>6</sup> In any case, the arrival of the Portuguese changed this situation forever.

Ten thousand years of blissful quarantine had left native Americans immunologically unprepared for European-style germ warfare. As the first of many biological invasions swept through the long-isolated and poorly protected Americas, romantic visions of a salubrious American Eden, free of illness and aging, yielded to the brutal reality of epidemics and premature death. Indigenous people succumbed in droves to exotic diseases; Mediterranean colonists battled hitherto unknown tropical maladies; and soon, imported African slave laborers, overworked and underfed, would fall prey to both.<sup>7</sup>

There was a vague understanding among the Tupinambá, even in the beginning, that the presence of the foreign fathers was somehow at the root of the growing health crisis. When the first of their numbers to be baptized suddenly fell ill, the *pajés* (native shamans) claimed with some intuition that the Jesuits were poisoning them “with the baptismal water and with the doctrine of death.”<sup>8</sup> In some areas, when the natives saw Jesuits approaching, they burned salt and pepper to drive off the anticipated impending illness.<sup>9</sup> But these initial contacts were of relatively minor medical significance. The complete demographic collapse of the indigenous population would begin in earnest shortly, driven by the plantation masters’ hunger for slaves and the padres’ desire for souls.

Sugar plantation owners initially bartered beads and metal tools to meet their labor needs. But indigenous workers proved to be unreliable and easily distracted. Several thousand years of a simple shifting-cultivation mode of subsistence had left the Tupinambá ill-prepared for the dawn-till-dusk drudgery of plantation existence. With few Indians willing or able to tolerate plantation life, the owners quickly resorted to slavery of the Tupinambá to meet their



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at the mouth and “suddenly become possessed with the devil.”<sup>35</sup> The women were initiated into witchcraft “by such ceremonies as smoke, dancing, etc . . . and make her able to foretell things to come . . . and pretend conference with spirits.”<sup>36</sup> Women clearly represented the principal vehicle of communication between the material and spiritual realms.

Tobacco (*Nicotiana tabacum*) was widely employed by the traveling shamans. Jean Léry observed that “with a very long cane, wherein they put the herbe Petem [tobacco] set on fire, they . . . blew out the fume of that herbe upon them that stood round about them with these words: Receive the spirit of fortitude, whereby you may all overcome your enemies.”<sup>37</sup> The Portuguese community also came to appreciate the effects of tobacco, perhaps to a fault, for its ability to stave off the effects of hunger and thirst.<sup>38</sup> Anthony Knivet describes the European addiction to this “holy herb,” noting that they are “all day and all night laid in their nets [hammocks], to drink this smoke, and are drunk with it as if it were wine. . . .”<sup>39</sup> While acknowledging the reputed medicinal benefits of tobacco, the Jesuits nevertheless refrained from its use, so as not to “conform with the unfaithful, that appreciate it greatly.”<sup>40</sup> By the end of the century, tobacco was being cultivated in the hills of Portugal, and Europeans throughout the Old World had acquired the habit of swallowing the sacred smoke.<sup>41</sup> The slave population in the New World appears to have picked up the practice early, as Monardes could observe in the 1570s that “The black people that have gone . . . to the Indias, have practiced the same manner and use of the tobacco.”<sup>42</sup> Most importantly, tobacco was in the process of being introduced to West Africa, where its medicinal and liturgical properties would be incorporated into local ethnomedical traditions and would eventually make the return journey via slave ships to Brazil and other points in the African American landscape.<sup>43</sup>

The most sacred object of the Tupinambá was the rattle gourd, fashioned from the pantropical *cabaça* (*Lagenaria siceraria*). Padre Nóbrega stated that they placed human figures inside the gourd so as to effect their magic.<sup>44</sup> Hans Staden reported, “They put their faith in a thing shaped like a pumpkin . . . filling it with small stones so that it rattles. They shake it about when they sing and dance, and call it Tammaraka, and each man has one of his own.” The power of the sacred gourd was reinforced by the traveling shamans, who fumigated it “with a herb called Bittin [tobacco].”<sup>45</sup> The bottle gourd, as noted earlier, was one of the few species common to South America and Africa prior to the fifteenth century. Its presence in Brazil, like that of tobacco, allowed African slaves and their descendants to carry on their own ceremonies and to adopt some of those of the soon-to-be-extinct Tupinambá.<sup>46</sup>





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easily be controlled or taxed by the crown authorities, its existence contributed in no way to the Portuguese coffers. African slaves, on the other hand, had to be transported across the Atlantic. Packed on ships like so many head of livestock, African slaves were accountable, taxable, and thus more likely to generate a profit for the Crown.<sup>58</sup>

The success of the Bahian sugar economy quickly came to depend on the technical skill and physical endurance brought by African laborers. Unlike their Native American counterparts, whose stone age technology, shifting cultivation, lack of domesticated animals, immunological vulnerability, and generally easygoing life style left them ill-prepared for the technical specialization and sustained drudgery of plantation labor, Africans had long been familiar with the lifeways of settled agrarian existence. They had also proved their ability to tolerate plantation conditions on the first sugar estates on the Atlantic islands of Madeira and São Tomé almost a century before. These perceived differences in ability to work were early recognized by Brazilian planters, who were willing to pay roughly three times more for an African than for an Amerindian slave.<sup>59</sup>

It is important to remember that in the areas of agriculture, animal husbandry, and metallurgy, African slaves were drawn from societies every bit as advanced as their European captors. Cattle-raising as well as equestrian skills were well-developed in African societies and were recognized by New World slaveholders.<sup>60</sup> Significant elements of the Iberian agrosystem, including many of the crop plants introduced to the Americas, in fact had their origins among African societies, or had diffused through Northern Africa to Southern Europe during the Islamic occupation of Iberia.<sup>61</sup> Monoculture would not have represented an innovation for the newly arrived Africans; nor would raising domesticated cattle, pigs, goats, or sheep. In the early stages of the Atlantic slave trade, metallurgy was as well developed in Africa as it was in Europe. Iron, which had been smelted in Nigeria since at least 500 B.C.E., was perhaps of better quality than that being produced in Europe.<sup>62</sup> Although most Africans were drawn from societies whose knowledge was preserved and passed on as oral rather than written text, a fair number of literate Africans also arrived in Bahia. The incongruity of literate slave and illiterate planter, particularly in the case of Hausa Muslim slaves, was by no means uncommon. Nor would the existence of populous towns necessarily come as a shock to slaves, especially those from Yorubaland, whose civilization was characterized as perhaps the most urban in Africa.<sup>63</sup> In terms of technological and intellectual adjustment, the incoming African was clearly better prepared than the local indigenous population to take a place in a reformulating European civilization.



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that an army of priests could not erase it. Magic represented one of the few weapons of resistance in the African's arsenal, and the anxiety it created in the Portuguese community played a key role in the evolution of Afro-Brazilian ethnomedicine.

The notion that minority ethnic and racial groups possess enhanced powers of magic and sorcery is widespread,<sup>81</sup> and the New World slave-owning class was no exception. The progressive development of this belief is nicely illustrated by the early colonial history of Guadeloupe. During the initial decades of settlement, incoming French colonists took advantage of their slaves' knowledge of plant medicine. Africans seemed to recognize the medicinal properties of many of the local species—some naturally native to the island, and others that were recent arrivals from Africa and elsewhere—and the French initially encouraged their medical efforts. This attitude changed, however, as the slave-owners came increasingly to fear slave uprisings in the late 1700s. Père Labat noted that "Almost all negroes who leave their country are sorcerers or at least they are able to use magic, witchcraft and poison with success." By 1767, growing European paranoia had found expression in a series of ordinances outlawing the use of plants for medicine or surgery by African slaves. Even to consult a slave on medicinal matters was banned.<sup>82</sup>

African magic, or at least the fear it spawned, represented a potent force wherever sizable numbers of slaves were found. The high priest Boukman carried out voodoo chants and rituals during the Haitian rebellion in order to immunize his followers against the white man's magic.<sup>83</sup> In South Carolina, African-born priest and doctor Gullah Jack was a principal conspirator in the Vessey Rebellion of 1822.<sup>84</sup> Henry Bibb, a North American slave, described how conjured powders and roots were used, albeit unsuccessfully, to control the plantation master.<sup>85</sup> African sorcerers in eighteenth-century Surinam entered trances and encouraged slaves to murder their owners.<sup>86</sup> White Roman Catholics in colonial Venezuela called on African witches to exorcise the devil from parishioners.<sup>87</sup> It was, according to anthropologist Alfred Métraux, "the witchcraft of remote and mysterious Africa which troubled the sleep of the people in the big house."<sup>88</sup>

African magic was to become equally worrisome to Brazilians. In the early centuries of colonization, while the African population was still small, recourse to the occult forces was limited to the dwindling indigenous population and to Portuguese colonists. During the first visits of the officials of the Inquisition to sixteenth-century Brazil, Africans were not even mentioned among those denounced for heretical activities.<sup>89</sup> This situation must have changed by the eighteenth century, however, when reports of African magical ceremonies be-



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