Cheryl Lans 2008 Society for Caribbean Studies Essay Prize winning essay.

Cheryl Lans did her doctoral work in social sciences at Wageningen University in the Netherlands. She has since taught and conducted research work in Canada. The following essay was the winning submission for the Society for Caribbean Studies Essay Prize 2008.

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Behaving like a Warao

Cheryl Lans

Abstract

Research was conducted into ethnoveterinary medicine in Trinidad and Tobago from 1995 to 2000. During the research Amerindian culture was discovered to be the basis for several of the medicinal plant uses and also provided the underlying belief system. Cultural codes transferred from the South American continent with migrants (particularly Venezuela and Guyana) and Caribbean culture may have several of these 'adaptations' of a preexisting New World culture. The historical links between aboriginal Trinidad and Guyanese Tropical Forest Groups is borne out by the data.

Introduction

Recently a pharmacologist colleague resident in Trinidad who was interested in tracing the linkages between the folk medicine in Trinidad and Tobago and in her native Nigeria was told to include the stately silk cotton tree (*Ceiba pentandra*) in her list of African 'survivals'. This was hardly surprising since there is a legend in Tobago of Gang Gang Sara, a powerful old female slave who climbed up a silk cotton tree in Les Coteaux in a failed attempt to fly back to Africa. It is widely known that these huge trees were revered by African slaves, that blood was found on them, and that ceremonies have to take place before they are cut down. However *Ceiba*

pentandra is also said to be the sacred tree of the Mayan people. Mayans believed that 'souls ascend to heaven by rising up a mythical silk cotton tree whose branches are heaven itself' (Kricher 1989: 88). Comparable beliefs are found in Bolivia where the Tacana believe that malevolent spirits dwell in canopy trees such as *Dipteryx odorata* and *Ceiba samauma* and that walking by them or cutting them down may cause illness (Kricher 1989; Bourdy et al. 2000). So how does a native tree² become the host of superstitions that are said to be only African traditions?

It is my contention that since folk knowledge was passed on orally, the descendents of slaves from the French West Indian islands and those born in Africa may have decided to rename the insufficiently understood Amerindian culture they had learnt in Trinidad as African. The culture of the Caribs of St. Vincent has been preserved by the phenotypically Negroid Black Carib of central America (Taylor 1949). A similar situation may exist in Trinidad since the Amerindians influenced the lifestyle of rural Trinidadians before they 'disappeared'.

When Cristòbal Còlon 'discovered' Trinidad in 1498 there were several Amerindian tribes; the Aruaca, Garini, Nepuyo, Shebaio and Yaio. These Meso Indians (population 10,000 - 40,000) lived in coastal and riverine villages and were fishermen, hunters and gatherers (Borde 1876). During the 1700s, Trinidad belonged as an island province to the vice royalty of New Spain along with modern Mexico and Central America (Besson, 2000). The Dutch and the Courlanders had established themselves in Tobago in the 16th and 17th centuries and produced tobacco and cotton. However Trinidad in this period was still mostly forest, populated by a few Spaniards with their handful of slaves and a few thousand Amerindians (Besson, 2000). Spanish colonisation in Trinidad remained tenuous. In 1762, after three hundred years of Spanish rule San José de Oruña (St. Joseph) and Puerto España (Port of Spain) were hamlets rather than towns. Because Trinidad was considered underpopulated, Roume de St. Laurent, a Frenchman living in Grenada, was able to obtain a Cédula de Población from the Spanish King Charles III on the 4th November, 1783. This Cédula de Población was more generous than the first of 1776 and granted free lands to Roman Catholic foreign settlers and their slaves in Trinidad willing to swear allegiance to the Spanish king. The land grant was thirty two acres for each man, woman and child and half of that for each slave brought. As a result, Scots, Irish, German, Italian and

English families arrived. The Protestants among them profited from Governor Don José Maria Chacon's generous interpretation of the law. The French Revolution (1789) also had an impact on Trinidad's culture since it resulted in the emigration of Martiniquan planters and their slaves to Trinidad who established an agriculture-based economy (sugar and cocoa) for the island (Besson, 2000).

The population of Puerto de España (Port of Spain) increased from under 3,000 to 10,422 in five years and the inhabitants in 1797 consisted of mixed-races, Spaniards, Africans, French republican soldiers, retired pirates and French nobility (Besson, 2000). The total population of Trinidad in 1797 was 18,627; 2,500 of which were "white", 5,000 were "free blacks and people of colour", 10,000 were slaves and 1,082 Amerindians. In 1797, General Sir Ralph Abercromby and his squadron sailed through the Bocas and anchored off the coast of Chaguaramas. The Spanish Governor Chacon decided to capitulate without fighting. Trinidad became a British crown colony, with a French-speaking population and Spanish laws (Besson, 2000). The conquest and formal ceding of Trinidad in 1802 led to an influx of settlers from England or the British colonies of the Eastern Caribbean. In 1832, the population of Trinidad consisted of 3,683 whites, 16,302 mixed, about 700 Amerindians, 20,265 slaves and 4,615 'Aliens and Strangers' (Besson, 2000).

Amerindians brought domesticates like guinea pigs and dogs to the Caribbean (Siegel 1991). The influence of the Amerindians on Caribbean folk medicine was noted by Douglas Taylor (1950) and Honychurch (1986) who recorded how the Dominican Caribs used plants to excite dogs to hunt. Morton (1981) states that there were still Carib Indians living in St. Lucia, St. Vincent and Dominica in 1938 using medicinal plants in traditional ways. Wilbert (1983: 358) reveals that Warao navigators traded with Trinidadians until the 1950s and that the island was included in Warao cosmogony. The intoxication of fish before capture as described by Im Thurn (1883: 233) is said to come from the Amerindians (Borde1876). However it is difficult to ascribe origins since ichthyotoxic (fish killing) plants were used in Spain before 1255 and are still used there and in South East Asia (Álvarez Arias 2000). However the specific plants used in Trinidad might have come from the Amerindian tradition. The use of lignum vitae (*Guaiacum officinale*) for women's problems and sexually transmitted diseases may have Amerindian origins (Lawrence

1998). Other Amerindian survivals are rituals that include *Nicotiana tabacum*, and the significance attached to dreams (Butt Colson and de Armellada, 1983).

Amerindians do not operate from the dualisms that separate humans from spirits, animals, plants or things; mind and body, thinking and feeling or nature and culture (Lawrence, 1998; McCorkle and Green, 1998). They practiced a universal belief in spirits of nature but deities were not worshiped (Besson, 2000). Medicine men served as curers and advisors due to their ability to contact spirits.

Amerindian origins were seen in Tobago in the first phase of the research. An individual remedy to induce oestrus included cedar bark (*Cedrela odorata*). The Tacanas in the Bolivian Amazon use a decoction of cedar bark for post partum haemorrhage (Bourdy et al., 2000). Amerindian culture also has personalistic explanations for sickness (Banks, 1956; Davis and Yost, 1983). Personalistic explanations of illness are explained by the active aggression of some agent which might be human, non-human, or supernatural like souls, deities, demons, ancestors and sorcerers (Dressler, 1980; Davis and Yost, 1983). The sick person is a victim of aggression or punishment directed against him for reasons that concern only him (Butt Colson and de Armellada, 1983). Dressler (1980) wrongly subsumes all personalistic beliefs under the African-based tradition of obeah. Wrongly because Warao [Amerindian] personalistic explanations dominate over those of natural causation and some of these explanations persist in the Caribbean (Wilbert, 1983a&b). There is an underlying aspect of some Amerindian culture claiming that all human relationships are potentially dangerous (Banks, 1956). It is claimed that this theme underlies their couvade³ and other rituals and purifications and the Amerindian theory of sickness.

"Survivals" and so on

There has been some effort made to reclaim the erased African heritage of the Caribbean peoples and this is necessary work. However as claimed by Haslip-Viera et al. (1997) this historical restoration has to be accurate and should not detract from the contributions of other groups.

McClure (1983) claims that slaves transported *Abrus precatorius* from Africa to the Americas 'because it had potential against evil spirits to be encountered in new lands.' No indication is given of how slaves knew they would be transported or how (manacled and stripped) they were

able to carry anything with them. Two other plants McClure reports were carried to the Americas by slaves are *Ricinus communis* and *Citrus aurantifolia*. McClure admits that both *Citrus aurantifolia* and *Abrus precatorius* were taken from Asia to Africa by Arab traders before 1454 and that the uses in Africa are similar to those in Asia. How then can one be sure that there is parallel usage of medicinal plants by Africans and their Caribbean descendants when Asians also live in the Caribbean? An example of the syncretism that took place in Trinidad with *Abrus precatorius* and possible links to Amerindian and Asian culture follows. Before electric lights were widespread some people put jumbie bead seeds (*Abrus precatorius*) in the lamp oil with garlic. It was said that no witch / soucouyant ⁴ could come into the house at night when the lamp was lit. Evidence of a soucouyant was a blue / black mark on the skin. Respondents claimed that "if you didn't get a lash it had to be a witch" (Lans 2001). Similar beliefs about witches leaving blue bruises are found in Nepal (Eigner and Scholz 1999); while the Yucatec Maya in Mexico use *Abrus precatorius* baths against evil eye (Ankli et al. 1999: 149). Similar beliefs may exist in West Africa, but these were not obtained during the research.

Amerindian contributions to Caribbean culture were not recognized by social scientists like Richard Adams (1959) who considered the natives to lie outside the process of Creolization. Adams and Niehoff and Niehoff (1960) may have assumed that the "extinction" of the Amerindians (as claimed by Julian Steward) was paralleled by an erasure of their culture. Implicit in their work is the idea that no Amerindian⁵ cultural patterns, whole or modified, could have endured to play a role in Creolization (Butt Colson and de Armellada 1983; Taylor 1949). It was assumed that most Caribbean folk culture was African 'survivals', and 'retentions' (Brathwaite 1971; Herskovits and Herskovits 1964 [1947]). Some of these so-called retentions are very similar to Amerindian practices described in Taylor (1950), Dennis (1988) and Duke (1980)⁶. M.G. Smith critiqued the theoretical claims of Herskovits while Mintz (1974) claims that social scientists attribute African origins to traditions because they are frustrated by the painstaking and inconclusive research required in order for origins to be traced. Mintz (1974) also claims that 'survivals' are considered interesting because they reflect the resilience of the human spirit even under slavery.

The early anticolonial discourse of Négritude may have contributed to the renaming of poorly understood Amerindian culture as African 'survivals'. This discourse evolved as a reaction against the feminization of subjugated colonized cultures and the erasure of the knowledge and teaching of African heritage during colonialism. The Négritude discourse however was described as merely an inversion of the existing colonial structure that tried to establish the ideological dogma that only African contributions to Caribbean culture could be counted (Arnold 1994). Amerindians may have been too marginal and powerless to protest their exclusion from national culture. However Indo-Trinidadians were not. Indo-Trinidadians first achieved population and educational equivalence and economic strength and then pushed for more political power (Munasinghe 2001). They claimed that Afro Creole Trinidadians had taken on the imperial oppressing-subjugating role and were pushing Afro Creole culture as national in a hegemonic way (Munasinghe 2001). Indo-Trinidadians (self-described social and cultural subalterns) who did not play along with the Afro Creole definition of national culture were called the "recalcitrant minority" by the first Prime Minister Dr. Eric Williams (Munasinghe 2001). Ryan (1999) claims that both of the 'Indian' and "African' vocal camps⁷ in Trinidad pushing what they call African and Indian culture are building their cases on half-forgotten collective memories or myths⁸ (Ryan 1999; Ryan 2001). These myths are spun or resuscitated by political and cultural interest-seekers who are using them to bolster their political, social or economic agendas... political ethnicity. The contestation over which culture is funded (dance, music, Carnival, and other 'feathers and flourishes') means a neglect of un-funded culture (folk medicine, patois) and Amerindian culture.

The mainland connection

Amerindian influence on local culture took place through the Spanish colonials and the 'peóns' of Venezuelan origin (Borde 1876; Brereton 1981). Trinidad was colonized and ignored by the Spanish until the island was surrendered to the British in 1797. During the Spanish control some Amerindians re-crossed the Gulf of Paria to the mainland, but those who stayed accepted the Spanish culture and Catholic faith and gradually became assimilated (Banks 1956). Spanish-Amerindian peoples, called 'cocoa panyols', were known as the poor but hospitable backbone of the cocoa economy, clearing the forest and cultivating the cocoa fields (Besson 2000).

Hispanicization of the Amerindians was carried out by the Catholic missionaries of the Cisterciensan and Capuchin orders who set up missions along the east and south coasts of Trinidad. The rural towns of Siparia and Arima were established by the Spanish Capuchins who came from the Santa Maria province of Aragon in 1756 - 1758. In 1787 the Arima mission was enlarged to accommodate the Nepuyo and other Amerindian people who had been displaced by European immigrants from Tacarigua, Sabana Grande, Caura and Arouca (Besson 2000). In 1757, the Capuchin friars dedicated their Arima mission to the first New World saint, Santa Rosa. Amerindians continue to celebrate the Santa Rosa festival in Arima and crown their 'Santa Rosa Carib queen' at this ceremony. Spanish-Amerindian culture has been documented in Moodie-Kublalsingh 1994.

When the Amerindians intermarried with other groups, their language may have been lost but their cultural heritage was passed on through every day practices. In this paper I illustrate the continuing existence of Amerindian culture in the ethnoveterinary uses of plants and insects by hunters. There is literature establishing that native Trinidadians or Spanish-Amerindians participated in hunts with Creole hunters (Carr 1893). Hunters use various strategies in an attempt to make their dogs better hunters or catch certain game. Farabee (1918) claims that dogs naturally become better hunters for certain animals. However Im Thurn (1883: 232) records that the Amerindians trained hunting dogs to hunt one sort of game. In Trinidad a combination of both occurs. Trinidad hunting practices are similar in many respects to the Amerindian traditions documented by Im Thurn (1883), Farabee (1918) and Roth (1915) and may reveal the kinship ties⁹ between Trinidad Amerindians and the mainland tribes described by Figueredo and Glazier (1978) as the Guianas Tropical Forest Culture groups. Kinship ties are also suggested by Heinen and García-Castro (2000) who claim that Waraoan groups in the Orinoco Delta have an oral tradition that the people who originally lived there came over from Trinidad. Amerindian use of hallucinogenic and other plants to improve hunting success is also recorded in Russo (1992: 202), Morton (1981) and Muñoz et al. (2000: 145).

Ethnoveterinary medicines used for hunting

The data on the Amerindian origins of some folk culture was obtained from a larger study of ethnomedicinal and ethnoveterinary practices in Trinidad and Tobago (Lans 2001). Taking into

consideration the difficulty of tracing origins because of the movement of people throughout the region during and after colonialism, medicinal plant uses were compared to ethnomedicinal practices in Europe, Asia, Africa and South America. The evaluation of the medicinal plants was conducted using a non-experimental method (Browner et al. 1988; Heinrich et al. 1992) which consisted of:

- o botanical identification;
- searching the pharmacological literature to determine the known physiological effects of either the plant, related species, or isolated chemical compounds that the plant is known to contain; and
- assessing whether the plant use is based on empirically verifiable principles; or, whether
 symbolic aspects of healing are of greater relevance.

Of one hundred and eighty nine plants examined, the geographical origin of eight is unknown, nine were European, 15 were pantropical, 17 plants were of African origin, 41 were Asian and 103 came from Latin America and the Caribbean. Thirteen plants that were not being used similarly in other places were tentatively judged to be "indigenous" to Trinidad and Tobago. The small number of indigenous plants implies that extensive "borrowings" from other cultures took place. The large number of native plants suggests that the Amerindian knowledge found throughout South and Central America is well represented in folk medicine. Given that there were considerably more Asian-origin than African-origin plants it is not possible to concur with the assertions of Niehoff and Niehoff (1960) that 'the Indians obtained a considerable amount of their beliefs from Negroes' [and that] the Indians depend heavily on the "bush" remedies which they have mostly borrowed from their Negroe neighbors' unless the plant borrowings that took place were those that originated in South America.

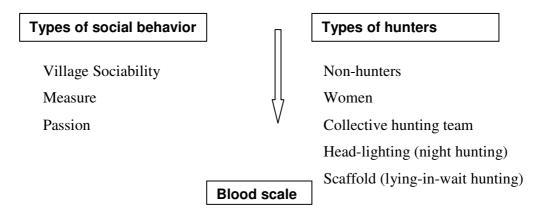
As part of a larger study into ethnoveterinary medicine, research was conducted into medicinal plants used by hunters from 1997 to 1999 (Lans et al. 2001). A veterinarian-colleague was a long-standing member of a seven-member hunting group and facilitated participation in hunting activities in Guayaguayare, South Trinidad. The participant observation involved taking part in five hunts over the three years (going into the forest, observing the chase and capture, sharing a meal and sharing of take-home game). Unstructured interviews were also held with four

individual hunters in North Trinidad (Paramin), two in Central Trinidad (Talparo) and four in Mayaro (South Trinidad). Paramin and Talparo retain Hispanic traditions either from the original Spanish colonists or from continuous small-scale immigration from Venezuela (Moodie-Kublalsingh 1994). The following information was collected from all respondents; the popular name, uses, part(s) used, mode of preparation and application. Plants were collected and identified at the Herbarium of the University of the West Indies.

Hunters claimed that their dogs either started hunting or hunted better after they had treated them in various ways with medicinal plants or other objects. The following game animals are most commonly hunted: agouti (*Dasyprocta agouti*), tatou (*Dasypus novemcinctus*), deer (*Mazama americana trinitatis*) lappe (*Agouti paca*) and wild hog/quenk (*Tayassu tajacu*). Hunting dogs are usually foxhounds, beagles, coonhounds and mixed breeds. These dogs are usually scent and not sight hounds. It was said that the mixed breeds (called 'common dogs') were quicker at catching game, "they hold the animal in 3 to 6 hours, now for now".

Hell (1996) developed a folk taxonomy of European hunters that distinguishes between red beasts (deer), black beasts (boar), and stinking beasts (fox). More hunting trips would be necessary to know how closely the Trinidad system fits this scale (see Fig. 1 below). In Trinidad the game animals are called beasts, and white meat (chicken) is classed at the bottom of the hierarchy, similarly to the European system (Hell 1996). Like the Amerindians studied by Im Thurn (1883: 228) Trinidadians rarely hunt alone. Collective hunting is deemed more socially acceptable than individual hunting as described by Hell (1996: 210) however the skill and landscape knowledge of the individual hunters who live off wild meat sales is acknowledged.

Trinidad Scale



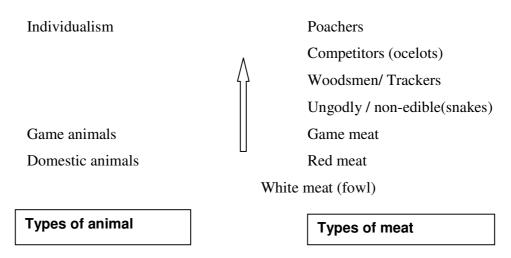


Figure 1. Trinidad taxonomy of hunting (adapted from Hell 1996: 214)

Women do not hunt. It was also claimed that women should not untie or tie hunting dogs or step over them during their menstrual cycle since that would "blight the dogs." However if a hunting dog was 'tied' by another hunter who was jealous that the dog was hunting better than his own, a woman was supposed to 'loose' it by bathing it in a river and making the dog pass between her legs. These mystical contagion¹⁰ beliefs may be Amerindian in origin since Taylor (1950) claims that Dominican Caribs did not allow 'heaty' women (pregnant or menstruating) to eat hunted meat, handle dogs or guns since this would make the hunter's dogs 'spoiled' or slow and heavy. Im Thurn documents similar beliefs that pregnant women should not eat game, if they did spoiled guns or dogs could be blessed and put back to rights but this would affect the guilty woman. Women are also excluded from hunting in Europe since they do not have the 'black blood' said to be characteristic of the hunter and the game (Hell, 1996: 209).

Hunters "compose" a snake bottle, often on Good Friday with plants collected on any Friday in Lent¹¹. The tincture in the snake bottle is made from various plant parts and other ingredients, carried in a flask on hunting trips, and drunk when required. Most snake bottles are composed of multiple ingredients for example: caterpillars (*Battus polydamus*, Papilionidae) that eat the tref leaves (*Aristolochia trilobata*) are put into alcohol with mat root (*Aristolochia rugosa*), cat's claw (*Pithocellobium unguis-cati*), tobacco (*Nicotiana tabacum*), snake bush (*Barleria lupulina*) and obie seed (*Cola nitida*).

Medicinal plant baths are used frequently in the Amazon (Nunes 1996) and a similar situation exists among the hunters. Preparing dogs for hunting is called "steaming" and the plants used are usually administered in baths and are considered to be mental and/or physical stimulants. The bush bath ¹² for quenk-hunting dogs is prepared the day after the new moon. Dogs are put into the thick, foamy green liquid and "scrubbed from head to tail". Lappe and tatou hunters also bathe their dogs in the new moon using rotted leaves from the river bed. Candle bush leaves (*Piper* hispidum) are used to bathe dogs in order to make them "good" in the chase similarly to the Caribs of Dominica who considered *Piper* species to be charms (Hodge and Taylor 1957). One Piper species was also against spirits on Nicaragua's Atlantic coast (Barrett, 1994: 18). Mardi gras (Renealmia alpinia) berries and leaves used in plant baths are said to help dogs closely pursue the game. Mosetene Indians in Bolivia also use *Renealmia alpinia* to improve their dogs hunting ability. They mix the crushed plant with water and rub this preparation over the dog's body (Muñoz et al. 2000: 145). In Trinidad dry seeds of guinea pepper (Aframomum melegueta) are ground to a powder, and sprinkled on the dog's food. The use of guinea pepper (Aframomum melegueta) may be a syncretism of African and Amerindian practices since the Caribs of Dominica put seeds of 'poivre ginet' into rum as a 'chauffe' to excite dogs. Poivre ginet was identified by Hodge and Taylor (1957) as Costus species.

Steaming is also carried out with one type of insect (an unidentified solitary wasp that hunts spiders). Both the wasp and its spider prey are put into rum with guinea pepper (*Aframomum melegueta*) on a Friday. This solution is then given to the dog, or included in the bath water, as a stimulant. The use of the solitary wasp in the "steaming" process can also be linked to Amerindian traditions. Waorani in the Ecuadorian Amazon feel that the characteristics of one entity or object may pass to another (Davis and Yost 1983: 281; Russo 1992: 196). This belief could explain the use of a wasp that hunts successfully in baths or decoctions to make dogs better hunters. Additionally there are records of a specific ant that was given to dogs by Guyanese Amerindians so that they would hunt with the same single-mindedness as the ants (Roth 1915). Amerindians also named their hunting dogs after ants and a wasp called "warribisi" that caught prey.

Plants are also placed in the dog's nose. Here it is expected that the plant will act as a nasal and chest decongestant and the dog will subsequently have a better sense of smell and improve its ability to follow a scent. One plant used in this way in Trinidad is bird pepper (*Capsicum frutescens*). Duke records that the Chocó Indians used *Capsicum frutescens* to give their hunting dogs more "energy" (Duke 1970: 356). The Chocó practice may be linked to the plant's ability to stimulate carbohydrate oxidation (Al-Qarawi and Adam 1999). In Trinidad ground kojo root (*Petiveria alliacea*) is used to bathe dogs so that they are more alert, while the Maya in Belize put *Petiveria alliacea* leaf on the dog's nose to improve its ability to follow a scent (Arnason et al. 1980: 359).

All of the above practices can be linked to those of the Guyanese Amerindians who conducted rituals in which ants and other insects were made to bite the nostrils of the hunting dog. Plant leaves and other plant parts including peppers were then rubbed into the wounds on the noses of the dogs. These practices were said to improve the power of scent in dogs since the nasal mucous membranes were cleaned, the nervous system of the dogs was irritated and thus responsive, the perceptions were sharpened, and the dog would keep its nose to the ground when hunting (Im Thurn 1883: 231; Roth 1915). Im Thurn also records that hunters from the Macusis, Arecunas and Ackawoi groups rubbed caterpillars on their chests or thighs in preparation rituals (230). The caterpillar hairs broke off easily and irritated the flesh causing a rash. There seemed to be a mental connection of success in acquisition of game with pain previously inflicted on the hunter and his dog (Im Thurn 1883: 231). There was also the belief that inflicting pain was a means of preparing the hunter and his dog to meet without flinching any pain or danger that could arise during the chase (Im Thurn 1883). This preparation was not ill-advised since the process of tracking deer was long and tedious and the pit viper 'mapepire z'annana' (*Lachesis muta muta*) often lives in the burrows of lappe and tatou (Farabee 1918; Mole 1924: 269).

Plants are also used for dogs that are "crossed". In this situation the hunters complain that the dog goes in the opposite direction from the game. The dog is faced upstream and bathed in a river with the water running East and rubbed with the crushed leaves of seven different plants found on the river bed (sometimes the plants used have no other distinguishing characteristic). The dog is then turned to face downstream. Crushed leaves of sun bush (*Lepianthes peltata* syn.

Potomorphe peltata) are used by Trinidad hunters to bathe dogs for "cross". This practice is dissimilar to the practices of the Cuna and Chocó Indians and the Ese'eje tribe of Amerindians in Perú who use a cataplasm of the leaves for practical reasons such as various external ailments and to exterminate lice (Desmarchelier et al. 1996: 49; Duke 1970: 362, 1975: 291). The plant is used as a bath for intestinal pains by the Yanomani Indians of Brazil (Milliken and Albert 1997: 271). Plant tops of seed under leaf (*Phyllanthus urinaria*) are also used to bathe dogs for "cross". This is similar to the use of the plant by Caribs with other plants in a bath against bad luck (called 'piai') (Honychurch 1986). One respondent claimed that crossed dogs are really "running spirits, evil things in the forest are humbugging them".

Bush baths were not universally seen as positive. Hunters with imported breeds claimed that only "hard-headed common dogs" were given bush baths, and that these baths especially those with bird pepper made the dogs look "miserable and hairless" and they "only last two seasons". As an alternative to bird pepper dogs were given mustard powder in rum. Other non-plant objects are also given to dogs. Deer liver and hooves are kept in a flask with puncheon rum and deer dogs are given a sniff before a deer hunt. The grated tail of tatou (*Dasypus novemcinctus*) is used similarly.

Cocoa panyols

The Amerindians influenced the original Spanish colonials and Spanish-Amerindian peoples were called 'cocoa panyols' (Besson 2000). Hispanicization of the Amerindians by Catholic missionaries was ongoing by 1787. An example of Hispanicization is the collection of medicinal plants on Good Friday, as is the practice in Almería, Spain (Martínez-Lirola et al. 1996). Talparo in central Trinidad retains some Spanish heritage. One Talparo respondent claimed that *Bixa orellana* root was to be cut on a Wednesday or Friday for dropsy, "this was a secret not obeah, but for jaundice it could be cut at any time" (Lans 2001). Seasoning makers in Paramin (another area with strong Spanish heritage) spoke of a religious-based belief that "on Good Friday if someone dug up a clump of fowl foot grass (*Eleusine indica*) they would get a piece of coal below the roots". White/red physic nut (*Jatropha curcas / gossypifolia*, Euphorbiaceae), "if cut on Good Friday would produce the blood of Jesus" (Lans 2001).

Moodie (1982) describes special plants called 'turals¹⁴' that are a source of strength, good luck, and success in hunting and cock fighting and that are believed to protect people and their homes. These plants had to be rewarded with silver coins as a symbolic payment ('mounted') before removing some of the plant parts, or the respondents claimed that the entire plant or clump of plants would die. This payment was supposed to be placed in the hole from which the root was dug. These 'mounted' plants are planted on Good Friday or the first Friday in Lent, sprinkled with the blood of a dove or chicken and the roots are sprinkled with milk (Moodie 1982; Moodie-Kublalsingh 1994). Two of these turals were identified in Paramin during the research. Tref (*Aristolochia trilobata*) was one of the plants used by the hunters in their tinctures for snake bites. The only explanation given for the paying the plant was that it was not a "simple plant".

Ruda (*Ruta graveolens*), a plant of European origin, was said to be a spiritual bush, and harvesters had to have clean hands to touch it, and could not be perspiring. The plant could not be told that it smelt funny or it would die. It had to be planted away from people since unclean people caused it to wither. "No evil meddles with it" respondents said of this plant. Hog tannia (*Xanthosoma brasiliense*, *Xanthosoma undipes*) was another plant that could not be planted too close to people since 'unclean' people would cause it to dry down and grow up somewhere else.

Giving plants symbolic payments is an Amerindian belief according to Dennis (1988: 17). Miskito speaking people of eastern and south eastern Honduras consider that the plants have supernatural owners who require such payment and the payment is placed on the ground near the plant before it is picked and can be recovered later by the person who picked it (Dennis 1988). The belief in the supernatural ownership of plants was revealed by a Talparo informant who claimed that he used "no compelling" when hunting, and his dogs used their "own mind" to hunt, implying that the plants hunters used compelled dogs to hunt.

Forgetting the Amerindian heritage

One of the few practices readily attributed to the Amerindian heritage is the use of roucou (*Bixa orellana*) in cooking to color meat. Gmelch and Gmelch (1996) have added the following contributions: fishing, crab catching, harvesting of sea turtles and the use of hammocks. There is a false consciousness in the Caribbean that gives little recognition to Amerindian customs

(Drummond 1980). Burnett (2002) suggests how this false consciousness may have developed during colonialism when Europeans claimed the superiority of their own knowledge and culture and minimized Amerindian knowledge. In the early years of slavery in Trinidad many of the slaves arrived in Trinidad during the French Revolution from the French West Indies, possessing a Creolized African-French-Caribbean culture and speaking Patois. The descendents of these slaves and those born in Africa may have decided to rename the Amerindian culture they had learnt as a reduced but insufficiently understood native "cultural language" as African. When a herbalist reporting family folk practices claims that her source was her grandmother's mother who came from Africa, it does not mean that the knowledge itself was African. Similarly for the knowledge of the herbalist described as an old and skilled Orisha woman descended from slaves. Ditto for the slave medicine (based on native plants) meticulously described by Handler and Jacoby (1993). Brathwaite (1971) maintains that there is a tendency for Caribbean people to depend on the 'mother' countries for normative value-references rather than using residential traditions and the Amerindian heritage has been poorly documented. Drummond (1980) argues that Guyanese rename, redefine and reconstitute Amerindian practices as "English" and claims that there is a Creole insistence on defining behavior and belief according to persistent ethnic stereotypes.

The Amerindians themselves may have forgotten some of their own cultural beliefs. Im Thurn (1883) has recorded how the Guyanese Amerindians used 'beenas', as charms to entice any object or desire wanted. Beenas were used for hunting dogs, which were made to swallow specific pieces of roots and leaves for specific game animals. Roth (1915) claimed that Guyanese Amerindians had forgotten that they used beenas because these plants were believed to possess associated spirits. Cultural explanations for plant use were not handed down so explanations are given using the Doctrine of Signatures¹⁵. It is difficult to say whether these explanations are culturally based¹⁶ or created to fill a knowledge vacuum.

Trinidad hunters claimed that certain plants had characteristics with desirable qualities or had physical properties that resembled the desired game. These desirable qualities were transferred to the dog after the plant use in a bath. Im Thurn (1883) records that the beena for lappe had typical white markings similar to those of the lappe, while the beena for quenk had a leaf with a small

secondary leaf under the surface that resembled either the scent gland of the quenk or its nostril tip. One Trinidad 'beena' is hog tannia. Trinidad hunters grind the root (or tannia) of hog tannia (*Xanthosoma brasiliense*, *Xanthosoma undipes*) and sprinkle this on the dog's food. One explanation given is that the leaf of hog tannia has needles similar to the bristle-like hairs on the back and neck of the wild hog/quenk and that quenks also eat these tubers. A second explanation is that the hog tannia scratches the dog's throat so it has to keep moving. A third explanation may be that the Dominican Caribs used a *Xanthosoma* species called "chou poivre" which they rubbed on their bodies as a war charm (Plowman 1969: 118). There is a rational explanation for using a war charm when hunting wild hogs. They can be very aggressive, especially in a group of five or six ¹⁷. One war story told of quenk hunting is documented in Carr (1893).

...it was found that the object of our chase had taken refuge within the hollow trunk of a gigantic balata tree...at the report of my shot and to our pleasant surprise, two more frightened members of the same band jumped right among us from the opening we had effected....After a short run, however, they were brought to bay by four of the dogs while the remaining five stood guarding the dead quank... Here were two full-grown quanks, foaming with rage...faced by the four dogs... The angered rovers of the woods put a stop to this truculent intrusion by frightfully mutilating with their tusks two of their annoyers...Exciting and not free from danger, as the foregoing might seem...there was... an encounter with the dreaded mapepire (Lachesis mutus) which had inhabited or was asleep in the hollow of the balata tree in which the quanks had taken refuge...His snakeship had not been in the least disturbed until one of the most daring of the dogs that had, on our return to this, the scene of our first "kill", gone into the hollowed trunk rummaging in quest of further possible game, indecorously seized and dragged into the open this terrible animal...Before we could get near enough to kill this death-dealing brute, it had bitten four dogs, one dying almost immediately and another within fifteen minutes... the other two, one bitten on the neck and the other on the paw, were promptly attended to, and got well after a few days. The remedy used was a tincture I carried, prepared from roots, barks and seeds. The two sick patients, though conscious, were unable to walk and had to be carried home in *guayares*, an extemporised basket-like Indian palm-leaf and liane knapsack. (Carr 1893)

Conclusion

Voeks (1996) claims that the African slaves who became herbalists in the Caribbean played a limited role in introducing plant species from Africa but recognized some of the African species that did arrive opportunistically. There were also similar taxa in South America to medicinal plants in Africa. The non-experimental evaluation of the medicinal plants provided verifiable

data on ethnoveterinary remedies used for hunting dogs. A 'reduced' body of knowledge (practising the rituals without knowing the underlying belief-system) was passed from the Amerindian hunters in the 1800s or before to their Creole co-hunters who then passed on this knowledge to family and friends. Since the plants and practices are largely comparable to those of Amerindian groups in South America there is every reason to believe that Amerindian culture may lie at the base of Caribbean Creolization as suggested by Butt Colson and de Armellada (1983) and Johannes and Werner Wilbert (1983a; 1983b) who have done extensive work on Amerindian groups. The evidence of modification of this culture by African traditions could not be obtained from the literature. To paraphrase Balée (2000), the Rosetta Stone of Amerindian knowledge is not made of rock or found in archaeological digs, but in the living cultural practices of Caribbean peoples themselves.

Notes

¹ Vampire bats (*Desmodus rotundus*) are probably responsible for the blood.

² Cumucurapo - the Amerindian name for Port of Spain means "place of the Silk Cotton trees" (Besson 2000).

³ Couvade (Fr. couver, "to hatch"), widespread custom among native peoples, whereby the father, during or immediately after the birth of a child, complains of having labor pains, and is accorded the treatment usually shown to pregnant women. The social function of couvade is held to be the assertion by the father of his role in reproduction or of his legal rights to the child. The underlying belief is that the souls of babies are weakly attached to their bodies and the couvade and practices of rest and dieting protect the soul for the first nine days after birth (Taylor, 1950; Butt Colson and de Armellada, 1983).

⁴ The soucouyant is said to be a syncretism of the European vampire and the African complement (Besson 2000)

⁵ Butt Colson and de Armellada (1983) base their arguments on ethnographic data derived from remote, mostly unacculturated Amerindian societies of the recent past and of today and historical evidence in 17th century literature on Carib peoples.

^{6 1.} Boiling milk bush roots to make a tea which is given to the expectant mother to drink on 5 or 9 successive days 'it cools down the body,' they say for this medicine. The scissors used to cut the umbilical cord are put beneath the place the baby's head is to lie, and left there for 9 days when mother and child first emerge from the house. The new mother can assume full household duties after 9 days. When the baby and its mother emerge from the house 9 days after the birth, a ceremony is held to present the new member of the family to relatives and the family dead. (Herskovits, 1947)

^{2.} A special bath is given eight or nine days after childbirth to the mother and another to the newborn infant. Plants used in the mother's bath are framboisin (Ocimum micranthum), coton noir (Gossypium vitifolium), rokou (Bixa orellana), verveine (Stachytarpheta species), semen contra (Chenopodium ambrosioides), sou marque (Cassia bicapsularis), pistache (Arachis hypogaea), and bouton blanc (Egletes prostrate). (Taylor, 1950; Hodge and Taylor, 1957). The second quotation refers to the Caribs in Dominica. The first quotation resembles the Amerindian practice of Couvade in which the underlying belief is that the souls of babies are weakly attached to their bodies and the practices of rest and dieting protect the baby's soul for the first nine days after birth (Butt Colson and de Armellada, 1983). However Herskovits and Herskovits (1947) refer to these practices as African survivals.

⁷ 'A cacophonous din of spoilers and dividers... opportunistic carrion crows...[responsible for] a hysteria of racial and religious bigotry spreading like maljo' (Pantin 1999).

⁸ 'One of the past's greatest strengths is its power to change' (Shannon 1998).

⁹ H. Dieter Heinen and Alvaro García-Castro (2000) claim the Carib (Kari'ña) of the mouth of the Guanipa and the "Island" Carib from Dominica were united linguistically by a common trade language, but only the former spoke a Carib language

¹¹ Medicinal plants are also collected on Good Friday in Almería Spain (Martínez-Lirola et al., 1996: 43).

¹⁴ Amazonian mestizos believe in magical plants which allow the healer to communicate directly with powerful beings (Jovel et al. 1996: 149).

¹⁶ Nunes (1996) claims that Amazonian users of fragrant baths may not realize that they are ingesting a drug and therefore credit effects to magical or occult forces.

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¹⁰ One hunter was bitten by a spider, and fell three times before he reached to the back of his house. When his wife called him he could not answer because before treating himself he had to: "Keep to yourself don't go by too much woman, if you see a pregnant woman you can't survive." He chewed three tref (*Aristolochia trilobata*) leaves found at the back of the house and recovered. Then he spoke to his wife. Mole (1924) records getting the same advice after he was bitten by a mapepire. He did see a pregnant woman and lived.

Absorption routes of the active compounds are said to be the respiratory tract (volatile compounds carried by water vapour) and the skin (Nunes, 1996).

¹³ The northern Pemon are Carib-speaking Amerindians in the Guiana Highlands of the border areas of Venezuela, Brazil and Guyana. Pemon say the Wanawanari (an excavating sand wasp *Ammophila*) is a great shaman (Butt Colson and de Armellada, 1983).

¹⁵ Davis and Yost (1983: 281) claim that the Waorani in Amazonian Ecuador have a similar logic to the Doctrine of Signatures. Certain plants that share a morphological similarity with a dangerous animal have the power to treat wounds caused by that animal.

¹⁷ One quenk hunter claimed he had been hunting from age nine to forty-eight and because of his use of bush baths had lost only two dogs to quenks.

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