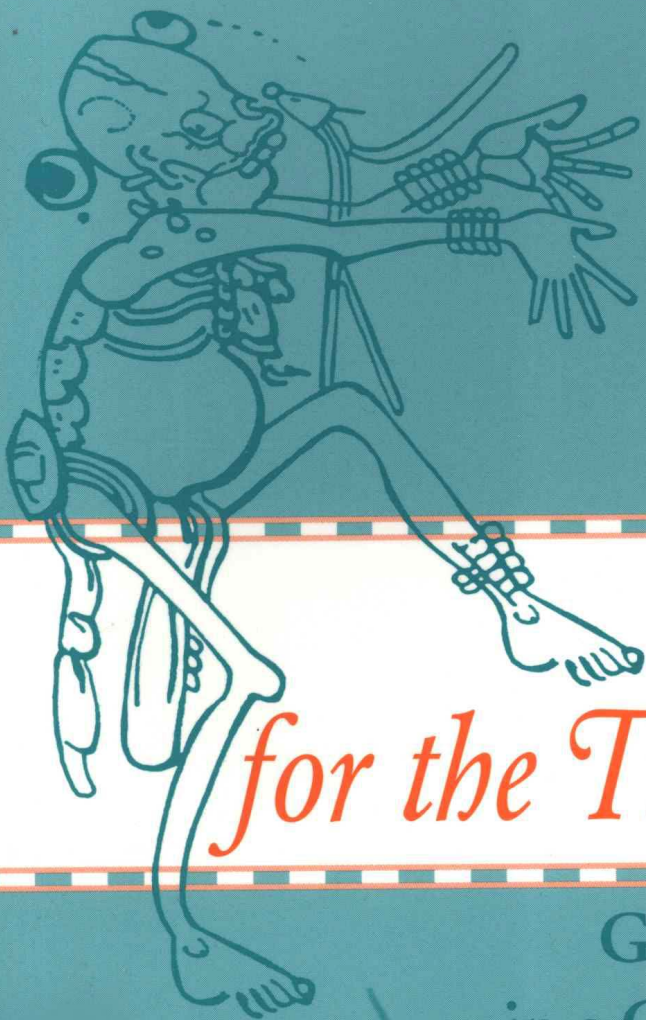

Last Rites for the Tipu Maya

Genetic Structuring in a Colonial Cemetery

KEITH P. JACOBI

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Last Rites for the Tipu Maya

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INTRODUCTION

Ticks on the Hands of the Tipu Maya

> To Dream About . . . Ticks on your hands . . . Means That . . . Death is coming soon (refers to earth on your hands in the cemetery). Steggerda 1941:59

> The Maya hesitate to establish a new cemetery plot, for such ground will demand a greater proportion of dead than an old cemetery would.
>
> Steggerda 1941:63

Teeth are not everlasting, but they come close. Admittedly, they are destructible, but they present an exceptional challenge to the natural elements to break them down. It is because of enamel, the hardest substance in the human body, that teeth linger when their owners have become memories on the landscape. It is often a tooth that remains as the last tangible evidence of a living creature. Thus it is this remaining vestige that interests scientists doing human osteology or, more specifically, dental anthropology. To these researchers, teeth can narrate a tale about an individual or group of individuals. This narrative reveals information about biological health, diet, cosmetic alteration, trauma, and the genetic structure of an individual or a population. This genetic structure also provides a basis for examining an individual's relationship to others in a population.

Although teeth speak of many things, this study will focus on data gathered about the dental genetic composition of an archaeologically derived Maya population from historic times and subsequently use the teeth to investigate associations or relationships within that group. This study is an analysis investigating both the morphological and metric variations of the teeth.

The Maya population of this study lived at the site of Tipu, Belize. Archaeological excavations conducted there revealed Spanish influences: a town, a *ramada* chapel called a colonial *visita* mission, and a chapel cemetery (Cohen et al. 1989; Cohen et al. 1994:122). As early as A.D. 1544, the Spanish managed to bring the Tipu area into the outer sphere of their southern influence. At this time, these European outsiders made architectural modifications to various existing structures within the Maya community. Although the Spanish political influence was minimal, Christianity was a more visible presence. By A.D. 1567–1568, Tipu had taken on the design of a small Spanish

town with a central plaza surrounded by a chapel and other buildings in the colonial style (Graham et al. 1989). Spanish interest in Tipu remained strong until A.D. 1707; in that year, the Spanish set their sights on other areas of conquest.

Excavations within and around the colonial *visita* mission uncovered the remains of approximately 600 individuals. The primary use of these burial areas was between A.D. 1568 and A.D. 1638, this latter year marking the Maya's rebellion against the Spanish (Cohen et al. 1989; Graham et al. 1989; Jones 1989). Individuals interred within the Tipu chapel and adjoining area proved to be exclusively Maya, and they constitute the largest number of Maya burials from contact times that have been excavated in a single cemetery.

The Tipu chapel and its burials provide a unique opportunity to investigate the interrelationships of an interesting flock of parishioners. Here at Tipu two cultures met: the Maya with a long-standing collection of their own religious beliefs, and the Spanish with an agenda of religious subjugation, leading ultimately to the prospect of political control. The first Spanish emissaries were friars of the Catholic Church. They found themselves few in number in the remote hinterlands of contact while the Maya were present in what must have seemed a multitude. However, these friars would have regarded the conversion of the Tipu Maya as the challenge that God had given them. It was a challenge that they would undertake with zeal to ensure that the Maya worshipped the Spaniards' God according to the traditions of the Spanish Catholic Church. With the intent of being closer to God and spreading His word, the friars devoted themselves to their work. How would the Maya respond?

Do the Tipu chapel and the individuals buried there give evidence that the friars met some of their goals of conversion, including influencing burial practices? Do the burials exhibit the pattern of possible Spanish influence found at historic churches at Lamanai in what is now modern Belize, or at Tancah, another Yucatán settlement in the state of Quintana Roo? Miller and Farriss (1979) describe the Tancah site as having burials within the church and its surroundings. Also at Tancah there is the possibility of sex segregation in burial placement, a practice that adheres to the Spanish custom of segregation in worship. Does this take place at Tipu, too? Or does the Tipuan mortuary record reflect what Douglass (1969) found in a Spanish Basque village? There, parishioners were buried in *sepulturies,* which are burial plots in the church floor designated for specific landholders. Finally, does the Tipu burial program merely show the Maya adaptation of the visiting friars' presence rather than an espousal of portions of their Catholic theology? Did the Maya simply continue their precolonial practice of burying their dead below household floors and temples, but with use of this new location beneath the Catholic church? In addition to consideration of various questions such as these, the Tipuan mortuary record was examined for evidence of migrant population

groupings, familial and temporal units, and Spanish individuals, including friars.

The detective work involved in the analysis of human remains takes an investigative approach. Non-metric and metric skeletal traits derived from the skull and axial and appendicular skeleton are often used in the study of human morphological variation (e.g., Buikstra 1976; Droessler 1981; Conner 1984, 1990; Hauser and De Stefano 1989). The traits are used to investigate relationships between or among population groups. Teeth are analyzed for morphometric information as well. Previous investigations recorded dental non-metric and metric characteristics of populations from large geographic areas (Dahlberg 1951; Moorrees 1957; Turner 1985; Kieser 1990:127–61). Populations have also been subdivided into single geographic areas and/or regional populations in studies such as Lukacs and Hemphill's (1991) temporal investigation of Baluchistan or Harris and Bailit's (1987) work on populations in the Solomon Islands and Oceania. Barksdale (1972) and Boyd (1972) chose to do morphometric analysis on an even narrower subdivision when they investigated the different village populations included in the Kainanut language family of people in the Eastern Highlands of New Guinea (Littlewood 1972). The dental genetic structure of a population can be subdivided further to focus on the extended family or immediate family (Harris and Weeks 1973). This particular study looks at the geographical/regional, temporal, and family influences on the Tipuan genetic structure.

The teeth recovered from Tipu have weathered well and show minimal amounts of dental wear. Therefore, the traits selected for examination provide an accurate record of morphological variation and genetic relationships at Tipu. Each tooth yields a number of dental features and measurements that help to distinguish genetic variation in the Tipu population.

The data from the colonial Maya teeth at Tipu are analyzed to create a complex of Maya dental traits indicative of that population, to search for family groups within the cemetery, to assess the degree of Spanish admixture at Tipu, to compare the similarities and/or differences of individuals within the Tipu cemetery, and finally to compare the similarities and/or differences of the Tipu Maya from other prehistoric, historic, and modern Maya groups. In addition, the analysis examines several archaeological and ethnohistorical theories about Tipu life at the time of contact, traditional Spanish Catholic burial practices at Tipu, and influxes of Maya refugees to Tipu.

Chapter 1 briefly recounts the missionary efforts of the Spanish friars among the Maya in the Yucatán, proselytizing that laid a foundation for Spanish colonization, and describes the Spanish Catholic chapels and churches built in the Yucatán. The archaeological investigations at Tipu and at Lamanai, another important mission site, are summarized. The chapter concludes with an analysis of ethnohistorical accounts of the Catholic friars' arrival at Tipu and subsequent events of importance.

Chapter 2 opens with a presentation of the prevalent beliefs about death and burial imparted by the Spanish friars to the Tipu Maya. The chapter also examines the evolution of these European burial practices, with specific examples of early European Catholic burial grounds.

Chapter 3 describes the Maya views of death prior to Spanish contact, archaeological information about early Maya burials, and the superimposing of Catholic beliefs on the Maya. The chapter concludes with information from archaeological sites other than Tipu to illustrate the general Spanish Catholic influence on burial customs in the New World.

A review of the literature of dental genetics, non-metric and metric traits, and the genetics of tooth development is found in chapter 4. In addition, the chapter includes a review of studies that use metric and non-metric skeletal and dental traits to examine variation within and between population groups, and examines the concordance between non-metric and metric traits.

Chapter 5 offers a review of previous Maya osteology and dental research. Predicted patterns are discussed in light of what is known about Maya and Spanish Catholic mortuary programs at a church cemetery. Predictions are made about the genetics of the Tipu church population and the relationship of this population to other Maya historic as well as prehistoric populations.

Chapter 6 focuses on the materials and methods involved in the study of the teeth of the individuals at Tipu. Techniques for evaluating, scoring, and statistically analyzing the traits on the teeth are reported.

Finally, the results and conclusions derived from the analysis of the dental remains at Tipu are provided in chapters 7 and 8.

The history of the Maya and their relationship with the Spanish will never be known for certain because nothing short of a time machine for being there can give us knowledge of the actual facts and events. Yet one must keep in mind the positive views of noted historian Henri Frankfort (1974:25), who advocated a multiplicity of approaches in the search for a key to the past. The investigation of dental traits certainly is an important approach. Along the same line, Thomas (1989) and Graham (1990, 1991) propose multivariate approaches to provide openings that eventually converge to either a single exit of historical truth or multiple understandings and overlays of history; the latter admittedly may often be perplexing, but nevertheless represents a step forward in the progression toward historical fact.

I Spanish Missions and the History of Tipu

Any Catholic priest entrusted with the "care of souls" has the duty to keep watch over the faith and morals of those in his charge. The Spanish missionaries, with the full support of the Crown, interpreted this duty broadly as a mandate to supervise every aspect of the Indians' lives from birth to death and to modify them when necessary in accordance with the church's teachings. Included within their purview were such obvious matters as attendance at mass and catechism classes, as well as many matters not so obvious. They concerned themselves with standards of dress and cleanliness, curing of the sick, patterns of residence, design of houses, inheritance of property, choice of marriage partners, and travel away from home—to give only a partial idea of the clergy's agenda. Farriss 1984:91–92

. . . it is necessary for preachers and confessors, who are the true physicians of souls in spiritual sicknesses, to gain a knowledge of spiritual maladies and the medicines they require. The preacher must know the vices of the country to exercise his zeal there, and the confessor must be no less conversant with those vices, to the end that he may make them the basis of his questions and understand what his penitents are accusing themselves of in their confessions. Ministers engaged in conversion should not limit themselves to saying that the Indians have no sins other than drunkenness, thievery, and carnal excesses, for there are grave faults among them which insistently call for remedy. The sins of idolatry, the rites of a paganism, the auguries and superstitions connected with it, have not completely disappeared. In order to preach against such practices and learn whether they still exist, one must know how the natives used them in the time of their idolatry, for unless we have acquired knowledge [of these practices], we allow them to commit many idolatrous acts in our presence without our being aware of them, and a few of us try to excuse them by saying that these are only childish, foolish, and nonsensical things. In fact, they are ignorant of the true source of such acts, and, whether it is a matter of idolatry or not, the confessors never call their penitents to account. They know nothing of the language necessary for an investigation, and besides they would not understand the explanations.
Sahagún 1880:5–6, in Ricard 1966:40

The Spanish encountered Maya who in their eyes had "grave faults . . . which insistently call for remedy" (Sahagún 1880:5–6, in Ricard 1966:40). This chapter takes a look at the modus operandi of the Spanish invaders and how the Catholic friars "entrusted with the 'care of souls'" furthered the conquerors' goals (Farriss 1984:91–92). The text also describes the four types of churches and chapels established by the friars in the New World and compares the tenure of the missions at Tipu and Lamanai. Last, it examines the archaeological site at Tipu and gives a historical survey of that settlement. The Itzá expeditions that influenced the population of the Tipu cemetery are included in this account.

FRIARS' FIRST CONTACT WITH THE MAYA

During the sixteenth and seventeenth centuries, the Spanish occupation forces had strict control over some regions in Mesoamerica while other regions were merely influenced by the Spanish, never coming under direct political control. Tipu, Belize (Figure 1.1), was one of these latter areas, under the umbrella but not the ruling thumb. It was a Maya settlement in the western part of what is now known as Belize, situated on the Belize River, which itself served as a geographical marker delimiting the southernmost boundary of Catholic Christianity.

Tipu was one of the Christian outposts or *visitas,* so named because individuals of the Franciscan Order "visited" them to convert indigenous inhabitants or to collect contributions (Jones 1989). These friars were "circuit-riding priests" who served the chapel at Tipu (Cohen et al. 1994:121). The Tipu *visita* was within the parish or *curato* of Salamanca de Bacalar, as described in the Guillen de las Casas Memoria of A.D. 1582 (Scholes et al. 1938:51–65). More than 175 miles of water route separated Tipu from Salamanca de Bacalar in Quintana Roo, a Spanish stronghold conquered in A.D. 1543 (Scholes and Thompson 1977:44; Jones and Kautz 1981:9). Friars who wanted to visit the Tipu settlement had to survive an arduous journey through an alien subtropical world. The rivers were filled with rapids, and the terrain presented a cathedral of green whose heights housed black howler monkeys (*Alouatta pigra*), anteaters (*Cyclopes didactylus*), hundreds of orchids, and more than 500 species of birds. The friars were in the domain of the puma (*Felis concolor*), ocelot (*Felis pardalis*), and jaguar (*Panthera onca*), as well as nine species of poisonous snakes, including the lethal yellow-jawed tommy goff, also known as the fer-de-lance or terciopelo. And always, along with giant cockroaches and armies of ants, there were the invisible gnats and the mosquitos that gorged on every available neck and ear, often transmitting tropical fevers (Anderson 1983; Nowak and Paradiso 1983; Pariser 1992). Thus, for much of the time before A.D. 1650, the Maya settlement of Tipu remained a torture to visit (Scholes and Thompson 1977:48).