THE FAITH OF SACRIFICE:

COMMITMENT AND COOPERATION IN CANDOMBLÉ,

AN AFRO-BRAZILIAN RELIGION

by

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A Dissertation submitted to the

Graduate School-New Brunswick

Rutgers, the State University of New Jersey

in partial fulfillment of the requirements

for the degree of

Doctor of Philosophy

Graduate Program in Anthropology

written under the direction of

Lee Cronk

and approved by

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New Brunswick, New Jersey

October, 2008

ABSTRACT OF THE DISSERTATION

The Faith of Sacrifice:

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Religion has long been assumed to promote group cohesion and solidarity. Recent developments in evolutionary anthropology and cognitive science have begun to provide clues to the mechanisms by which this may occur. A central idea that has emerged from this literature is that costly expressions of religious commitment may serve as honest signals of cooperation toward other group members. This dissertation explores this hypothesis in the context of Candomblé, an Afro-Brazilian religion centered in Northeastern Brazil. Candomblé is organized around independent communities called *terreiros*, which depend on the collective efforts of their members to succeed. Belonging to Candomblé demands constant investments of time and effort from its members in terms of ritual participation. Thus, the religion presents an ideal setting to explore the relationship between religious commitment and intra-group cooperation.

Quantitative and qualitative research was carried out over a period of fourteen in the city of Salvador da Bahia. Initially, a survey was conducted to understand the variability present in the population of terreiros. Although Candomblé has long been the subject of ethnographic inquiry, there is a dearth of material on the internal sociology of terreiros and the composition of their membership. The information collected during this time was essential to understand the dynamics that operate within these religious communities. In subsequent months, systematic data were collected from a sub-sample of thirteen terreiros. Instruments included a religious commitment scale designed specifically for Candomblé devotees, an individual questionnaire, and an experimental economic game. Results show that individuals who demonstrate higher levels of religious commitment cooperate more in the game and report more instances of past cooperation toward other group members. Those who provide more cooperation to others also report receiving more cooperative acts in return. In addition, those individuals who may have more to gain from group-belonging also display higher religiosity. Apart from income, other demographic variables had little effect on various measures of both religious commitment and cooperation. Results from these analyses are discussed within the framework of signaling theory and taking into account the historical, economic and social context of Candomblé.

DEDICATION

To my parents, Jorge and Carmin, because I owe them everything. With all my love.

A mis papás, Jorge y Carmin, porque les debo todo. Con todo mi amor.

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CHAPTER ONE: INTRODUCTION

1. Anthropology and Religion

The study of religion is intimately linked to the development of anthropology. The subject constituted the theme of the earliest works of anthropology as a distinct field and the subsequent works of major theorists have been variously concerned with defining, understanding, deconstructing or interpreting ritual and belief.

In the last thirty years, however, as has happened with other concepts that originally were central to anthropology, religion has been questioned by scholars as a legitimate category of study. The post-colonial critiques of theorists such as Said (1979) and Asad (1982) that questioned the validity of a construct rooted and defined by Western standards have found a large audience in the field. This view can be summed up in Asad's principal point that "there cannot be a universal definition of religion, not only because its constituent elements and relationships are historically specific, but because that definition in itself is the historical product of discursive processes" (1982/1993: 29). These evaluations have been an important antidote to simplistic conceptions of religion and highlighted the delicate role of the ethnographer as interpreter of a different reality. They have brought to the forefront of the field the need for constant awareness of the specificity of religious practices and beliefs (as of other cultural expressions) and emphasized the necessity of careful self-reflection on the part of the investigator.

On the other hand, the refutation of universalistic definitions or explanations has excised discussions of the origin of religion from anthropological scholarship. The evolutionary frameworks of the turn of the 19th century are usually the cited representatives of such attempts and rightly described as ethnocentric and naïve. Indeed, the works of early scholars of the anthropology of religion did suffer from

these shortcomings. They can provide little help in attempting to understand the why or how of ritual and belief. But these theories have long ceased to have an impact. Instead, emerging work from completely different perspectives has begun to provide a fresh and novel perspective on classic questions. This work represents independent strands of theory and research that have begun to coalesce as a distinct field (see Barrett, 2000; Bulbulia, 2004a; Bulbulia *et al* 2008). Broadly, these can be characterized as evolutionary and cognitive studies of religion. As their names indicate, these bodies of work differ in theoretical orientations, methodologies, and research aims. Theories of the evolution of religion have centered on understanding ultimate causes of religious behavior and its possibly adaptive characteristics. The cognitive science of religion, on the other hand, has been more concerned with proximal mechanisms that govern the acquisition and transmission of religious beliefs and tends to view these as by-products of other psychological processes. Both areas are also multidisciplinary, so that psychologists, cognitive scientists, evolutionary biologists, neurobiologists, religion scholars and of course, anthropologists, have contributed to the discussion. Where these literatures converge is on the common interest of understanding religion as a natural process and in a manner that is consistent with evolutionary theory.

In order to attain a coherent dialogue on these issues, it is of course crucial to agree on the topic of study. But as the post-modern critiques point out, this may be more complicated than it appears at first glance. Any definition of religion will immediately encounter exceptions and variations. However, because religion is not defined by unambiguous boundaries does not mean it cannot be described and studied in meaningful ways. Gender, ethnicity, and art are similar constructs in that they are highly variable across cultures and do not fit neatly into a bounded category. Still,

there are entire fields dedicated to the study of each of these concepts. A clear-cut definition of religion, then, is not only impossible but also unnecessary. A more fruitful approach is to identify the elements that constitute the subject of study. Thus, religion can be understood as a system that encompasses five distinct elements:

1.) Belief in a supernatural reality

2.) Communal rituals

3.) Strong ties to the moral order

4.) Evocation of profound emotions

5.) Presence of specialists

Religion is unique and identifiable because all these elements are present. In this light, religion can indeed be described as a universal of human society (Brown, 1991). Other concepts in what might be termed the religious continuum may possess some, but not all these characteristics. In the West, for example, superstitions, magic, and divination all share something of a faith-based belief but do not constitute religion because they do not involve a community of individuals that perform emotionally meaningful rituals together. Indeed, the question of why some beliefs become religious and others do not is in itself an interesting question.

While religion as identified above is the broad theme of this dissertation, the main focus is on only one element. I am primarily concerned with exploring the evolutionary processes that govern religious ritual. More specifically, this dissertation explores the intersection of ritual, religious commitment (which can be understood as one of the deep emotions that religion excites) and intra-group dynamics. To explore these issues, I rely on what I will term the signaling theory of religion based primarily on the work of Irons (e.g. 2001) and Sosis (e.g. 2003, Sosis and Bressler, 2003; Sosis and Ruffle, 2003). In this framework, costly or hard-to-fake displays of religiosity are

viewed as expressions of commitment to the group that translates into cooperativeness. The broad aim is to understand how religion can have evolved to foster intra-group cooperation and solidarity. In the next section, I provide a very brief summary of the research setting where the project was carried out.

2. Research Setting

The research was conducted in the city of Salvador da Bahia in Northeastern Brazil[1]. Salvador is the fourth largest urban metropolis of the country and widely considered the center of Afro-Brazilian culture. I focused on communities of Candomblé, a religion that combines ancestral African elements and features of Catholicism. Candomblé developed around Salvador and other areas of that region, although it now has an important presence in the large cities of the South (Prandi, 1991). The religion acquired its current structure in the early to mid 19th century (for historical accounts, see Butler, 1998; Harding, 2000), although the roots of Afro-Brazilian religion run much deeper (see Sweet, 2003). Candomblé is based on the cult of the orixás, spirits that represent natural forces and which can become manifested in followers through possession and trance. The religion is not organized under an over-reaching authority, but structured around independent temple communities or *terreiros* which possess a strict internal hierarchy (see Bastide, 1958/2001; Lima, 2003).

Candomblé has long attracted the attention of Brazilian and foreign scholars (see Silva, 2000 for an analysis of the relationship between Candomblé and ethnography). There is a vast ethnographic literature that begins with the works of Nina Rodrigues and at the turn of the century and a paper presented by Manuel Querino in 1916. Interest waned for some years, only to reappear in full force in the

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[1] Bahia is the name of the state where Salvador is located, but is often used to refer to the city as well. To avoid confusion, throughout the dissertation I will use Salvador to refer to the city and Bahia to refer to the state.

1930 and 1940's. Scholars from this period, such as Edson Carneiro, Melville Herskovitz, Ruth Landes, and Arthur Ramos, concentrated much of their efforts in describing, documenting and attempting to understand what amounted to a foreign religious universe in the midst of an increasingly Westernized country. In the 1960's, Roger Bastide and Pierre Verger focused on tracing the connections between Candomblé and its African predecessors. These classic works set the themes that were to dominate much of the subsequent scholarship on Candomblé in later years, and in many cases still do. Current authors have produced increasingly detailed accounts of Candomblé ritual elements, such as the preparation and symbolism of food (e.g. Lody, 1998), ethnobotany (e.g. Voeks, 1997), and mediumship (e.g. Wafer, 1991), and continued to explore the relationship of Candomblé with its African roots and ensuing notions of authenticity and tradition (e.g. Capone, 2004). Much less attention has been paid to the sociology of the religion and the changes it is undergoing (but see Amaral, 2002; Pierucci and Prandi, 1996; Prandi, 1991, 1996, 2005). There is a dearth of information on the formation and disintegration processes of terreiros, the demographic composition of terreiro membership, or the internal mechanisms and conflicts of these religious communities.

3. Aims and Significance

This dissertation combines theoretical and ethnographic interests with two objectives in mind. One, to present evidence that tests the signaling theory of religion and open new lines of inquiry in this direction. Second, to investigate aspects of the social organization of Candomblé and contribute to fill a gap in the ethnography of the religion. These two themes are intertwined throughout most of this dissertation, but there are sections that are of particular importance to each.

The more general theoretical orientation may appear incompatible with the specificities of ethnographic investigation. A useful way to conceptualize the dialogue between these two objectives is to keep in mind the differences and utilities of ultimate and proximate levels of explanation. Evolutionary theories, including signaling theories of religion, seek to provide an understanding of the distant causes of behavior. In this case, the aim is to understand the reasons why, in the evolution of our species, religion came to be and occupy a crucial place in every human society. From this perspective, parallels between situations that differ widely in times and space can be drawn and generalizations are necessarily made. Ethnography, on the other hand, is a proximal explanatory approach that focuses on the nuances and infinite variations of human interaction and experience. With this kind of specificity there are also limitations to the scope of questions that can be asked and answered, since they will only apply to a particular situation. Many other explanatory frameworks lie in-between. Cognitive studies of religion, for example, are situated more proximally to the phenomenon we are trying to explain than evolutionary explanations, just as a person-centered ethnography is much more proximal than a historico-comparative approach.

What this dissertation attempts to accomplish is to interweave these two levels of explanation in order to obtain a more balanced and complete picture of the subject of study. The work is informed by a body of literature that seeks ultimate causes, but placing these finds in the context of ethnographic interpretation is necessary to ground the discussion on observed behavior and on subjects' own experiences and interpretations. Religion is a powerful catalyst of human experience and meaning that cannot be only studied and analyzed through the abstractions of experimental work. Ethnographic fieldwork is essential to truly understanding the realities that lie behind

concepts and theories. This kind of work can give rise to new and often unexpected questions and avenues of research.

The significance of this dissertation lies in several points. First, this work contributes to remedy the paucity of ethnographic research in the field of evolutionary and cognitive studies of religion. Second, the theoretical concerns of the project have been primarily discussed in the context of major world religions. In contrast, the focus here is on a local religion, adding to the cross-cultural body of evidence that is badly needed in the field. Finally, the work combines quantitative and qualitative methodologies to gain the advantages of systematic hypothesis-testing and detailed ethnographic description.

4. Dissertation Overview

The dissertation is organized in four main chapters. The first chapter examines the literature on the evolutionary and cognitive science of religion. I provide brief summaries of major theories and empirical findings, pointing out the strengths and weaknesses of each. I also indicate key issues and questions in the field and suggest avenues for future research. The second chapter describes the research setting and reviews the historic and ethnographic background of Candomblé. This section begins with a description of the city of Salvador da Bahia and the locations where most of the fieldwork was conducted. It sketches the ritual and social organization of Candomblé terreiros, emphasizing those elements that are particularly germane to the theme of the dissertation, such as the history of cooperation of the religion and the commitment costs that members undertake. Chapter three discusses data on a sample of approximately fifty Candomblé terreiros that were collected as the first stage of the research. The first half of the chapter is concerned with methodology and statistical analyses that begin to explore some of the general characteristics of these

communities. I also discuss factors that lead and motivate individuals to become part of the religion. In the second half, I present four vignette descriptions that illustrate the history and functioning of typical terreiros. This section provides a richer interpretation of the systematic data and highlights current issues that are important in the broader Candomblé community. The fourth chapter centers on hypotheses-testing. I first outline data-collection methods and provide extensive discussion of the measures used, as they reflect concepts that are essential to the study. I then describe the main individual hypotheses of the project that represent the main findings of the dissertation. This is followed by statistical analyses and discussion of results. I endeavor to complement systematic findings with ethnographic detail to provide examples of theoretical concepts. In the conclusion, I evaluate some of the major issues that emerge from the research and suggest directions for further theoretical and experimental work.

5. Notes

The language of Candomblé is filled with words of Yoruban origin, but some of these terms also have widely-used equivalents in Portuguese. For example, the Yoruban *yalorixá* or *ialorixá* is used interchangeably with the Portuguese *mãe-de-santo*. Since I have no knowledge of Yoruban, throughout the text I rely on the orthography and terminology used by most researchers of Candomblé. It is important to note that these terms refer to Yoruban candomblés from the Ketu or Nagô tradition. Candomblés that affiliate with other traditions, such as Angolan, have their own ritual terminology, although for the most part the underlying concepts are the same.

The names of all persons and identifying places have been changed to protect the privacy of informants. Some neighborhood names have been kept since these are

large areas where many terreiros are located and identification of individuals is highly unlikely.

The most common name for a Candomblé temple is "terreiro", but other terms include *roça* (farm), *casa* (house), *axé*, or simply the lower-case "candomblé". Here, I generally use "terreiro" but sometimes "house" or "candomblé" to avoid excessive repetition.

All translations in the following pages are mine unless otherwise noted.

CHAPTER TWO: THEORETICAL BACKGROUND

1. Introduction

While the evolutionary study of social behavior has become a firmly established discipline in the last thirty years, it has only very recently concerned itself with religion. Nevertheless, there is now a growing literature that represents novel and interdisciplinary work from biologists, psychologists, cognitive scientists, and anthropologists who converge in a common interest: explaining religion in ways that are consistent with evolutionary theory and ordinary psychological capacities.

While empirical substantiation is in its infancy, theoretical work has yielded much fruitful work. Two main approaches have emerged. One is concerned with the social aspects of religiosity, specifically with how religion may promote cooperation and influence the creation and maintenance of moral systems (e.g. Alcorta and Sosis, 2005; Bering and Johnson, 2005; Bulbulia, 2004; Cronk, 1994; Irons, 1996; 2001; Johnson and Bering, 2006; Sosis, 2003, Sosis and Bressler, 2003; Sosis and Ruffle, 2003, 2004; Wilson, 2002). The other is focused on the cognitive underpinnings of religion and on exploring how innate cognitive biases can account for the acquisition and transmission of religious concepts (e.g. Atran, 2002; Barrett, 2004; Bering, 2002; Bering and Bjorklund, 2004; Boyer, 2001, 2006; Guthrie, 1993; Dawkins, 2006; Dennett, 2007; Kirkpatrick, 2004; Lawson and McCauley, 1990, McCauley and Lawson, 2002; Tremlin, 2006; Whitehouse, 2004).

These approaches are the result of work in complementary but distinct disciplines. They differ in theoretical assumptions and content focus. Social solidarity theories of religion tend to emphasize religious behavior and ritual rather than beliefs, have an explicit evolutionary orientation, and consider religion as adaptive or as having adaptive value. Cognitive theories, on the other hand, focus on religious beliefs and

proximate mechanistic processes rather than ultimate causes, and tend to view religion

as a by-product of other psychological capacities. Although representing separate

lines of inquiry, there is now sufficient dialogue between these two broad areas to

consider them part of the same emerging discipline (see Bulbulia, 2004a, Bulbulia *et*

al, 2008).

This characterization does not exhaust the range of biological approaches to

religion. In some intriguing experiments, areas of the brain have been associated with

mystical states using neuroimaging technologies (Newberg *et al*, 2001; Persinger,

1987). Archaeologists have begun to explore cognitive explanations for the dramatic

cultural changes found in the Upper Paleolithic that suggest the emergence of

shamanistic religion (Lewis-Williams, 2002; Mithen, 1996). There has also been

theoretical work that links charismatic religious leadership to sexual selection (e.g.

Miller, 2000; Stevens and Price, 2001; Sapolsky, 1998). In this chapter, however, the

discussion will be limited to evolutionary and cognitive approaches to religion. First, I

will provide a brief overview of the evolution of cooperation and signaling theory,

which are essential background for understanding the principal theory that informs

this dissertation. Second, I will discuss evolutionary theories of religion that focus on

social solidarity explanations. Third, I will review work on the cognitive science of

religious belief and ritual. In the final section, I will point to important needs of the

field and suggest directions for further study.

2. Evolutionary Approaches to Religion

Adaptive reasoning is the main tool of evolutionary studies. Physical and

behavioral traits are understood as designed by natural selection to increase fitness. In

this view, the sacrifices that most religions demand are particularly puzzling.

Religious traditions the world over require adherents to follow rules and codes of

conduct that seem absurd to outsiders and which can even be detrimental to physical well-being. Painful initiation rituals, food offerings and animal sacrifices in times of scarcity, or hours spent in meditation or prayer seem, at first glance, glaring departures from what constitutes adaptive behavior. Moreover, religious beliefs bear so little relation to the physical world that is it difficult to understand how such dissociation from reality could have been beneficial enough to become prevalent during human evolution. Praying to be saved from a flood rather than running for the nearest hill simply does not seem like a particularly effective strategy. Yet, not only are religious beliefs widespread, but the feelings and devotion that they inspire run so deep as to motivate the most heroic, and also most heinous, of actions.

Evolutionary perspectives on religion have centered on trying to understand how beliefs and rituals may have been adaptive for our human ancestors. This has led to renewed interest in the idea that religion fosters intra-group cohesion and cooperation. This notion has, of course, been a long-standing assumption in anthropology (e.g. Durkheim, 1915/1965; Geertz, 1973; Rappaport, 1999; Turner, 1969). Evolutionary approaches provide novel ways of examining this idea and give rise to specific predictions of the kinds of behaviors that we should expect from believers. These theories are intimately linked to the study of cooperation and altruism, which is not limited to humans. Other organisms regularly act altruistically by helping others at the expense of individual welfare (e.g. ants at a colony, a bird alerting others to the presence of predators). In the specific case of our species, explaining prosociality is particularly important for scholars that understand human behavior as the maximization of individual benefits. Rational choice theorists, for example, have struggled to understand how collective action can arise and be maintained without external rewards or punishments (see Olson, 1971; Schelling,

1980). The difficulty was also recognized by Darwin who found it "scarcely possible…that the number of men gifted with such (moral) virtues, or that the standard of their excellence, could be increased through natural selection…" (1871/1998: 163).

To understand how altruism in humans and other organisms can have evolved, theorists posit four mechanisms: kin selection or inclusive fitness, reciprocity, group selection, and costly signaling. Kin selection or inclusive fitness (Hamilton, 1964) establishes that, because related individuals share a portion of identical genetic material, helping kin is an evolutionarily beneficial strategy under some circumstances. The second mechanism is reciprocity (Trivers, 1971), characterized by a "you scratch my back, I scratch yours" scenario in which an altruistic act is later repaid by the original receiver of the interaction. Indirect reciprocity (Alexander, 1987; Nowak and Sigmund, 1998) extends this original principle to suggest that altruism among members of a group may come back to the actor through the action of those other than the original beneficiary of the altruistic act. Indirect reciprocity may be particularly relevant in small groups where members can easily monitor the actions of cheaters and cooperators.

Group selectionist accounts of altruism are controversial (see Williams, 1966), but remain important for some theorists and have recently enjoyed renewed interest (e.g. Boyd and Richerson, 1990; Gintis, 2000; Wilson and Sober, 1994; Sober and Wilson, 1998). In these models, altruistic tendencies can evolve because groups with altruistic members will outcompete those with more "selfish" members. Such scenarios focused on inter-group competition are particularly relevant in discussions of cultural evolution (e.g. Boyd and Richerson, 1982, 1985; Henrich, 2003; Soltis *et al*, 1995; Wilson, 2002).

Finally, costly signaling has been proposed as an additional mechanism by which altruism can evolve in organisms with higher cognitive abilities (Gintis *et al*, 2001; Smith and Bliege-Bird, 2000; Zahavi, 1977b, 1995). In this scenario, altruism can be understood as a purposefully expensive act that honestly reflects the individual's willingness to help others. Altruistic individuals should benefit from their actions by attaining a favorable reputation and becoming a desirable mate or coalitional partner.

In this brief overview, I have chosen to use "altruism" rather than "cooperation" because that it the specific term used in biology, where these theories have been developed. In the evolutionary literature, terms like altruism, cooperation, prosociality, and even collective action are often used interchangeably. This is not strictly accurate and may lead to confusion. The biological definition of altruism is specific and refers an act that is harmful to the individual but beneficial for other members of its species. Awareness on the part of the recipient that an altruistic act has been committed is not required. Cooperation, on the other hand, can be defined as "common effort"[2]. Thus, it implies an interaction where all individuals are aware of the goal and all are expected to act to achieve it. The goal may not be equally beneficial to all or it may change with each cooperative act, which opens the door to cheating or defection. While encouraging general altruism is an important axiom of some religious traditions (e.g. "love thy enemy"), the focus of this dissertation is on a more specific kind of prosocial behavior. The principal theme here is how ritual can foster cooperation, or more specifically, how religious signaling can promote and facilitate inter-personal relationships of mutual help.

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[2] Merriam Webster Dictionary

2.1 Costly Signaling Theory

Versions of costly signaling theories have been independently developed in various fields. In this view, traits and behaviors that are costly, wasteful or detrimental to individuals are understood as hard-to-fake forms of communication. At the turn of the 20th century, economist Thorstein Veblen introduced one of the earliest versions of the idea. He argued that conspicuous consumption explained the spending patterns of the North American bourgeoisie. The excessive spending of the wealthy classes, although appearing irrational, could be understood as a way of displaying high social standing. A more recent conception of hard-to-fake signaling is Frank's (1988) theory of social emotions. He argues that sentiments like guilt or shame may serve to honestly signal commitment in interpersonal relations and prevent individuals from defecting collective efforts. Anthropologists have also theorized on the obligations and implications of expensive and wasteful gifts (Mauss 1954/2006).

In biology, signaling theory has developed primarily in the area of animal communication and more specifically, in the contexts of sexual selection and predation (for reviews, see Bradbury and Vehrencamp, 1998; Hauser, 1996; Maynard Smith and Harper, 2003). The essential point of is that a signal should honestly demonstrate an underlying quality that is otherwise difficult to assess. Maynard Smith and Harper provide a useful characterization. They define a signal broadly as "any act or structure which alters the behaviour of other organisms….and which is effective because the receiver's response has also evolved" (2003: 3).

A particularly influential formulation has been Zahavi's "handicap principle" (Zahavi, 1975; 1977a; Zahavi and Zahavi, 1997). This is the argument that some traits can act as reliable signals of an otherwise non-observable quality because they are costly to produce or maintain. A famous case of a handicap signal is the peacock's

tail. A male that is able to survive while maintaining such a cumbersome and extravagant feature communicates his superior genetic fitness to females, becoming more attractive and more likely to reproduce and pass on that trait. There have been numerous refinements to Zahavi's handicap principle. An important distinction was made by Guilford and Dawkins (1991) who distinguish between efficacy and strategic costs. The former are the inherent costs needed for any communication to occur, while the latter are the additional expenses that ensure that only those individuals that possess the necessary underlying quality can emit the signal. This highlights the idea that a signal may be costly to produce (i.e. have a high efficiency cost) but not be a handicap because it is equally costly to all individuals in a population and all are capable of producing it. In general, then, a handicap must accurately communicate an underlying quality and individuals must differ in their ability to produce the signal in order to avoid rampant cheating (Grafen, 1990; Pomiankowski, 1987).

Nonetheless, there may be traits or behaviors that are not costly to produce and still honestly communicate underlying qualities. Enquist (1985) demonstrated that a signal that is not costly but has costly consequences if produced dishonestly is in fact a handicap because there is a punishment (i.e. costly consequences) for cheaters. Additionally, he notes that there are signals that are not costly but can only be produced by individuals with a specific underlying quality so they cannot be faked. To clarify the these differences, Maynard Smith and Harper (2003) divide the kinds of signals that will become important to this discussion into two categories: *handicap signals* (i.e. costly signals) which are honest because they are costly to produce or have costly consequences, and *indexes* (i.e. hard-to-fake signals) which are impossible or difficult to fake but are not necessarily costly.

However, if organisms have conflicting interests as it often happens, honesty may not be the best policy. Predator-prey relationships are the most obvious example of this tension (the predator wants to eat; the prey does not want to be eaten). In this case, deceptive signaling may evolve. Batesian mimics, organisms that mimic the coloration of poisonous species to repel predators, are a classic example of deceptive signals. A fruitful approach to signals that takes into account deception has been advanced by Dawkins and Krebs (1978; Krebs and Dawkins, 1984). These authors argue that we can expect an arms race to develop between signalers and receivers depending on what measure both share the same interests. Receivers have evolved more efficient ways of identifying manipulative signals and in turn, signalers are expected to develop signals that are more difficult to ignore or detect as manipulative. Furthermore, they argue that if transfer of information is beneficial for both, then signals should be simple and subtle. On the other hand, if there are conflicting interests, each party should become better at either producing or resisting deceptive signals, resulting in gestures that are prominent and complex. While deceptive signals may prove to be of particular importance to understand instances of human interaction, their role has not been systematically studied in this context. Most studies of costly signaling focus on traits or behaviors that honestly communicate underlying qualities. The next section reviews applications of signaling theory to religious behavior.

2.2 Costly Signaling and Religion

Anthropologists have utilized signaling theory to understand various aspects of human behavior. Departures from optimal foraging theory have been shown to conform to the conditions of costly signaling. Turtle hunting by Meriam Islanders (Smith *et al*, 2000; Smith and Bliege Bird, 2003) and torch fishing in Ifaluk atoll

(Sosis, 2001) are activities where the caloric return rates are not energy-efficient. Instead, participants that take part may be demonstrating underlying qualities such as superior strength or skill. These costly activities can translate into prestige or status benefits that ultimately may yield higher reproductive success. Signaling theory has also been fruitful in the study of human sexual selection. Brown *et al* (2005) found that in a Jamaican population, the dancing of more symmetrical men was judged to be more attractive by women. Because symmetry is thought be a reflection of developmental stability, dancing ability can be interpreted as a hard-to-fake signal of genetic quality.

Various scholars have converged on signaling theory to explain the social solidarity that seems to result from religion (e.g. Atran, 2002; Boyer, 2001; Bulbulia, 2004b; Cronk, 1994; Irons, 2001; Sosis, 2003). Several have drawn from the work of economist L. Iannaccone (e.g. 1992, 1994, 1995), who now spearheads a field he calls the Economics of Religion (see Iannaccone, 1998). Iannaccone's work does not have a specifically biological or evolutionary orientation, but instead uses rational choice theory to explain the ongoing importance of religion in North America and the dynamics of commitment and competition that operate in religious institutions. His original insight is that "strict churches" will be stronger and more successful than those which are laxer in their requirements because they will only attract members that are truly committed. Stringent entry costs and ongoing constraints on behavior will restrict participation only to those truly willing to pay the costs of belonging and prevent free-riders from gaining access to the social benefits the organization provides. Iannaccone's arguments have received criticism on a number of grounds, such as his failure to provide clear definitions or measures of strictness, strength and success (e.g. Bruce, 1999; Hadaway and Marler, 1996; Marwell, 1996). For example,

is the huge but often lax membership of the Catholic Church more or less successful than a small but tight-knit Amish denomination? A related issue is an inherent circularity in the argument: the strictness of churches is measured by the levels of commitment required, but their success is also a result of members' willingness to commit. Obviously, churches that only accept committed members will also have the highest levels of commitment. The use of broad databases, such as the General Social Survey, also presents difficulties for hypotheses-testing. For example, studies suggest that such measures vastly overestimate religious participation (Hadaway *et al*, 1993; Hadaway *et al*, 1998) and there is a narrow focus on Christian traditions which represent only a very specific configuration of religiosity. Although much more work needs to be done in this area (see Iannaccone and Everton, 2004), Iannaccone's work has spawned much interest within economy and political science and inspired fruitful work from evolutionary theorists.

Irons (1996a, 1996b, 2001) draws from this body of work to develop a more specific thesis centered on evolutionary theory. Irons contends that religion may have been instrumental in human evolution to overcome the collective action problem. As discussed earlier, the emergence and maintenance of cooperation is always threatened by individuals who seek to free-ride on the efforts of others. Although cooperation by all will provide greater benefits, the self-serving choice is to defect whenever possible. Nevertheless, it is clear that humans routinely identify with a particular group and create unified communities. Within evolutionary theory, the idea that religion serves to facilitate intra-group cohesion and success in inter-group competition has been a recurrent theme, although the mechanisms have not always been made clear (e.g. Alexander, 1987; Hinde, 1999). Irons argues that religion may have functioned as a display of commitment to the in-group. More importantly, he

breaks the circularity of this argument with the contention that religious ritual functions not only as a general signal of commitment to the group's doctrines or identity, but rather, of willingness to participate in cooperative interactions with other group members. Discussing the constant rituals of the Yomut Turkmen among whom he worked, Irons points out that, "one conspicuous message about social behavior conveyed by these numerous signals was a division of the human world into an in-group and an out-group, and a message of commitment to cooperation to the in-group" (2001: 300). Religious groups always require adherents to conform to particular rules and participate in activities that endorse the values of the community and are difficult for outsiders to fake. The public nature of many rituals allows individuals to monitor each other's behavior and ensure everyone complies with internal norms. Because rituals are costly or hard-to-fake, only those who are truly committed to the group and willing to cooperate with other members will comply with the group's demands. In this way, religion may serve to foster trust and maintain intra-group cooperation and solidarity.

Irons (2001) derives a number of predictions from the religion as a hard-to-fake signal hypothesis. For example, he argues that individuals in greater need of expressing commitment (such as newer members) should be more religious, that individuals will tend to express commitments that are advantageous and important for themselves, that expression of religious commitments will change as the needs of the group change, and that the threat of conflict from outside should increase religiosity. Empirical research on these questions has only recently begun. Anthropologist Richard Sosis and his collaborators have provided important substantiation of the signaling theory of religion. In one study (Sosis, 2000), 200 American utopian communes (112 secular and 88 religious) from the 19th century were compared to

determine length of duration. The analysis showed that religious communities tended to last significantly longer than secular ones, from two to four times more likely. Moreover, the difference occurred within a short time of formation, which suggests an immediate difference in the internal dynamics between the two types of communes where religious ones are able to more effectively sustain collective action. Subsequently, Sosis and Bressler (2003) tested the more specific idea that groups that require costlier signals of commitment will attain higher levels of cooperation, avoid collective action problems, and thus last longer. Historical data on the rules and restrictions that the communes imposed on members (e.g. bans and taboos on material possessions, sexual behavior, etc.) were collected for a subset of 30 religious and 53 secular groups. Religious groups were less likely to dissolve than secular ones and religious groups had almost twice as many costly or hard-to-fake requirements for members than secular ones. Having more requirements was correlated with longer survival, but this only held true for religious communes.

Why do these types of signals work more effectively in religious rather than secular contexts? Irons (2001) and Sosis (2003) suggest that the constant reinforcement of group values that occurs through ritual activity may serve to maintain cooperation through long periods of time. While secular systems such as college fraternities or armies also adopt costly or hard-to-fake rituals (pledging, boot camp, etc.), these tend to occur as entry requirements rather than regularly performed activities. Further work by Sosis and collaborators provides some support for this idea. Sosis and Ruffle (2003) used an economic experiment in matched sets of religious and secular Israeli kibbutzim to measure individual willingness to donate a portion of allocated money provided by the researchers to fellow group members. Economic games have recently become a popular tool to measure cooperation which

has the advantage that it can be taken to practically any field setting (e.g. Henrich *et al*, 2004). Since players' decisions are anonymous and no one knows how much money is given or withheld by others, this kind of experiment serves to indicate trust and willingness to cooperate among group members. In this study, it was found that males in religious kibbutzim donate significantly higher amounts of money than either females or members of secular kibbutzim, among whom there was no difference. Religious males are the subset of individuals who most often and regularly performs public rituals and thus have more to gain by honestly signaling their commitment.

Understanding religion as a costly or hard-to-fake signal of cooperation, then, means that ritual serves to promote altruism to fellow group members and not outsiders. In general, the existence of strong and easy-to-create in-group/out-group biases is well-documented in psychology (for a review, see Hewstone *et al*, 2002) and religion seems particularly instrumental to kindle prejudice against non-group members. Doctrinal teachings that emphasize the uniqueness of one's own group accompanied by regularly performed ritual activity may serve to strengthen feelings of group identity, and with it, animosity toward others. For example, the major religions of the world are concerned with implementing an ethical code for followers but do not extend this to outsiders. These religions make specific distinctions between believers and all others, such as Jews and Gentiles or Muslims and Infidels. The specific moralities embedded in these traditions are not of general altruism, but one that is restricted to members of the same group. Ruffle and Sosis (2006) have recently shown that, even in the face of rhetoric that emphasizes generosity toward society in general, members of Israeli kibbutzim are more cooperative with other anonymous members rather than city residents.

Although in-group biases may not appear beneficial in many of today's multiethnic societies, they may also be instrumental to strengthen internal cohesion in contexts of inter-group competition. Wilson (2002) describes a framework of religious psychology and behavior that emphasizes group selection. While he does not explicitly differentiate between biological and cultural group, the case of religion seems a specific case of *cultural* group selection[3]. Wilson develops the idea of a religious system as an organismic entity that may differentially survive in relation to others. As in signaling, a group must also enforce particularly strict cheater-detection mechanisms which are costly to the believer but which are offset by the benefits the social organization provides. Wilson does not explicitly pursue an explanation based on individual benefits. Rather, he argues that religious beliefs "can provide blueprints for action that far surpass actual accounts of the natural world in clarity and motivating power" (2002: 42) which effectively encourage cooperative behavior. While the mechanisms by which this occurs are not made clear, Wilson's central point is that in-group cooperation allows religious groups to compete with each other, as units, despite the individual sacrifices of members. This is possible because religious groups enforce rules to remain fairly isolated, socially and even genetically. A religious ideology that transmits cultural values which alienate its members from other groups will be a more effective competitor, even if it proves detrimental to individual believers.

Even within groups, however, individuals may act deceptively or attempt to manipulate others. Cronk draws on Dawkins and Krebs' (1978; Krebs and Dawkins, 1984) theory of animal signaling discussed earlier to suggest that communication signals between parties will vary from subtle and understated to strident and

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[3] In Wilson and Sober (1994) and Sober and Wilson (1999), Wilson makes a case for biological group selection.

flamboyant, depending on the degree to which they share a common interest. Thus, "the loudest and most elaborate religious moral proclamations should be those that most involve non-cooperative signals" (1994: 92). The prominence of displays such as religious rhetoric, symbols and rituals should increase as a function of the degree in which the religious system increasingly benefits signalers while harming recipients. Institutionalized religions controlled by the elite such as Christianity, Islam or Buddhism, are far more likely to place an emphasis on costly signals than the religions of egalitarian societies. Another prediction that arises from this framework is that when religion is used to colonize or indoctrinate, it should also involve greater frequency and embellishment of the specific message and ritual practices associated with the new religion. This pattern also seems to be true for the historically proselytizing religions. Thus, a more sophisticated understanding of religious signaling will help understand how cooperation and manipulation can evolve in tandem.

2.3 Religious Beliefs and Morality

In the context of any cooperative social group, the implementation of punishment against cheaters or defectors becomes a second-order collective good problem. This is because punishment of cheaters is beneficial to all because they discourage free-riding, but only the punisher will carry the cost of applying the sanctions. Johnson and Bering (2006) argue that belief in gods that can enforce group norms may have evolved as a way to circumvent this issue. Retribution that comes from a supernatural source is impossible to contest, can inspire considerable fear on offenders, and because spirits can be omniscient in ways that other humans cannot, may be more effective at preventing cheating in circumstances when the actor cannot be monitored by others. Other theorists have argued that belief in supernatural beings

may facilitate in-group cooperation by providing an extra incentive to behave altruistically in inter-personal relationships (e.g. Roes and Raymond, 2003; Rossano, 2007).

Bering, McLeod and Shackelford (2005) conducted a series of experiments where people who are dead or believed to be dead are ascribed with increased moral and ethical characteristics. In the same paper, they report that telling subjects that there is a ghost in the place where they perform a task makes them less likely to cheat. In another study, people behave more cooperatively in an economic game if they are primed with god concepts (Shariff and Norenzayan, 2007). In conjunction, these results suggest that an innate tendency to believe in moral agents that transcend life, whether dead ancestors or supernatural beings, can reduce free-riding.

It is the case that gods, ancestors, and spirits are often believed to be particularly attentive to the moral behavior of believers. Nevertheless, there may be a more economical explanation. We may simply be particularly receptive to social scrutiny and this tendency is carried over to other any agents, real or not. There is abundant evidence that humans are particularly sensitive to the feeling of being watched and that we change our behavior accordingly. Burnham and Hare (2007) showed that when individuals were placed in a room with a robot, they cooperated more than when alone. Haley and Fessler (2005) conducted a study where people who played an economic game were more likely to donate more money if an eye-like design was placed on their computer monitor. In another experiment, individuals were more likely to donate more money to a common pot when a banner with a picture of eyes was present rather than when the banner showed flowers (Bateson *et al*, 2006). Thus, there is a leap in reasoning that must be explained before supernatural beings can be imbued with morality. As Knight (2004: 6) rightly points out, after

supernatural agents "arise spontaneously as our mind-reading proclivities impute agency to features of the surrounding world" how do these "imaginings then endow themselves with moral authority and institutional support?" A suggestive finding is that gods that concern themselves with the ethical behavior of the faithful seem to be a rather modern invention. Roes and Raymond (2003) conducted a survey of cultures around the world and found that belief in moralizing gods increases with the size and complexity of the society involved.

In many tribal religions, the relationship with supernatural beings is based on exchange systems where ill fortune or rewards from the gods are the result of a violation of ritual norms, rather than failures to act altruistically toward others. If this was the pattern during most of human evolution, as it is reasonable to suppose, then it appears that gods that enforce social norms only became prevalent as societies grew in size and complexity. In smaller groups, monitoring of social behavior can occur through mechanisms like reciprocity, punishment and reputation, which rely on other group members rather than supernatural beings. Even if costly signaling occurs in the context of ritual, it remains a social mechanism of control that can remain agnostic about the beliefs of individuals. One can participate in ritual activities if there are enough benefits provided by group-belonging, even when there is no internal commitment to the faith. In larger groups, on the other hand, social behavior cannot be monitored as easily by peers and additional sources of authority may be necessary for the smooth functioning of collective enterprises. This may explain why costly signals such as painful initiations and other dramatic rituals loose value in religions aimed at large groups. The emotionally-charged rites of tribal groups may be effective at promoting cooperation because they are easy to monitor closely by other group members. Doctrinal religions, on the other hand, must find alternative mechanisms of

social control such as complicated hierarchies and orthodoxies (see Whitehouse, 2004 for a cognitive account of what he terms "imagistic" and "doctrinal" modes of religiosity).

Not all gods and spirits are omnipresent or omniscient. In fact, there are supernatural beings that can be tricked, fooled and lied to. Since these tend to occur in localized rather than world religions, it may confirm the notion that moralizing gods are a recent development. The relationship of people to gods in these systems is often one of exchange, rather than total obedience. A sacrifice is done because a return is expected, not because it is "god's will". The return may prove beneficial to the actor, but actually detrimental to others. In Candomblé, for example, a woman may desire another's husband. She may then perform the appropriate rites to make the man fall in love with her. If she succeeds and the man leaves his wife, it only means she did her duty to the gods well and the other woman did not. The wife had somehow failed in her obligations to the gods and thus, the gods failed her and did not protect her. The punishments that the gods impose are though of as a lack of obligation toward the god, rather than toward other people. This does not tally with the idea of gods concerned with inter-personal morality. This suggests that increased sensitivity to ethnographic evidence is necessary to formulate adequate evolutionary explanations of religion.

3. Cognitive Science of Religion

Most work on the cognitive accounts of the evolution of religion has tended to focus on beliefs and concepts (some exceptions are Boyer 2006; Boyer and Liénard, 2006, 2008; McCauley and Lawson, 2002). These theories work at a different explanatory level than social solidarity or evolutionary models, since they focus on the individual mental processes that produce religious ideas rather than the

relationship between religion and social behavior. Additionally, although most theorists work within a Darwinian framework, most agree that religious concepts and ritual behaviors are not evolved adaptations but rather by-products of other cognitive mechanisms or even maladaptations. This is not surprising, since virtually all important figures of mainstream psychology from Freud to James have debated the possible detrimental or beneficial effects of religion. This issue continues to be important as contemporary researchers continue to look for connections between religion and physical and mental health (for reviews, see Ellison and Levin, 1998; George *et al*, 2002; Hummer *et al*, 1999; Miller and Thoresen, 2003; Powell *et al*, 2003; Strawbridge *et al*, 2001). Here, I will omit this vast literature and focus on the recent theoretical developments of cognitive science and evolutionary psychology, which represent an independent body of literature.

Cognitive science and evolutionary psychology are based on similar assumptions of how the mind works[4]. Three of these assumptions are particularly relevant for this discussion: sociality as a determinant factor in the evolution of the human brain, mental modularity, and the unconscious nature of mental processes that govern conscious thought. The fist assumption, not restricted to our species, refers to the idea that many cognitive capacities have evolved as a response to the pressures of sociality and group-living (Humphrey, 1976; Dunbar, 2003). In the case of humans, this has given rise to the ability to attribute mental states and intentionality to others to a remarkable degree, an ability known as theory of mind (ToM). Being able to infer the internal states and feelings of our conspecifics and tailor our behavior accordingly may have been a decisive factor in the evolution of our species.

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[4] While human behavioral ecologists and anthropologists often remain agnostic about specific mental processes, they generally agree with these assumptions. See Smith *et al* (2001) for a review of the differences between the fields.

The second assumption, modularity, refers to the idea that the mind works as a set of discrete tools designed to deal with particular aspects of information-processing rather than a general problem-solving machine (Barkow, *et al*, 1992; Fodor, 1983; Pinker, 1997). In the case of evolutionary psychology, mental modules are taken to be responses to specific evolutionary pressures. Since cooperation and cheater-detection are such crucial aspect of social living, theorists have posited the existence of a mental tool designed by natural selection to make us particularly attentive to instances of cheating in social contexts. In an experiment using reworked versions of the Wason selection task, a well-known psychological test, Cosmides and Tooby (1992) revealed that people tend to pay more attention to instances of cheating in a social context as opposed to analogues in non-social circumstances.

A related idea is the notion that some mechanisms that shape the way we think occur outside of conscious awareness, while others require a conscious effort. The existence of mental processes that underlie conscious thought implies that there is a limit to the kinds of things we can think about and the way we can think about them. Sperber (1997) distinguishes between reflective and intuitive beliefs, while Barrett formulates this difference in terms of reflective and non-reflective beliefs. Reflective beliefs involve "conscious, deliberate contemplation or explicit instruction", while non-reflective or intuitive beliefs are automatic, unconscious and "operate continually in the background" (Barrett, 2004). These last mental tools are designed for rapid, automatic information-processing that underlies explicit, reflective beliefs. For example, we may have to learn that a particular organism is an animal called a lion. However, once we know that, we have a host of assumptions of the properties of the category animals and thus, of the lion: it will eat when it is hungry, it cannot pass through solid objects, it is not empty inside. Reflective, conscious thought can only be

constructed using non-reflective, unconscious mental tools that are the result of specific selective pressures. Just as there is a limit to the kinds of structures that can be constructed using a hammer and nails, the things we can conceptualize and understand are constrained by the mental tools we have (see Hirschfield and Gelman, 1994; Pinker, 1997; Sperber, Premark and Premark, 1995).

3.1 Acquisition and Transmission of Religious Concepts

The cognitive science of religion is based on the idea that our evolved mental architecture makes it possible, and almost inevitable, to sustain religious concepts and beliefs. An early idea that has remained influential is the work of anthropologist S. E. Guthrie (1993), who revives the notion of animism to account for the widespread belief in deities, spirits, ghosts and other supernatural beings. Guthrie explains that many living organisms routinely practice 'animism' and ascribe living properties to inanimate objects (e.g. cats and frogs see prey in flying leaves, dogs hear growls in police sirens). Humans not only animate non-living things, we also routinely anthropomorphize objects, animals and natural phenomena. Guthrie argues that the psychological mechanisms behind animism and anthropomorhism are adaptive because they allow organisms to identify what is most important in the environment. Animism allows individuals to be prepared to confront predators or catch prey. For example, if a rabbit sees a brownish object and it is unsure whether it is a rock or a fox, it is much safer to assume it is a fox. Anthropomorphism represents a similar psychological adaptation. Humans see human-like agents everywhere because other humans are our most important concern. In other words, "because we are so preoccupied with each other, we are sensitive to any possible human presence and have tolerant standards for detecting it. Mostly unconsciously, we fit the world first with diverse humanlike templates" (1993: 91). Thus, belief in the existence of

supernatural agents can be seen as corollary result of our tendency to see agents everywhere.

Barrett (2000) has introduced the terms Agency Detection Device (ADD) and Hyperactive Agency Detection Device (HADD) (both now commonly used) to refer to the cognitive module responsible for our exaggerated tendency to look for intentional agents. Barrett contends that as a side effect of HADD humans look for intentional agents to explain otherwise confusing events, like extreme natural phenomena, coincidences, misfortunes or even death (similar arguments have been made by other people, see Bering and Johnson, 2005). Barrett believes that since we are wired to think that events are produced by agents, ascribing intentionality and causality to random happenings gives us "intuitive satisfaction" (2000: 35). A similar idea is advanced by Boyer (1994) who uses the term "abductive reasoning" to describe the tendency to find causal connections between unrelated events if the implication of the premise is observed. For example, if the neighbor's home is struck by lightning and ours is not, we may take that event to mean that our neighbor did something to offend the gods while we acted correctly and thus were spared. However, studies have also found that causal attribution differs between Americans and East Asians (Norenzayan and Nisbett, 2000). Other studies have shown that children only begin seeing these kinds of spurious relationships until around 7 years of age, which suggests more work is needed to understand just how intuitive is this tendency (Bering and Parker, 2006).

Cognitive constraints may also mediate our understanding of concepts closely related to religion. For example, Bering and colleagues have studied concepts of the ontology of afterlife beliefs. Bering (2002) theorizes that afterlife beliefs share universal features based on a separation of psychological and biological states.

Because it is impossible to know what it is like to be dead, we ascribe to dead agents qualities that we cannot imagine being without because we never cease to experience, such as psychological and emotional states. On the other hand, we can more easily assume that biological and physical properties, like hunger or sleep, disappear after death. As we get older, these intuitive assumptions change and are shaped by explicit understandings of biological processes and the beliefs imposed by our particular cultural milieu. A series of experiments have tested these posited regularities about the existence of an afterlife. They found that belief in the continuity of dead agents' physical and psychological characteristics decreases among older children. However, older children tend to ascribe psychological and cognitive states after death, rather than biological ones (Bering and Bjorklund, 2004). In a different set of experiments, Catholic-schooled children were more likely to believe in the continuity of states than those in secular schools, although the "pattern of change with regard to question type" did not differ, which the authors suggest is due to the fact that afterlife thinking occurs within a set developmental schedule (Bering, Hernández-Blasi, and Bjorklund, 2005).

These results seem to confirm the importance of agency and intentionality in human cognition. It seems unsurprising that agents are widespread in religious concepts. More interestingly, the agents involved are rarely, if ever, ordinary beings. On the contrary, the agents of religious belief have extraordinary powers and remarkable properties. They may display grotesque physical characteristics, be able to master the elements or have extraordinary powers of perception. Anthropologist Pascal Boyer (e.g. 1994; 2001) contends that it is precisely the bizarre quality of religious concepts which make them easily acquired and transmitted. However, it is not merely the bizarre which makes a religious concept memorable. Boyer argues that human minds are endowed with a collection of specific categories of how to define

the world (an "intuitive ontology"). Boyer claims that across cultures religious concepts are created by combining the expected or intuitive properties of five existing cognitive domains: person, animal, plant, artifact, and natural non-living object. For example, one might think of a mountain (non-living natural object) that eats people (like a person or animal). This idea is easy to remember because it uses basic psychological constructs and at the same time, it violates intuitive, domain-level expectations of what a mountain is or does. Ideas that reflect these characteristics have become known in the literature as "minimally counter intuitive concepts" or MCIs (Barrett, 2000).

Not all counterintuitive concepts are expected to be preferentially selected, remembered and communicated. Across cultures, important religious concepts are represented by human-like agents. Given the high level of sociality that characterizes humans, it is unsurprising these we find this kind of ideas particularly interesting. Additionally, not all concepts that violate intuitive expectations are easily memorable. It seems that maximally counterintuitive concepts, those that grossly distort the original domain category, are difficult rather than easy to recall. Support for this idea comes from a series of experiments that used ordinary, minimally and maximally counterintuitive concepts embedded in coherent narratives. It was revealed that individuals in the France, Gabon, and Nepal are better at remembering concepts that have minimal violations of domain properties rather than those that are mundane or too bizarre (Boyer and Ramble, 2001). Other findings have shown that concepts that violate expectations are better recalled and transmitted than commonplace elements of a story (Barret and Nyhof, 2001) and that concepts which involve high imagery are remembered more easily and accurately than those with low imagery (Slone *et al*, 2007). Other studies have shown that in when concepts are presented without a

contextual story or narrative, subjects recall intuitive items better than minimally and maximally counterintuitive ones, even after a week (Norenzayan and Atran, 2002).

Atran (2002) contends that while most counterintuitive concepts disappear from the cultural repertoire, the ones that survive are particularly immune to decay because they are interesting and attention-grabbing, especially when combined or placed in the context of intuitive beliefs. He rightly points out that MCIs constitute only a portion of beliefs of whole religious systems. The Bible, for example, is mostly concerned with everyday activities and events, like marrying, having children, stealing, lying or being kind. Although MCIs may not always be as easily remembered as intuitive beliefs, "they may draw attention to the entire belief set in which they are embedded. They encourage paying more attention to the belief set as a whole….cognitive bootstrapping may be in operation between a minority of counterintuitive and a majority of intuitive. The former draw interest, the latter ensure recall over time" (2002: 106). Evidence does indeed suggest that the salience of MCIs is highly dependent in contextual information (Gonce *et al*, 2006).

An important caveat about MCIs is that they are not restricted to religious belief but found in many other contexts. This has been referred to by Atran (2002) as "the Mickey Mouse problem" because cartoons routinely portray agents that violate domain expectations, like a talking mouse or rabbit or a cheerful sea sponge. Yet most people do not "believe" in Bugs Bunny or SpongeBob SquarePants nor do they revere them as deities. It may be argued that this is because religious concepts are embedded in broader systems that excite powerful emotive feelings (see Alcorta and Sosis, 2005), but this does not solve the problem of why some concepts become part of the religious repertoire and others do not. In fact, it is difficult to find secular counter-intuitive concepts that are not aimed primarily at children. And it must be noted that

children *do* believe in the reality of Mickey Mouse and Bugs Bunny, develop feelings of attachment to them and can be emotionally moved by them. Ghosts, spirits, and other supernatural beings may be examples of non-religious MCIs, but people who truly believe in these are not indifferent to them and often can fit them somewhere in a religious schema (e.g. ghosts are the spirits of the dead), so that the borders between these and religious ideas are extremely fuzzy. In addition, the MCIs that are part of religious traditions are so different from each other that they often appear absurd to outsiders, yet adherents believe in them with equal fervor. It would seem that any MCI that fits within certain parameters is just as likely as the next to end up being part of a religious system.

While there may not be a satisfying *cognitive* explanation for why some MCIs are considered religious and others are not, the answer may lay on broader properties of cultural transmission. Many theorists have advanced theories of culture and religion analogous to epidemiology (e.g. Dawkins, 2006; Dennet, 2006; Sperber, 1996). These approaches are based on the premise of trying to understand culture by the way in which is its transmitted or spread and the prevalence of some beliefs over others. Some authors (Dawkins, 2006; Dennet, 2006) espouse a view of religion based on memetics or the idea that culture spreads in a manner analogous to genes. The central idea is that religious beliefs are parasites on the human mind that originate randomly and self-replicate because of some inherent quality. Evangelism is an example of such a self-replicating meme. In this sense, it may be that, within the cognitive constraints described above, some concepts and ideas simply take hold more than others in random fashion or because of their inherent properties. A more sophisticated account of similar cultural transmission developed by Richerson and Boyd (e.g. 1985, 2005) is that some concepts will be more effectively transmitted if

the costs of individual learning are too high. They argue that for cultural learning to be effective, it has to occur rapidly and with less-than-optimal discrimination between beneficial and detrimental ideas. Thus, being able to learn quickly has an inherent cost in the acquisition of maladaptive or useless traits along with the favorable ones. These authors argue that many religious beliefs fall into the category of ideas that simply pass unfiltered by our cognitive system even if they have no adaptive value.

The problem with these approaches is that, first, there is no evidence at all that religious beliefs are maladaptive (if anything, the evidence from psychology tends to suggest that religious people live longer and healthier lives, e.g. George *et al*, 2000; Hummer *et al*, 1999; Powell *et al*, 2003; Strawbridge *et al*, 2001). Second, they assume "mindblindness" in that they do not provide room for individuals or communities to reject beliefs and ideas that affect them adversely or adopt those that seem more positive. In other words, they assume that religious ideas themselves are so powerful that they are followed blindly by adherents. This is not always, if ever, the case. Most religious believers negotiate their beliefs constantly and follow religious orthodoxy selectively. Evolutionary and environmental factors may also favor the expansion of some beliefs over others. For example, the fact that taboos on meat-eating are widespread may be explicable if one considers the potential for transmittable diseases that this kind of food carries (Fessler and Navarrete, 2003). Social conflicts and struggles for power may also favor some beliefs over others. The Virgin Mary, a cornerstone of Catholicism, is also a powerful image that is used to restrict female sexual activity. In a male-dominated system, the counter-intuitive concept of a mother who is also a virgin is particularly sensitive to manipulation by the elite.

The previous theories are useful to evolutionary understandings of religion because they are broad enough to encompass wide religious variety. All religions, whether Candomblé, Catholicism or the religions of Australian aborigines, contain intentional agents and counter-intuitive concepts. However, there is a troublesome trend to focus empirical research on major world religions, especially Judeo-Christianity, and interpret those results as generalizable conclusions. The features of world religions and their contrast to those of localized, small-scale societies have been noted by many authors. The Weberian notion of charismatic and routinized religious authority is echoed in Goody's (1986) distinction between nonliterate and literate traditions, and more recently, Whitehouse's (2000; 2004) categorization of religion as imagistic or doctrinal. The apparition of world religions is accompanied by a set of other social changes, mainly more complex political organization and social hierarchies, which are also recent innovations in the evolutionary time scale. It is problematic to make universalistic claims about the cognitive underpinnings of religion based on interpretations of data from only this type of tradition. While both types of religious traditions merit attention and are amenable to explanation, any claim about the cognitive underpinnings of religion needs to be grounded on a perspective that considers our evolutionary past.

Founding theoretical claims on the content of religious beliefs can be problematic. For example, Kirkpatrick (2004) argues that gods are representations of parental love. He contends that personal religiosity is underscored by an infant-mother attachment psychology. As Atran (2002) points out, this idea is objectionable because it is primarily based on culture-specific concerns. The idea of a god as a loving parent is primarily a construction of modern Christian theology; in many other religions, gods are the subject of fear and distrust rather than loving caregivers.

Another example is the idea that god concepts, rather than develop as anthropomorphized beings, are distinct products of the way the mind works. Barrett (e.g. 2004) argues that children assume "by default" that others are all-knowing and all-powerful because they have note yet a mature ToM. This aptitude is then used to understand gods as infallible and omniprescient. Some studies provide indirect support for this idea by showing that younger children ascribe the same knowledge to adults and gods, but as they get older they learn to think of only gods and supernatural beings as all-knowing (Barrett *et al*, 2001; Knight *et al*, 2004). While it is tempting to draw overreaching conclusions based on research with children, it is important to remember that even children as young as 3 or 4 years of age (the youngest in these studies) already have a host of culturally-determined understandings. It is dangerous to assume that their beliefs about the afterlife are solely the result of cognitive intuitions rather than learned ideas. Moreover, studies with adults show that even believers of traditions that explicitly describe deities as omniprescient (Americans Protestants and Hindus) respond to narratives featuring gods as having more human-like characteristics (Barrett and Keil, 1996; Barrett 1998). All-knowing and infallible gods are not a universal feature of religion and may represent a learned concept rather than a natural one.

Finally, there is the notion of "theological incorrectness" (Slone, 2004) which posits that because our minds work with both tacit and explicit beliefs, there may be a tension between theological teachings and the kind of belief that is more cognitively "natural" (like finding intentional agents). Tremlin contends that "even amid theological trappings and well-rehearsed dogma, intuitive understandings of supernatural agents continually undermine abstract presentations of such beings" (2006: 182). In Theravada Buddhism, for example, the highly abstract teachings of

the monastic elite bear little relation to the deity-centered religion of most adherents. In this case, specialized doctrine that is incongruent with implicit cognition is transformed into more cognitive-friendly beliefs. However, this formulation may be only reflective of traditions with a formal theology like Islam or Catholicism. The religions of small-scale societies do not present the same divide between orthodoxy and general practice. In this light, it may be that a distinction between correct and incorrect theology does not even make sense in a discussion of the evolution of religion.

3.2 Cognitive Accounts of Ritual

Although most of the cognitive science of religion has focused on the acquisition and transmission of beliefs and concepts, there is a growing body of work that attempts to understand the underlying mental processes of ritual. Within anthropology, where ritual has yielded more theoretical interest than belief, the importance of religion is its profoundly social nature and its relationship to values that are important to the community (Durkheim, 1915/1965; Geertz, 1973; Rapaport, 1999; Turner, 1969). In contrast, cognitive theories of ritual focus on the individual mental processes that produce such behavior and generally remaining agnostic of the place of ritual in the social milieu.

An early account has been Lawson and McCauley's ritual form hypothesis (1990, McCauley and Lawson, 2002). These authors develop what they call a competence theory of ritual that makes an analogy with linguistics. They argue that just like language follows a syntax structure that is independent of content, so does ritual occur in regular patterns across different cultures. Individuals, then, mentally represent ritual as having certain correct forms. They do not delve into ritual symbology or meaning except to say that religious rituals are distinguished from other

ritual actions by a commitment to supernatural beings. The ritual form hypothesis, as

they term it, states that ritual consists of three crucial categories: "agent", "action"

(which requires an instrument), and "patient" (as the entity on which the action is

performed). More controversially, they claim only activities that contain these three

elements qualify as rituals. In this view, praying or chanting are only religious acts or

events; fragments of ritual but not rituals themselves. The central prediction of their

argument is that there are different ritual forms depending on what part of the ritual is

more directly connected with the supernatural. Thus, a ritual is a special-agent ritual if

the action centers on the agent, or a special patient/instrument ritual if the supernatural

is more tightly linked to the other two categories. From this typology, the authors

predict a host of associations depending on ritual form, the most important of which is

that special-agent rituals will have a greater degree of perceptual stimulation (what

they call sensory pageantry) and be more transmittable because they are more

emotional and memorable (for an initial empirical test of this idea, see Barrett and

Lawson, 2001).

A different kind of explanation is inspired by combining the ideas of Freud

linking religious behavior to psychological disorders and the anthropological

literature that conceptualized ritual as the separation of sacred or pure elements from

profane and polluted ones (Douglas, 1966/2002; Durkheim, 1915/1965). Fiske and

collaborators (Dulaney and Fiske, 1994; Fiske and Haslam, 1997) categorized

elements of rituals from ethnographic records and found that the most commonly

found are remarkably similar to those found in OCD (e.g. control, purity and

pollution, rules of right and wrong, actions designed to ward off misfortunes of

various kinds). Rapoport and Fiske (1998) suggest that OCD represents the

pathological version of a generalized, evolved psychological mechanism essentially

concerned with creating order. More recently, Boyer and Liénard (2006; 2008) posit the existence of what they call a "hazard-prevention system" as an evolved mental capacity that guards us against dangerous situations, from predation to social breaches. Like Fiske, they argue that an overactivation of this system leads to OCD and individual pathologies. However, because we make inferences of causality about negative events, even when there is none, the hazard-prevention system can also be weakly activated resulting in ritual activity. For this reason, ritual usually occurs in moments of misfortune or possible danger (i.e. a drought, an imminent war, at the time of death). There is some evidence that ritual action may indeed alleviate anxiety from potential perils even in instances where the individual professes no religious belief. A study found that Israelis subjected to the threat of constant violence derive comfort from ritual practices (Sosis, 2007).

Rather than provide relief from danger, ritual may be inherently comforting simply by virtue of aligning actions and beliefs. Some researchers (Barrett, 2004; Boyer, 2001; Sosis, 2003) suggest that beliefs and actions that do not match up will cause psychological discomfort, a bias known as cognitive dissonance (Festinger, 1957, 1964). According to this idea, it is cognitively satisfying to have beliefs and actions that are consistent with each other so that we may modify our beliefs to reconcile them with our actions and thus reduce any tension. In the context of ritual, performing or participating in ritual actions may reinforce the emotional commitment to the faith and internalize its beliefs, as well as reduce any dissonance that may stem from conflicting practices and ideas. Internalizing beliefs may be particularly important to reduce the perceived costs of ritual participation and thus facilitate commitment to the faith.

Of course, this raises the question of why there should be conflict between beliefs and practices, especially for someone who is born into a particular tradition and has never found opportunity to question it, as often happens. Sosis (2003) argues that along with reduction in dissonance, ritual actions learned in childhood may create a bias where the individual's positive self-perception is strongly linked to the degree of commitment to religious beliefs. Work on cognitive biases such as these are particularly difficult to empirically substantiate, but the idea that religious beliefs may be a form of self-deception is intriguing. Trivers (2000) suggests that self-deception may be an adaptive mechanism that allows us to more easily deceive others because, since we are deceiving ourselves, there is less change of detection. In the context of religion, being convinced of one's faith and reinforcing that commitment through ritual action may serve to communicate religious signaling more effectively to others, even when the ultimate motivation is more self-serving than altruistic.

A broader account of ritual comes from anthropologist Harvey Whitehouse's modes of religiosity theory. Based on his field work among the Pomio Kivung, a cargo cult in Papua New Guinea, Whitehouse has developed a theoretical framework that incorporates various aspects of religion and cognition. The modes of religiosity theory contends that religions cluster around either a doctrinal or an imagistic mode. In this view, meanings and concepts embedded in ritual action differ in their ability to be easily transmitted and remembered because some are better adapted to our cognitive architecture than others. Ritual exegesis in doctrinal and imagistic religions occurs through diverging pathways, each of which takes advantage of different long-term memory systems, semantic and episodic (Tulving, 1972). The doctrinal mode of religiosity encapsulates traditions where ritual meanings must be learned through semantic memory, which deals with conceptual or factual knowledge unrelated to

specific events (e.g. the meaning of words, how to behave in a classroom). In the doctrinal mode, relevant ideas are constantly repeated and their meaning is produced and verbalized by authority figures. Centralization of the religious orthodoxy discourages individual interpretation and stresses standardization of belief. While these features allow for the religion to be easily transported and spread, they also give rise to problems of tedium because rituals are repetitive rather than arousing (e.g. Catholic Mass). In contrast, the imagistic mode of religiosity centers on rituals that can only be interpreted through direct individual experience. Learning occurs because, although rituals are infrequent, they are arousing, dramatic, and often painful and traumatic. Such events create episodic or 'flashbulb' memories that participants will revisit and reinterpret the rest of their lives, a phenomena Whitehouse terms spontaneous exegetical reflection (SER). Because SER is a deeply personal process, religious authority is minimal and the tradition is much more localized. In addition, strong cohesive bonds are created among participants by virtue of the highly emotional shared experience. Despite, or perhaps inevitably because, or its broadness, it has also been the subject of refinement and criticisms, three of which I think are particularly relevant here. First, the distinctions posited are not as clear-cut as they at first sight appear. In many of the imagistic traditions that Whitehouse seems to have in mind, highly arousing rituals occur often and regularly. Candomblé is a case in point, since its regular ceremonies and feasts include possession trance, frenetic dancing and constant music from beating drums. Second, the modes of religiosity theory is essentially a descriptive rather than an explanatory account of religion (Hinde, 2005). By the same token, and taking into account that this is never what Whitehouse claims, it is not informed by evolutionary theory. However, the theory has engendered substantial theoretical interest and served as a grounding area to

anchor disparate pieces of cognitive science of religion and some evolutionary theorists as well (see Whitehouse and Laidlaw, 2004; Whitehouse and Martin, 2004; Whitehouse and McCauley, 2005).

CHAPTER THREE: AN INTRODUCTION TO CANDOMBLÉ

1. Introduction

The diversity of the Brazilian religious universe reflects the diversity of Brazilians themselves. Since the 1950's, the previously-dominant Catholic Church has experienced a dramatic decline in favor of a wide range of traditional and new religious movements, from indigenous shamanic traditions to Charismatic Catholic Renewal movements, Neo-Pentecostal churches, Espiritismo[5] and Afro-Brazilian faiths. Many of these newly popular religions share an appeal centered on charismatic leadership and emotional experience (Chestnut, 2003). In this milieu, the collection of African-based traditions that were re-formulated after arrival in Brazil are particularly interesting because of their direct links with questions of national identity, racial relations and the contested legacy of slavery that have been part of the construction of Brazilian history.

Because of their common historical origins, all Afro-Brazilian religions share traits with other diasporic religions of the New World, such as Santería in Cuba and Voudou in Haiti. Within Brazil, there are regional variants with distinctive characteristics[6], such as Tambor da Minha in Maranhão, Xangô in Pernambuco, Batuque in the South and of course, Candomblé in the Northeast. The latter is undoubtedly the most visible and has an extensive ethnographic history (for a history of the involvement of anthropologists with Candomblé, see Silva, 2000). Most authors have largely focused on describing and understanding the cosmology of its adherents

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[5] Allen Kardec, a Frenchman, came to Brazil in the 19th century and quickly popularized his brand of Spiritism among the middle classes of São Paulo. Espíritismo is now popular across social and economic classes in many areas of Brazil.

[6] Regional varieties of Afro-Brazilian religions share enough features to be collected under the same denomination, but they have different names: Candomblé is used in Bahia, Rio and São Paulo, Xangô in Pernambuco and surrounding areas, Tambor da Mina in Maranhão and the Amazonian states, Batuque in the South, and Macumba in Rio de Janeiro. Umbanda, which was born in the South and mixes Candomblé, Espiritismo and Amerindian traditions, is also considered an Afro-Brazilian tradition although it represents a special case. For a detailed treatment of Umbanda, see Brown, 1994.

(e.g. Bastide, 1958/2001; Carneiro, 1969, 1981; Verger, 1997), and more recently, attempted to link contemporary themes of anthropology to the dynamics of Candomblé, such as gender and power (e.g. Joaquim, 2001), self-reflexive ethnography (e.g. Wafer, 1991), and transnationalism (e.g. (Matory, 2005).

There are fewer accounts, mostly by Brazilian sociologists, that examine how the majority of Candomblé houses of worship function, how religion is interwoven with the daily lives of its adherents, and how the internal ritual and organizational structure of the religion has changed in the last few decades since classic studies were conducted (e.g. Amaral, 2002; Pierucci and Prandi, 1996; Prandi, 1991, 1996, 2005). Here, I will address some of these issues by focusing on the relationship between religious commitment and cooperation within Candomblé congregations. I will also point to areas where future ethnographic research would be wothwhile. In the first section of this chapter, I will provide an account of the historical trajectory of Candomblé from its beginnings in the 19th century to its current form today. Second, I will discuss the doctrine and ritual organization of the religion and describe its social organization. Third, I will discuss some of the commitment costs faced by adherents of Candomblé, and finally, the historical and current role of terreiros as centers of solidarity and cooperation.

2. Colonial Bahia and the Development of Candomblé

Although the development of the Afro-Brazilian religious experience occurred against the background of Catholic hegemony, interference by the Church in the affairs of slaves remained minimal until the 19th century. Missionaries only made tentative inroads into the process of slave conversion, prevented by the language barrier, the heterogeneity that existed in any given concentration of slaves, and the resistance of masters who objected to sparing their slaves from work. The rituals and

beliefs of slaves were considered banal superstition at best and evil witchcraft at worst. For these reasons, documentation of the religious practices of Africans and their descendants are scarce until well into the 19th century (for historical accounts of the development of Afro-Brazilian religions, see Harding, 2000; Reis, 2001; Sweet, 2003).

On the other hand, the relative laxity of colonial authorities allowed for the maintenance of African beliefs and their subsequent development as uniquely Brazilian products. Although the short life span of enslaved Africans and the disruption of ethnic and family ties prevented the establishment of any continuing religious practice until the 19th century, elements of African culture and religion became a central element in a dialectical relationship with the dominant European culture that shaped Brazilian identity (e.g. Kraay, 1998a; Magi, 1992; Sweet, 2003).

In this process, the historical contingencies of the slave trade played a decisive role in the development of Afro-Brazilian religion. Throughout the colony, a wide diversity of ethnic groups left their imprints on the cultural legacy of the region. The Dahomey littoral, present day Guinea, Angola, and Congo were the principal providers of slaves at different times. At the beginning of the 18th century, the supply of labor shifted to the area around the Gulf of Benin on the West coast, and 'Minas' slaves, which included Ewe, Fon and Yoruba, became prevalent in Bahia. This last incoming wave of enslaved workers introduced new forms of divination and ritual which became the basis for Candomblé and other Afro-Brazilian religions of the Northeast (for an alternative view discussing Bantu elements, see Carneiro, 1981). The city of Salvador da Bahia was established in 1549 and remained a thriving commercial center until the 18th century. Its early wealth centered on the sugar industry which fueled the slave trade and made the Portuguese the largest slave

traders of the period: of the approximately 15 million Africans brought to the New World, close to 4 million arrived in Brazil between the 16th to the 19th centuries; more than a third of those in Bahia (Bueno, 2003; Harding, 2000).

To understand the possibility of a structured religion like Candomblé subsisting and flourishing under conditions of slavery, it is important to recognize the ambiguity that marked the relations of masters and slaves in Brazil. In this context, African "magic" became an object of simultaneous fear and fascination. Throughout colonial times, it was not uncommon for well-known magicians or *feitiçeiros* to be consulted by members of the elite in search of health tonics, protective amulets, love potions and aphrodisiacs. Sweet expresses this notion when he states that Africans were able to utilize "the widespread recognition of their divination powers to seize a moment of power from their masters, using the opportunity to carve financial or judicial space for themselves in a community that was otherwise hostile to their individual autonomy" (2003: 130). Scholars have begun to probe how slaves and their descendants were able to rely on religion to negotiate the bleakness of their circumstances (see Butler, 2001; Magi, 1992).

This is not to imply that slavery in Brazil was a benign affair. However, high levels of miscegenation and the sheer number of Africans and their descendants in Brazil, which exceeded the number of Europeans in most areas and certainly in Bahia, ensured that a complex hierarchy of social statuses quickly developed, crisscrossed by categories of color, legal status, ethnic origin and place of birth. As Eakin puts it, "Brazilians discriminated, but on the basis of color, and there were many shades" (1997: 116). In a pattern that remains today, lighter-skinned individuals were viewed more favorably and received better opportunities. Mulattos or *pardos* in general fared better than blacks or *pretos*. By the 18th century, some Afro-Brazilians were able to

prosper and become partially integrated into predominantly white institutions

(military in Kraay, 1998b; agriculture in Mahoney, 1998, journalism in Skidmore,

1985).

While ethnic differences had played a defining role in isolating and

maintaining distinct cultures and identities throughout most of colony, by then the

presence of individuals from multiple ethnic groups that worked and lived together

had facilitated the merging of diverse religious beliefs and practices. In her book *A

Refuge in Thunder* (2000), Rachel Harding analyzes the dynamics that contributed to

the formation of Candomblé around this time. One of the principal enabling factors

was the attainment of some economic independence in emerging urban centers, such

as Salvador. The most profound change for the enslaved population to occur in the

region was the collapse of the sugar industry. Competition from Caribbean producers

gradually shut down what had been the backbone of the Brazilian economy through

the 1700's. Plantation owners were forced to find new ways of maintaining their

human labor productive. One of these ways was converting their workers into

escravos de ganho or *ganhadeiros* or "paying slaves". These individuals were sent out

by their owners to work in towns as street merchants and craftsmen, and to perform a

wide variety of jobs and services as water-carriers, chair-bearers, barbers,

seamstresses, construction workers, sewage cleaners, laundresses, tailors, ship

loaders, and myriad others. Since escravos de ganho were able to keep a portion of

their earnings, this eventually allowed them to buy their freedom or that of relatives

and friends. Ganhadeiros often lived together or in collective housing which

perpetuated cultural traditions, facilitated the merging of a variety of ethnic heritages

and provided a space of communion and camaraderie. One result of this dynamic was

the organization of *cantos*, worker unions of a sort, which allowed members to come

together to solicit customers. Cantos were often organized in terms of gender and ethnicity, the latter especially for men.

Cantos allowed women to dominate areas of street commerce, especially food stands. This played a role in the development of Candomblé as a space of female religious authority. Women could channel their gains towards the construction of a religious space in which they were primary participants. Harding suggests that because women were able to overcome ethnic differences with greater ease than their male counterparts they were particularly instrumental in the creation of a pan-African tradition that did not exist before. By the beginning of the 20th century, Afro-Brazilian women were able to establish spaces devoted to religious purposes in which some members of the community could live permanently. Mãe Aninha, for example, was a savvy merchant of imported African goods. With her own money, she was able to purchase land in which she founded Axé Opô Afonjá in 1909, which went on to become one of the most prestigious Candomblé communities with Mãe Aninha herself as one of the most respected religious leaders in the Afro-Brazilian community (Butler, 2001).

Organized groups of Africans and Afro-Brazilians that gave rise to Candomblé also formed, ironically, under the protection of the Catholic Church. During the colony, religious fraternities and sodalities devoted to the veneration of a particular Catholic saint were a prevalent social form among the elite. These conferred membership according to social class and often enjoyed considerable political power. Sanctioned by the Catholic Church, *irmandades de côr* (fraternities of color) for slaves and eventually freed blacks were formed as early as the 17th century (Sweet, 2003). These operated as thinly disguised ethnic alliances, manumission clubs, savings and mutual aid societies. More surreptitiously, they also provided a space of

autonomy in which African cultural values could be shared in relative safety, even if under the guise of Catholic worship. For early irmandades, ethnic distinctions were primary determinants for inclusion. Africans in Bahia had traditionally identified themselves in terms of "nations" or *nações*, which were aggregations of people from the same general region, but encompassing a good deal of variation among them. The nações of the colonial period came from West, East and Central Africa and varied with the fluctuations of the slave trade. By the nineteenth century, the most prevalent groups were West Africans and particularly Yoruban, and included Jêjes, Nagôs, Nupes and Hausas. Within the nações, groups further categorized themselves according to language or other criteria, such as kingdom lines in the case of the Ketu (for detailed descriptions of the ethnic groups represented in the transatlantic slave trade to Brasil, see Pantoja and Saraiva, 1999; Sweet, 2003). Thus, only women of Ketu origin could belong to the Irmandade de Nossa Senhora da Boa Morte[7] (Sodality of Our Lady of the Good Death), while Nossa Senhora do Rósario (Our Lady of the Rosary) admitted only Bantu men from Angola and the Congo (Joaquim, 2001).

These classifications became impossible to sustain as the population of Brazilian-born blacks increased and ties to African homelands became distant memories. By the 19th century, few irmandades retained codes of membership based on ethnicity. Nominally, however, an irmandade often retained links to a particular region of Africa on which it based its collective identity (Butler, 2001; Harding, 2000). This set the precedent that would later characterize Candomblé congregations, which now identify their ritual in terms of ethnicity, regardless of the actual origin of its members.

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[7] The Irmandade da Boa Morte remains active in the town of Cachoeira and conducts a famous religious festival every August that combines Catholic and Candomblé elements.

Towards the mid-19th century, authorities and abolitionist societies began to take over the social services previously provided by irmandades and their popularity declined.But the conflation of ethnicity and religiosity originated with irmandades and later transposed to Candomblé played an important role in "reconceptualizing Afro-Bahian 'nationality'" (Butler, 2001: 139). Candomblé terreiros, as houses of worship are called, epitomized a mythical African experience which any Brazilian-born black could join. The religious initiation was in fact a rebirth and the formation of a new persona. Individuals could become de-attached from their (historic) social, ethnic or legal background and adopt a new identity defined by the terreiro to which they belonged. Terreiros quickly flourished as alternative meeting spaces autonomous from white authority.

Although their appearance was made possible by the growth of urban centers, the first terreiros were located on the fringes of towns and often in areas of difficult access where everyday ritual activities could be discretely conducted (Rodrigues, 1935). Secrecy was important to avoid prosecution from local authorities which even after abolition remained suspicious of Afro-Brazilian activities and gatherings. Additionally, Candomblé ceremonies required the presence of natural elements difficult to find in urban areas. Sacred plants and herbs are crucial in Candomblé rites and the detailed taxonomy of their uses and benefits constitutes one of the more difficult areas of learning for a novice. Today, urban encroachment makes the continuation of these practices one of the most challenging aspects of the religion (see Voeks, 1997).

The Candomblé terreiros that established the structure of the contemporary form of the religion were founded early in the 19th century on the outskirts of Salvador. Most accounts state that three women and a man, all African-born of

Yoruban origin, founded the spiritual community of Ilê Axé Iyá Nassô Oká around 1830. The women were likely members of the Boa Morte irmandade. At the time, the terreiro was located on the grounds of an abandoned sugar plantation outside the urban area, which earned it the moniker of Casa Branca do Engenho Velho (White House of the Old Sugar Mill), or simply Casa Branca. Disputes over succession at Casa Branca led to the establishment of a second house of worship, Ilê Iyá Omi Axé Iamassé, or Gantois for short after the neighborhood where it is located. Similar reasons resulted in the foundation of a third community, Ilê Axé Opô Afonjá, in an area called São Gonçalo. All these remain active as the most famous Candomblé terreiros and the areas where they are situated have become central neighborhoods of the city.

Before Casa Branca was formally established, some of the founding members had traveled back to their homeland to study and ensure the authenticity of the ritual and doctrine. Throughout colonial times, the mobility of African slaves throughout the Portuguese empire had not been an unheard-of occurrence (Sweet, 2003). It was preferable for religious leaders to be Africans rather than Brazilian-born, since they were considered the true carriers of traditional knowledge. Africans recently arrived from their continent and those who had traveled there were objects of great respect and deference in the Afro-Brazilian community. They represented a measure of continuity with their roots which most Afro-Brazilians had lost or simply never had. Thus, the measure of legitimacy for religiosity became its closeness to the "authentic" African form. By embracing all things African, and moreover, situating those elements as the goal of spirituality, Candomblé gave blacks a new perception of themselves. By looking at Africa and the African past as a mythic Eden, Afro-Brazilians sought to regain the history and sense of identity they had lost during

slavery. Candomblé houses became "a recreated African homeland in microcosm" providing a compelling alternative to mainstream culture (Butler, 2001: 143). Thus, an important and complex factor in the development of Candomblé was the recreation of Africa and African cultural elements, or what Bastide described as "the Africanization of the country of exile, or rather, Candomblé as a piece of Africa" (*a africanizaçao da patria de exílio, ou, de preferencia, o candomblé como un pedaço da Africa*) (1958/2001: 73). Since white Brazilians considered all things African as the opposite of everything valued and desired, many mulattos found that the only way to become integrated into mainstream society was to distance themselves from their ancestry and heritage. But in the religious community, Africans were accorded great respect and being African became a valuable asset that meant legitimacy and prestige. Classic ethnographies that stressed the connections between Candomblé and its Yoruban origin only served to strengthen this idea (e.g. Bastide, 1958/2001; Ramos, 1946; Verger, 1997). Tradition and purity in relation to African roots remain important values of Candomblé today (see Capone, 2004).

3. Beliefs, Ritual and Doctrine

3.1 Pragmatism and Amorality

Candomblé retains the characteristics of pragmatism and hedonism found in its West African predecessors. These are essentially life-affirming faiths, more concerned with the everyday problems of life than questions about the afterlife or the salvation of the soul (Parrinder, 1976). While there is a small group of Candomblé religious houses or terreiros dedicated to the cult of the dead, they constitute a special case. These terreiros are mostly located in the island of Itaparica, across the bay from Salvador, and are traditionally restricted to male members. Even today, it is difficult for outsiders to gain access to these houses, which probably explains why there is

very little material about them (but see Braga, 1984). During my time in Salvador, I was once offered a visit to an egun ceremony. However, when the person who invited me learned that my field assistant was to accompany me, he recanted the invitation. What is common knowledge among Candomblé followers is that during ceremonies, the spirits of the dead or *eguns* appear to followers as limbless bundles of clothes. There are two main kinds of eguns: those of specific individuals that attained great power and spirituality in their lifetime and those which represent collective ancestors.

For most Candomblé adherents, however, direct questions about death will elicit few specific answers. Most will readily say that nobody can know what happens after death and some will give an account vaguely related to Christian notions of heaven or a surviving soul. The rituals that are performed when someone dies are designed to separate the spirit from the body and cleanse the spaces the dead person occupied. There is little sense that death will bring about retribution for actions in life (for an account of beliefs related to death, see Santos, 2002).

In Candomblé, the relationship with the supernatural is emotional and intuitive, based on action rather than doctrinal teachings. It is only by actively taking part in rites and ceremonies that the novice begins to comprehend the *fundamento*, the secret knowledge that lies at the core of the religion. Fundamento is given away sparingly and gradually; many activities are restricted to advanced initiates. Spiritual growth and understanding can elude the adherent for many years. I often heard that Candomblé is a "*poço sem fundo*", a bottomless well, so that even after a lifetime in the religion one does not reach the depths of its mystery. When explicit teaching occurs, it is through myths, stories, and anecdotes that the initiate must learn to interpret. The flexibility inherent in oral transmission, coupled with the autonomous nature of houses of worship, has proved advantageous to the development of the

religion. Candomblé has been able to adapt to the varying circumstances of colonialism, slavery and urban poverty to a remarkable degree.

Another reason for the continued relevance of Candomblé may be its inherent practicality. Adherents expect material rewards for their devotion. If a person complies with her ritual obligations to the *orixás* (the deities of Candomblé) she will receive prosperity, health and happiness in return (orixás are also called *santos*, the Portugese word for saints). This exchange-based relationship with the supernatural has consequences that set it apart from the background of Catholicism of mainstream society. For one thing, the Christian notions of sin and repentance do not have a strong hold. If something is amiss in a person's life, it is because she has not paid sufficient attention to her obligations and the orixás are angry or upset. There are practical measures that need to be taken, such as sacrifices or offerings, which if done correctly, will solve the problem and guarantee the orixas' protection. This means that Candomblé often attracts followers that would not find a place in a Catholic or Christian congregation, like prostitutes, transvestites, or drug-traffickers. Obviously, this is also linked to the host of historical and social reasons that have relegated Afro-Brazilians to the edges of society. In the setting of urban poverty in which the religion has developed, crime and illegal activities are unsurprising facts of everyday life. In this context, the clear-cut morality of the Catholic Church has little impact against the protection that a good relationship with the orixás can afford. This is paralleled in other areas of Latin America, where religious practices and beliefs can take on morally ambiguous forms. In Mexico, for example, a sizeable cult has grown around Jesus Malverde, a Robin Hood-figure that lived at the time of the Mexican Revolution and is now considered the patron saint of drug-traffickers.

This does not mean that everything is acceptable or that deeds perceived as negative are not condemned or repudiated. Reputation and gossip play an important role in curbing open assertions of wrong-doing or direct ritual attacks against enemies. Asking the orixás for help finding a job or solving a family dispute are unambiguously positive and discussed in the open; offerings performed to break up a marriage are carried out in secret and often denied. Nevertheless, any Candomblé priestess worth her salt needs to learn how to use and manage these darker forces if she wants to protect herself and her followers. The brand of Candomblé that deals with seedier requests is referred to as quimbanda or macumba and draws as much fear as respect. This aspect of Afro-Brazilian religions plays a large part in the continued discrimination that adherents suffer from mainstream society, where Candomblé adherents are often perceived as evil and immoral.

A final point that has drawn much attention from scholars is the syncretism between Candomblé and Catholicism (for recent analyses of this topic, see Greenfield and Droogers, 2001). Candomblé altars often display crucifixes and statuettes of Catholic saints alongside those of the orixás, and the yearly calendar of feasts overlaps with Catholic holidays. Most noticeable is the fact that some orixás are identified with corresponding Catholic saints and although not quite interchangeable, many adepts consider them as different manifestations of the same principle. The orixá Iemanjá, for example, is associated with Nossa Senhora da Conceiçao Aparecida, Catholic patroness of Brazil, while Obaluaê is identified with Saint Lazarus, both of whom are related to the cure of contagious illnesses. In addition, women from Candomblé constitute the main participants of many of the largest public celebrations of the Catholic Church in Bahia, which if not quite officially sanctioning the practice, does nothing to discourage it. Celebrations such as the Festa do Bonfim

or the Festa da Boa Morte have become symbols of Bahian identity and folklore, largely as a result of mixing beliefs and traditions. Whether this conflation occurred because slaves utilized Catholic icons as a façade to hide their beliefs or as an acculturation process is not clear. In practice, a Candomblé adherent sees little problem in participation in Catholic holidays and occasionally attending mass, while at the same time maintaining a worldview that is more closely associated with Candomblé. The extent of syncretism does not deeply penetrate the meaning or organization of ritual activity. Indeed, some leaders of the Candomblé community have explicitly rejected syncretism, seeking to change the perception of Candomblé from an exotic sect to a legitimate religion (see Consorte, 1999; Ferreti 1999). This is also reflected in how adherents refer to the religion. The word *seita*, Portuguese for sect, is often used by both outsiders and adherents to refer to Candomblé. However, more politically-involved followers make it a point to remove seita from the vocabulary and use *religiaô* or religion instead.

3.2 Axé, Orixás and Entidades

The governing principle of Candomblé is the maintenance of *axé*, the vital spiritual energy of the universe. Axé inhabits all beings and objects and can be transferred, augmented, or lost. Cultivating and preserving a balanced axé is absolutely necessary for individual and collective well-being, and ritual activities and ceremonies are aimed at such a purpose. It may be said that a particular Candomblé priestess or house of worship does not possess axé, that is, it is lacking true or legitimate spirituality. The word itself can be used in various contexts and is often used to refer to the religion itself or even the terreiro. Thus, an initiate may say "*Eu sou do axé*" (I am from the axé) or "*No meu axé,…*" (In my axé,…).

An important way in which axé is maintained is through animal sacrifice, which occurs regularly and before any important ritual. Sacrifice, also referred to as *dar de comer ao santo* (feeding the saint) is closely related to eating and its symbolic language (for discussions of food and its meanings, see Amaral, 2002; Lody, 1998). Everything 'eats' in Candomblé: orixás, different areas of the house of worship, trees, ritual objects, and even body parts, all must be presented with periodic sacrifices and offerings of food. The act of sacrifice is confined to the terreiro's initiates and it is a highly secretive event. This is because of the very sacred nature of such ceremonies and the dangerous forces that are unleashed at the moment of sacrifice. Only those with the proper preparation may be able to perform the act and it can be dangerous for non-initiates to be present at such a time. Sharing food prepared from the sacrificial animal (i.e. domestic chickens, guinea fowl, pigeons, sheep, goats, and even cows) is a crucial means of establishing a connection with the supernatural as well as reinforcing the bonds of the community through the sharing of the axé contained in the food. The rich details and complexities that accompany food preparation and cooking, from the mixing of ingredients to the utensils used, constitute an elaborate effort of preserving and augmenting axé.

Orixás are conceptualized simultaneously as individuals and as cosmic energies associated with natural elements. There is a 'high god', Olodumaré or Olorum, a creation deity who in fact has little to do with the life of the community. Most orixás, on the other hand, are a constant presence in the life of an adherent. Although African orixás are many, fewer than twenty are widely worshiped in Brazil (the most common are Oxalá, Iemanjá, Ogum, Oxum, Oxóssi, Ossain, Xangô, Obaluaê or Omolu, Iansã, Nanã, Obá, Logun Edê, Ewá, Oxumaré, the Ibeji and Exú). Each orixá has a definite personality and physical representation and each is

associated with numerous details of preferences, colors, taboos, professions, and even days of the week. For example, Ogum is male; he is the orixá of war and his color is dark blue. He is handsome, proud, and charming, but also jealous and intransigent. In contrast, Xangô is concerned with justice and business matters. His colors are red and white and he enjoys crab but cannot eat white beans. Iansã is patron of winds and storms and her day is Wednesday. Her sacrificial animals are goats and hens and those associated with her tend to suffer from respiratory illnesses. Every person has a main orixá who is the *dono da sua cabeça*, the owner of one's head. If Oxóssi is the owner of my head, I will often say that "I am from Oxóssi" or "I am a daughter of Oxóssi" and I will share some of his traits. However, since there are variants of each orixá, my Oxóssi might be quite different from someone else's. In addition, there are adjunct orixás that complement the characteristics of the primary one and which are often kept secret by the individual to avoid harm and ritual manipulation from enemies.

A particularly important orixá is Exú, a complex figure that embodies the ambiguous moral nature that characterizes Candomblé. The nature of Exú is problematic and not entirely agreed upon even among adherents. In its syncretic form, Exú is associated with the Devil, and although members of the Candomblé community make a point of disabusing this notion, it is not difficult to understand why. Exú represents the crucial generative power of the universe, a masculine energy related to all matters of sex, reproduction and death. Exú is the first orixá to be worshipped in feasts, because offending him risks great danger. More crucially, Exú is the messenger and the connection between humanity and the orixás so that nothing can be done without his intervention. Exú, in his quality as messenger, can open or close roads and possibilities. He is the guardian of roads and more symbolically

important, crossroads. To add to the complexity of this orixá, the energy that Exú represents can be split into the *exús*, also called *escravos* (slaves). Exús or escravos act on matters that the orixás, because of their purity, will not touch. This often means the more truculent side of sex and death, and because of that exús are feared and revered. It is very rare for an initiate to have Exú as their main orixá – I met only one person during the course of my research who was initiated as a *filha de Exú* or daughter of Exú.

Apart from the orixás, Candomblé has incorporated into its cult various mythical figures and spirits that are unique to Brazil (see Prandi, 2001). Referred to as *entidades* (entities), their worship must take place on different days than the orixás, since their character is more ambiguous. While orixás are ultimately conceived as embodiments of a cosmic energy, entidades are manifestations of human beings, sacred but still human. As such, they are often sought after to intervene in more mundane problems. Their feasts are more like social than religious affairs, and incorporate hard liquor, smoking, and samba dancing. Among the most widely worshipped entidades are the *caboclos*, spirits of Amazonian Indians with names like Pena Branca (White Feather), Sete Serras (Seven Mountains), or Sete Flechas (Seven Arrows). There are also sailor spirits called *marujos*, representatives of the Brazilian backland cowboys or *boaideros*, and Pomba Giras or Maria Padillas, mythical prostitutes invoked in matters of romance and sex. If the Candomblé pantheon sounds confusing, it is. This reflects the open-ended nature of Candomblé belief. While there are general similarities across believers that represent orthodoxy, each community and each initiate will interpret beliefs and rituals in a slightly different way. This is exacerbated by the fact that much the revelation of knowledge is gradual and keeping the *awo* or secret from outsiders and recent initiates is at the core of the religion.

Orixás and the entidades are not distant, abstract beings. The world of a Candomblé adept is populated by their different manifestations and their presence is an almost domestic occurrence. It is common to hear initiates speak of their orixá as one would speak of an acquaintance, citing likes and dislikes of the orixá in a familiar manner. Part of the reason for this sense of immediacy is the practice of spirit possession, during which the orixás and other entities manifest themselves to their followers. In Candomblé, becoming possessed is referred to as *incorporar* (to incorporate), *manifestar* (to manifest), *receber* (to receive), *vir na cabeça* (to come to the head) *pegar santo* (to "catch" the saint, as catching an illness), and *rodar com santo* (to roll with the saint), among other terms. Not everyone has the capacity to incorporate, but when it occurs, the person will only incorporate his or her main orixá (the dono da sua cabeça), in addition to the entidades.

Possession occurs in various contexts, most impressively in the large public celebrations held throughout the year. Possession by the orixás is a strictly ritualized affair which generally occurs within the confines of a sacred space. The medium, often called *cavalo* or horse, has blank or shut eyes and mumbles softly and sometime unintelligibly, following movement configurations characteristic of each orixá – for example, Obaluaê traces circles in a slow rhythmic dance, while Oxumaré rushes back and forth while periodically hopping on one foot. Although it is an inherent ability, possession must be cultivated and perfected. Novices and others who have not received the necessary preparation experience possession as a dramatic and even violent event. It is only after the individual goes through the appropriate training and rites that manifestations will occur in the proper manner.

Possession by caboclos, boiaderos and other entidades follows a different pattern. It can happen practically anywhere and to anyone. During feasts, mediums

dance erratically while smoking cigars and cigarettes and taking long gulps of

cachaça, a strong liquor made from sugar cane. Because entidades are the spirits of

departed humans, they act as such. They chat, joke and flirt with visitors, and often

behave rowdily and lasciviously. Possession in Afro-Brazilian religions has been the

subject of much work, including a recent cognitive account of the phenomenon by

Cohen (2007).

4. Social Organization

A Candomblé house of worship is most commonly called terreiro, but other

terms are casa (house) or simply candomblé. A terreiro is essentially the private

residence of the leader of the house and family members with specially-designated

areas for ritual activity. Traditionally, some religious followers also lived at the

terreiro, but I found this to be increasingly rare in Salvador. Since there is no

overreaching religious authority in Candomblé, terreiros are essentially self-governing

and autonomous. However, because new candomblés are formed by initiates who set

out on their own from an existing house, the religion has a phylogeny of sorts.

Usually, the leader of a new terreiro maintains strong bonds to the house where he or

she was initiated and to those of people initiated at the same time. Older terreiros who

have given rise to daughter establishments are called the *raiz* (the root). Thus,

candomblés are by no means isolated and exist in a well-established network of social

relationships.

Physically, a terreiro consists of living quarters for its resident members as

well as areas designated for ritual purposes. Ideally, the organization of the house

recreates the sacred in a meaningful manner in which the location of various rooms

and structures follow determined strictures that ensure the preservation of axé

(Bastide, 1958/2001). They must also be near natural resources that are required for

ritual activity, such as rivers and certain trees. Since Candomblé has become a primarily urban phenomenon, this makes it very difficult for traditional forms to persist. Apart from a few wealthy establishments that have large surrounding patios to recreate natural spaces, most terreiros are small and located among modest residences in low-income neighborhoods and shantytowns. These terreiros function with a few basic elements: a room of the amplest proportions available for rituals and feasts (the *barracão*), a small altar room to house offerings and paraphernalia for each orixá (although traditionally there should be one for each orixá), and a separate room used for secluding neophytes during initiation and other especially sacred rites (the *roncô*). In more modest terreiros, a small room may serve the purposes of both roncô and altar room. It is also common for areas to be used for both secular and religious purposes. The barracão, for example, is often a general living-room sort of area for house residents. This is one of the ways in which the flexibility of the religion has served it well, since adherents have been able to accommodate aspects of the religion to the new demands of urban living.

Each terreiro identifies with a particular *nação* or 'nation', which denotes the ethnic origin of the ritual. Terreiros may describe themselves in various manners, but commonly as Angola, Congo, Jeje, Nagô, Ketu, or Ijexá, the last three belonging to the prevalent Yoruban tradition. This identification of a terreiro has long ceased to represent the ethnicity of its members and it is limited to differences in musical rhythms, ritual language, or details of ritual practice, although these are also not always practiced consistently. Most candomblés in Bahia identify as Ketu or Nagô. This conveys prestige in the form of authenticity and long-standing tradition, since these were the nações of the first terreiros of Salvador.

Usually, a terreiro is a family-run operation although not all members of the household are necessarily initiated or even involved in the religion. I encountered terreiros where family members were Catholic or even recent converts to Evangelism, which is particularly hostile to Candomblé. Normally, however, kin and in-laws constitute the core of a terreiro and possess important roles in the hierarchy. This is facilitated because extended families often live under the same roof. Generally, adherents of Candomblé can be divided into two categories: initiated members who have a defined position in the religious hierarchy of a terreiro and external followers who are essentially outside the hierarchy but frequent terreiros in various capacities and levels of devotion. Thus, although these categories may appear to be well-defined roles, in practice they are ambiguous and their limits are not clear-cut.

4.1 Terreiro Hierarchy

The structure of terreiro membership parallels a family in terminology and organization (for a detailed treatment of the internal hierarchy of terreiros or the *familia-de-santo*, see Lima, 2003). Only those who are initiated are part of a terreiro's strict internal hierarchy. Apart from the position of leader of the house, rank is determined by type of membership and seniority in terms of initiation date. Even children can occupy high posts in the hierarchy of a terreiro if they have been initiated and some as young as seven or eight participate regularly in ritual activities. All members of a terreiro are expected to keep careful track of hierarchical relationships and their relationship to everyone else, and act accordingly.

Becoming an initiate can occur through different paths. Candomblé allows people to be attracted and seduced by the rhythms of the ritual. As Silva (2000) explains, "the principal way of attracting new adepts in the Afro-Brazilian religions is by promoting channels of participation so that individuals incorporate in themselves

the religious values through the empirical experience of that universe" (*a principal forma de atração de novos adeptos nas religiões afro-brasileiras é propiciar canais participativos para que as pessoas incorporem em si mesmas os valores religiosos através da experiência empírica desse universo*). For those born into the religion because of family ties, formal initiation may never occur and the person is gradually incorporated into the activities of the terreiro since an early age. Both children and adults are often brought to a terreiro as a last-resource solution to a variety of psychosomatic symptoms, such as headaches, nauseas, dizziness, visions, amnesia, and unusual or odd behavior. In those cases, it is clear the person is "wanted" by the orixás and the solution is either a course of spiritual treatment or full initiation. In other cases, a person may simply be curious about the religion and start by attending public feasts and consulting the services of the terreiro as a client. Clients bring a variety of practical problems to the terreiro, from illnesses to relationship issues. Apart from representing a pool of potential initiates, clients are also the terreiro's main source of income, since there are fees for consultation and treatment.

The following categories describe the general hierarchy of a terreiro in order of decreasing importance. This is a simplistic characterization that does not do full justice to the diversity within each category, but provides a broad outline of the organization of a terreiro.

Ialorixá or Babalorixá:

The undisputed authority in all secular and religious matters of a terreiro is the *ialorixá* or *mãe-de-santo* (in the case of a woman) or *babalorixá* or *pai-de-santo* (in the case of a man).[8] Older terreiros, like the famous Casa Branca and Opô Afonjá have only had female leaderships throughout their histories. While the majority of

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[8] The literal meaning of ialorixá is "mother of the orixá", while babalorixá means "father of the orixá". The Portuguese forms, mãe-de-santo and pai-de-santo, can be translated as "mother of the saint" and "father of saint", respectively.

terreiros today are still led by ialorixás, there are many led by men. Despite the gender difference, the responsibilities and duties of both are virtually identical (for convenience's sake, I will use the terms ialorixá and mãe-de-santo except when the gender distinction is necessary). Ialorixás must have the ability to incorporate or be possessed by the orixás, since communication with the supernatural is their primary source of power. To become one, the initiate's own mãe-de-santo must determine if she has the appropriate spiritual and social ability to assume the role. This can be referred to as having a *dom*, or gift, or *vir com cargo*, meaning "coming with the charge". If that is the case, the person may open her own terreiro after completing a seven-year cycle of ritual obligations. Another route to becoming a ialorixá is through inheritance. Terreiros can be passed down to the next generation after the death of the original leader; usually a family member is appointed and readied beforehand. This individual must complete the same requirements as any other ialorixá.

Opening a terreiro is a daunting effort (for a case study of the difficulties of opening a terreiro, see Maggi, 2001). Since most ialorixás come to the post by opening their own establishment, rather than inheriting it, this involves at the very least renovating an area that can be adapted for ritual worship. This is usually done at home, but sometimes a different location is purchased for this purpose. The lack of an appropriate space is a deterrent for many and often delays the foundation of new terreiros by years. Rather than beginning as fully functioning religious communities, most terreiros only arrive there after a gradual process in which the ialorixá garners enough material resources and fills a few key positions of the religious hierarchy. As a mãe-de-santo pointed out to me, "nobody opens a candomblé by herself" (*ninguém abre candomlé sozinha*)[9]. Many begin by receiving clients at home and performing

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[9] As mentioned in the Introduction, other terms to refer to a terreiro are candomblé, roça, casa, and axé.

occasional *sessões* (sessions), small gatherings of friends and neighbors where an entidade (e.g. a caboclo or Maria Padilla) is manifested and provides consultations for clients and guests. Once a core group of followers is ready and materials for altars and feasts are bought, formal inauguration rites and attendant feasts must take place for the terreiro to open officially.

Economically, things may be easier for someone who inherits a terreiro, but there are other challenges. If the successor is not a relation of the previous leader, conflict over the property can escalate to legal proportions between the religious community or *familia-de-santo* (literally, family of the saint) and the biological family, or even among relations who do not wish to continue running the candomblé. In either case, transitions are rarely smooth and the new leader must struggle to establish her authority, especially with older members. She must also affirm the existing clientele's ability in her own powers or attract new ones. Many times, the death of a long-standing leader and ensuing conflicts spell the end of a terreiro or results in a split into different establishments.

Once the terreiro is fully functioning, the responsibilities of the ialorixás only increase. She must organize and conduct worship of the orixás, provide consultations to clients, and ensure the welfare of her familia-de-santo. Initiates or *filhos-de-santo* (children of the saint) are dependent on their mãe for spiritual and practical guidance. She is the first source of aid to every situation, from curing illnesses to arbitrating disputes or collecting donations for a member in need. In return, filhos-de-santo are expected to obey and completely submit to her authority. The success of a terreiro is largely dependent on the charisma and personality of its leader and her ability to attract and retain both clients and initiates. Conflicts and jealousies among filhos-de-santo are common, as they compete for the attentions and preference of the ialorixá.

An effective leader must thread a delicate balance between authority and affection. Thus, while there is certainly an income that can be made if the terreiro is successful in attracting followers and clients, the economic and emotional burdens are also never-ending.

Equedes and Ogãs:

Filhos-de-santo who never incorporate orixás are divided by gender into equedes (females) and ogãs (males). While their initiation or *confirmação* is less extreme, their role afterwards, especially for women, is quite demanding and involves very specific responsibilities centered on the care of the orixás. Although equedes cannot open their own terreiro, they constitute the backbone of the house and can reach very high levels within the hierarchy, often becoming the second-in-command or *iakekerê* (also called *mãe pequena* or little mother, or *pai pequeno* or babakekerê in the case of a man). Other equedes, depending on their specific place in the hierarchy and their personal abilities, are in charge of cooking food offerings, performing ritual sacrifices, preparing neophytes during the initiation period, caring for ritual instruments and altars, and more mundane tasks like cleaning the terreiro and supervising feast arrangements. In addition, equedes have the special responsibility of assisting the orixás when they manifest themselves though possession. Each orixá has special attire, headdress, and ritual objects, such as a mirror or a long silver cane. Equedes must keep this equipment ready and in optimal state to dress the orixá when it manifests while making sure the initiate does not get hurt during the trance. This caretaker role is the most determinant aspect of the position. A teenage equede, succinctly described her role to me in a short phrase: *equede nasce mãe* (an equede is born a mother).

Ogãs, rough male equivalents of equedes, are also crucial for the everyday functioning of the terreiro. Ogãs also help in the preparation of rites, decorating the ritual area or barracão, collecting necessary leaves and herbs, and purchasing animals for sacrifice. Like equedes, ogãs can attain important posts in the house, like that of *axogum* or *ogã de faca* (ogã of the knife), who is in charge of sacrificing animals. Others may be *alabês* or *tocadores*, musicians who play the drums and direct chants during feasts. Ogã is also a title that is given to male benefactors of the terreiro that may not be very active in its daily routine. For example, the most famous terreiros of Salvador count as ogãs politicians, artists, writers or other prominent figures of public life that rarely attend feasts or rites, but contribute financially to the maintenance of the house.

Iaôs:

A Candomblé initiate that can manifest or incorporate the spirits becomes a *iaô*. Although the term is widely acknowledged to mean "wife", iaô is used for initiates of both genders. Often, a person will seek to become part of a terreiro after experiencing possession spontaneously during a public feast. This is a clear sign the orixás want that person's head and she will know no peace until she is properly initiated. At this stage, possession is violent and uncontrollable. Only after initiation and training will the iaô learn to manifest the orixás in the appropriate manner. Iaôs begin at the lowest echelons of the religious hierarchy, partly because they are particularly vulnerable to supernatural forces and special precautions need to be taken. Initiation is a normally a collective act in which several neophytes are grouped together in what is called *o barco das iaôs*. Members of the same cohort or barco often retain close ties throughout their lives. The initiation ritual is particularly

grueling, involving a period of total seclusion in the roncô that traditionally lasted many months.

Today, the period of seclusion during initiation is often reduced to a few weeks since many new members work outside the terreiro or simply do not want to spare long periods of time. Nevertheless, the process is still arduous and one of the most jealously guarded secrets of Candomblé (but for an account, see Wafer, 1991). All body hair must be removed, which is why a common term for this type of initiation is *raspar cabeça* (shave the head). During this time, each initiate is bathed and swathed in herbs, potions and the blood of sacrificial animals. They can only consume especially prepared foods and constantly receive secret knowledge from especially chosen older members. A crucial act involves making sacrificial cuttings across the initiate's shoulders, torso and head. Initiation is conceptualized as a rebirth where the main orixá of the person is revealed, giving her a new name and identity. The *saída de iaô* or coming out, is marked by a large public feast that acknowledges the new member's entrance into the life of the terreiro. After seven years of initiation, a iaô becomes an *ebomi*, an elder of the terreiro. Few will go on to become ialorixás or babalorixás of their own terreiro. Most iaôs will remain in their original house to continue their role as connectors between the congregation and the orixás.

Abiãs:

Abiãs are novices who have yet to go through the initiation process and are only beginning to seriously undertake the study of the religion. Many end up leaving or switching terreiros before initiation takes place; others may remain abiãs for years and never become initiated. Abiãs are at the lowest level of the terreiro's hierarchy. They cannot actively participate in important rituals and are often confined to the menial jobs of the house. During this stage, the individual may attend various terrerios

to determine where they fit best, which is normally a matter of personal preference on both the side of the novice and the leader of the house. As a researcher learning for the first time about Candomblé, I was sometimes called an abiã.

4.2 Clients and External Followers

A terreiro provides spiritual guidance but its mission is fundamentally pragmatic, aimed at helping individuals achieve happiness and material success in this life. In this capacity, the most important external followers are clients, who range from regulars to once-in-a-lifetime customers. They are the principal economic support of a terreiro, and their fees serve to finance ceremonies and offerings to the orixás. Problems brought to the terreiro by clients range from illnesses to family disputes, bouts of misfortune, monetary issues, love and relationship issues, alcoholism and other addictions, or even a sense of existential angst. Sometimes, the services provided by the terreiro are analogous to a tarot reader: the person seeks advice about an important future decision or simply wants to know what rituals they should follow to ensure good luck in the coming year. Only the ialorixá or babalorixá provides consultations, which utilize a divination technique called *jogo de búzios*. This uses arrangements of cowry shells to communicate with the orixás and determine the best method for solving the problem and, if desired by the client, follow with the appropriate course of treatment or *trabalho* (literally, job). A trabalho can involve a variety of offerings (e.g. food, alcoholic beverages, cigarettes, candles, plants and other objects), herbal baths, tonics, cleansings, and animal sacrifices depending on the severity of the problem. There is usually a fixed fee for a consultation while follow-up trabalhos are charged depending on the amount of work needed to ensure a favorable conclusion. A client also supplies the items and materials for the necessary rituals, but may know nothing of how a particular part of the service is performed. For example,

the placement of offerings, called *despachos* or *ebôs*, in the appropriate location is usually a secretive activity carried out by members of the terreiro without the client. It is quite common to find despachos on the streets of Salvador, usually at crossroads, under bridges, near the sea, or in parks next to particular trees. Because terreiros depend on clients for steady income, it is important to sustain a reputation of effectiveness, honesty, tradition and seriousness. Terreiros that advertise their services on newspapers, radio and even websites, are generally frowned upon as greedy charlatanry by other Candomblé followers, although several ialorixás I encountered gave out business cards offering their services.

The majority of clients consist of neighbors, friends, and relatives, but their social background tends to be more diverse than that of terreiro members. A client may be a neighbor who regularly attends feasts at the terreiro and has a personal relationship with its members. It may be someone with only a passing acquaintance with the religion, brought by a relative or friend or simply through word of mouth. It is not uncommon for individuals very much outside the social sphere of a terreiro to seek its services, either as a last resort to a particularly intractable problem or as a sort of fashionable adventure. Tourists and upper middle-class Bahians often consult a mãe-de-santo simply to find out which orixá they are most compatible with, rather in the nature of an astrological sign. Not all terreiros attain an economically diverse clientele, but having wealthy individuals as clients is certainly an asset that every terreiro covets. Having a client base that extends beyond the immediate neighborhood greatly enhances the reputation of a ialorixá or babalorixá, particularly if it includes Brazilians from large cities, like São Paulo or Rio de Janeiro, or foreigners. There is also an obvious economic gain, since consultation fees are often adjusted to the income of the client. In exchange, wealthier clients are often treated with special

deference. For example, they are provided with special seating during public feasts, whereas everyone else stands (a courtesy often extended to me as well).

Apart from clients, any given terreiro has a group of followers that are not part of its internal hierarchy but become important members of the house. Close friends and relatives are often invited to private rituals although they are not initiated, or may simply attend as a matter of course. Neighbors who grew up around Candomblé lend a hand during feasts, such as taking over drumming or helping serve food for guests. These individual cases are negotiations between the leader of the house and the followers, depending on factors such as the person's relationship to terreiro members or the degree of adherence to orthodoxy of the ialorixá or babalorixá. Finally, there are also those for whom Candomblé public feasts constitute an entertaining social gathering. They may not be active devotees, but they enjoy attending feasts around the neighborhood whenever they happen to occur.

Broadly, the Candomblé community or *povo-de-santo* (people of the saint) is highly interconnected. The logistics of initiation and establishment of new terreiros ensure that many adherents have relationships with other houses. Members of the same initiation cohort often retain close ties throughout their lifetimes. In one case, I encountered two terreiros that organized their feasts together because the ialorixá and babalorixá of each had been initiated together. While initiation in many ways bounds an individual to a particular house, he or she does not have to remain its exclusive member. Older and more established terreiros may have all important posts already occupied and an ambitious initiate may begin to frequent other, newer establishments in order to obtain an important position in the hierarchy. Other factors, like finding a candomblé in one's neighborhood or disliking changes that occur during leadership

shifts, also play a part. It is not uncommon for an individual to become a permanent member of a terreiro different from where he or she was initiated.

On the other hand, terreiros can also be rivals for followers and clients. The povo-de-santo constitutes an efficient gossip network where everything from an initiate's ritual clothes to the quality of the food at a particular terreiro are widely discussed. Criticism about other terreiros' perceived deficiencies of ritual practice, belief and reputation are common subjects of conversation. Rivalry can be sparked by competition for the most successful feast, the most initiates, the largest house, or the wealthiest clients. More serious indictments center on deviant sexual practices and incest, since sexual relationships among terreiro members are strictly prohibited, but do occur. Terreiros may even accuse each other of practicing quimbanda, working to harm rather than help others.

A particularly sharp divide is found between the handful of older, wealthier terreiros and the hundreds of more modest establishments throughout the city. The 'traditional' terreiros of Casa Branca, Gantois, and Opô Afonjá have been the center of ethnographic studies on the religion and are featured in countless documentaries, interviews, and news segments. Their feasts and celebrations attract numerous politicians and public figures - famous Brazilian musician and now Minister of Culture Gilberto Gil is an assiduous member of Opô Afonjá. Their high visibility means that these few houses have a disproportionate say in what constitutes the orthodoxy of the religion (which by no means implies they agree with each other). Pronouncements from the ialorixás of these terreiros constantly decry the corruption of tradition that occurs in other terreiros, while their smaller counterparts perceive them as pretentious, greedy, and far removed from the true spirit of the religion.

5. Commitment Costs

In addition to the sacrifices inherent in the hierarchical position, Candomlé requires significant investments of time, effort and material resources associated with a range of individual obligations and communal activities. Both rituals and the social organization of a terreiro reflect its axé and the nature of its relationship with the orixás. Thus, violating or ignoring the many regulations that govern terreiro life can have dire consequences for initiates and the house itself. Failing to do right by the orixás can result in accidents, economic problems, or even death. One must be particularly careful to follow the taboos associated with one's main orixá to avoid illness or misfortune. This is why many non-initiates follow these to some extent, although this depends on the degree of devotion to the religion and the terreiro itself.

The daily upkeep of the terreiro is a shared responsibility among all members. This includes mundane tasks like cleaning, cooking, or mending ritual clothes, but also collaborating on the trabalhos of clients and performing weekly internal rites. Monetary donations are frequently needed to purchase sacrificial animals, food, candles and other offerings, in addition to paying utilities like electricity, gas or running water. Renovations and improvement schemes to the terreiro can also drain the resources of initiates.

Individually, a Candomblé adherent must comply with a long list of proscriptions, taboos, and regulations. The strictness with which these rules are followed depend on the degree of flexibility the mãe or pai-de-santo allows. Nevertheless, the list is dauntingly long. There are certain foods a person cannot eat and colors she cannot wear. Obedience and acquiescence to the hierarchy of the house is crucial and frequently emphasized through submissive greetings and gestures. For example, abiãs and low-ranked iaôs never walk pass the ialorixá without bowing the

head and must sit on the floor in her presence. The person must memorize chants, terms, and names of people, objects and rites (some in Portuguese and some in Yoruba); learn the myths, preferences and traits associated with each orixá, become skilled at recognizing and using herbs and potions, and conduct rituals in the appropriate manner. Within the terreiro, initiates must ask for the ialorixá's permission for practically everything and wear special robes that must be donned on and taken off in a particular manner. Every week, the individual has to keep a day or two of *resguardo* (roughly, a day of protection). During resguardo, the person must abstain from alcohol, sexual relations and secular entertainment like bars, parties or concerts.

Initiation for a iaô, as described above, is particularly rigorous and time-consuming. Iaôs must also purchase the complicated and expensive attires the orixás wear during trance. While requirements for equedes and ogãs may not appear as demanding, they too must sponsor a large public feast to mark the occasion of initiation. In addition, there are obrigações or obligations that must be completed to mark the anniversary of initiation at one, three, seven, fourteen and twenty-one years. Each of these involves a period of seclusion at the terreiro and a large public celebration, which is why many initiates never complete more than one or two obrigações. In addition to these special ceremonies, every terreiro has a more or less regular calendar of public feasts that commemorate occasions or motives important to the community, such as the founding date or celebrations for the principal orixás of the house. There are also a handful of well-recognized dates that most terreiros celebrate on a yearly basis, such as feasts for Oxalá in December, Obaluaê in September, or the feast of caboclos.

Feasts are a showcase for what each community represents and they are aimed at attracting and emotionally engaging attendants (for a detailed treatment of the meaning of the feast, see Amaral, 1998). Because these public occasions constitute the proselytizing element of the religion, much of the activity of a terreiro revolves around their planning. The size of feasts depends on the economic resources of a terreiro, since not all can afford celebrations on a grand scale. Nevertheless, even the most modest terreiros put on extra effort to ensure a feast will be successful and preparations begin weeks in advance. Amaral (2002) provides a detailed list of the items usually needed for a relatively inexpensive saída de iaô ceremony and estimates the cost at around $1500 dollars. In addition to ritual apparel, adornments, cooking utensils, and candles, live animals must be brought to the terreiro for the sacrifice that takes place before the public part of the feast begins. Large amounts of food must be cooked for attendees and guests. The barracão, the largest ritual room in the house where the feast takes place, must be cleaned and decorated, and the orixá costumes are washed and ironed to perfection. Initiates remain at the terreiro for days before the actual event to conduct purifying rituals and offerings and their sustenance also represents a drain on the resources of the house. In addition to these logistical concerns, there is extensive spiritual preparation. Special precautions must be taken by all members of the terreiro, such as additional taboos on food and sexual activity.

Candomblé devotees sometimes complain that many people are attracted to the religion simply because of its beauty or *boniteza*, rather than true spiritual devotion. After witnessing a feast, it is easy to sympathize with the sentiment. Feasts are a sensory overload of imagery, song, dance and food. They normally start late in the evening, around eight or nine, and easily continue into the early morning. Fast, percussive music and chants are constant throughout and provide an almost

hypnotizing background for the frenzy of activity (a basic Candomblé orchestra is composed of three *atabaques* or drums and the *agogô*, a small metal instrument consisting of two bell-shaped structures banged with a stick). Each orixá has its own rhythms, songs, and dance steps, so that possession begins to occur as each of the respective pieces are played. As the iaôs fall into trance, they are taken away by the equedes and later return dressed in the elaborate attire of their respective orixás. For the duration of the feast, orixás and uninitiated iaôs will dance constantly and continuously, swirling in fast circles, rushing across the room, jumping, and occasionally giving piercing ritual yells. Meanwhile, equedes and ogãs will serve and distribute food and drink to the guests and ensure that all is running in an orderly fashion.

A successful feast is well-attended; chairs and benches placed along the walls of the room may not be enough and visitors crowd around windows or stand around the room. Apart from associates of the terreiro, and their friends and relatives, attendees include neighbors who casually drop in an out during the feast, individuals from other terreiros, especially invited guests such as ialorixás, wealthy clients, local politicians, and sometimes tourists. Part of the attraction of Salvador as a travel destination is its Afro-Brazilian heritage, and Candomblé feasts are often in the itinerary. Organized tours to Candomblé feasts are a desirable source of income, whether these are arranged through semi-governmental organizations[10], travel agents, or an enterprising member of the terreiro. While it may be true that some terreiros

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[10] In Bahia, the Bahian Federation of Afro-Brazilian Worship (*Federação Baiana do Culto Afro-Brasileiro* or FEBACAB) arranges guided tours to Candomblé feasts. The FEBACAB's origins go back to the 1930s when Bahian scholar Edson Carneiro and Candomblé activists came together to organize a series of conferences on Afro-Brazilian religion, which culminated in the formation of the Union of Afro-Brazilian Sects (União de Seitas Afro-Brasileiras). The original aim was to unite the Candomblé community and protect terreiros against rampant police abuse. The União was later transformed into the FEBACAB, or Federação for short, which now has counterparts in other Northern states where Afro-Brazilian religions are widespread.

compromise the integrity of the ritual for the sake of more tourists, I did not found this to be the case. Generally, tourists are treated in the same way as the many other guests, required to behave respectfully, and often asked not to take photographs.

It is ironic that Candomblé represents an important draw for the tourist industry of the region, since historically it has also been the subject of extensive prejudice and discrimination. This dichotomy is not exclusive to the religion, but extends to other aspects of Afro-Brazilian culture. In periods of political turmoil and crises of national identity of Brazil's recent history, Afro-Brazilian symbols have been romanticized, adopted and (mis)appropriated by the white elite (e.g. the Modernists in the 1920's, Gilberto Freyre and the Vargas dictatorship in the 1940's, and the Tropicália movement of the 1960's). Today, Candomblé's influence in Bahia is evident anywhere from pop music, Carnival floats, to street monuments honoring the orixás. This obscures the fact that terreiros have endured legal prosecution for most of their history and had to register with the Health Department until the late 1970's. Unjustified police incursions into terreiros still occur and in recent years, vitriolic rhetoric from Evangelical and Pentecostal groups has added to this climate of intolerance. In the best of circumstances, outsiders tend to perceive Candomblé with a mixture of trepidation, fear and contempt. For most Candomblé adherents, settings that place them outside their immediate circle of acquaintances mean hiding or down-playing their religious affiliation. Being recognized as a *macumbeiro*, a pejorative term for Candomblé adherents[11], can result in losing a job or enduring mockery and abuse. Thus, religious discrimination can represent a non-trivial cost to terreiro membership.

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[11] Some Candomblé adherents also use the word to refer to themselves.

6. Cooperation in Candomblé

The kinship relations that were the basis of many African social and cultural systems were irretrievably ruptured by the slave trade. The internal structure of the Candomblé religious hierarchy and priesthood created a fictive kin network which may have helped fill that void in the lives of Africans and their descendants. The necessity for support networks became particularly urgent as freed plantation workers flocked to urban centers in post-abolitionist Brazil. Abolition had made no provisions for these thousands of individuals. Terreiros offered services the state failed to provide, functioning as community centers where medical or financial help could be obtained (Harding, 2000).

It may be that these religious communities were particularly attractive to women as sources of economic and social support. The question of why women predominate in Candomblé has been often tackled by scholars. Reasons put forth suggest that Catholic sodalities in the 19th century facilitated the emergence of female leadership and allowed women to more easily overcame ethnic divisions and collaborate to form pan-African communities (Harding, 2000), or that women attained greater economic independent through dominance of street commerce, which allowed them to invest in religious houses (Butler, 2001). All these factors may have contributed to transforming candomblés into safe and supportive spaces for women in situations of economic and social marginalization. Some accounts of Candomblé (e.g. Lima, 2003) point out that in the past common-law marriage was a frequent arrangement and that only women and children lived at the terreiro, while men were only occasional visitors. Terreiros could also provide help for women who would otherwise rear children alone.

Similar dynamics may still operate in contemporary Bahia. According to the Brazilian Institute of Geography and Statistics (Instituto Brasileiro de Geografía e Estatística or IBGE)[12], women head 24.9% of households in Brazil, while the rate in Bahia goes up to 32.54%. Poverty and unemployment foster teenage pregnancy and unstable relationships between couples, which in turn contribute to a female-centered, extended family structure that often lives under the same roof. Women still constitute the majority of the religious membership in Candomblé and are usually the most active members in the daily life of the terreiro. In cases where the ialorixá is the leader of the house, members of the extended family often constitute the core of religious community. The income that the ialorixá makes from clients is often can become the primary support of children and grandchildren, a pattern I often saw repeated. Terreiro leadership as an avenue for economic stability may also play a role in attracting certain members.

When the terreiro is led by a man, parallel circumstances may apply. As Landes (1947/1994) noted long ago, many babalorixás and male iaôs are openly gay (others not so openly). Homosexuality in Brazil is a difficult path, particularly for young men, and many face rejection from family members and friends. Several researchers have suggested that Candomblé provides a space in which homosexuals can attain not only acceptance, but social success (Amaral, 2002; Fry, 1986). This is partly because meanings of identity, the body and sexuality are intimately tied to religious beliefs. There are also orixás that are sexually ambiguous: Oxumaré is neither male nor female and Logun Edé inhabits each gender for half the year. Because a person's fundamental character is a reflection of the orixá that 'owns the head' this association can explain and sanction behaviors normally considered

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[12] www.ibge.gov.br

deviant. If a babalorixá has a female orixá, his homosexuality becomes a fundamental part of his nature, and moreover, the center of his spiritual potency.

Apart from providing an opportunity for leadership, terreiros often continue to function as community centers of sorts. Followers can count with a temporary home, a small loan, someone to look after their children, and simply friendship and companionship. A candomblé can become an important source of support for the immediate community, a role that many houses take seriously. The best-known and wealthiest terreiros all have organized community programs, ranging from computing classes for teenagers to programs to combat racism and promote religious tolerance. Smaller candomblés do this as well, usually with very little external funding. Two of the terreiros I encountered in my research were registered as non-govermental organizations and worked with underprivileged youth and children. Another distributed hot meals to seniors in the surrounding shantytowns and the leader of yet another was heavily involved in various local committees and organizations for a variety of causes.

Thus, a tradition of solidarity remains alive in Candomblé today and has expanded to include a broader notion of social service. As early as the 1930's with the formation of the Uniaô de Seitas Afro-Brasileiras, Candomblé began to transform into an arena where debates on race, poverty and social justice were played out. Today, the religion continues to strengthen its involvement in advocacy and activism, either through direct action or by seeking out political candidates to represent their interests in local government. Paradoxically, part of the reason for this may be a response to the stunning success of Evangelical and Pentecostal churches to insert their members in political office. Because these congregations are openly hostile to Afro-Brazilian religion, Candomblé adherents have begun to mobilize to ensure they also have a

voice in the local political process. For example, I met a ialorixá who regularly hosted

meetings at her terreiro for a candidate running for *vereador*, a sort of city

councilman. With the expansion of the religion to the large metropolis of the South,

the visibility of Candomblé in public life can be expected to grow.

CHAPTER FOUR: THE CANDOMBLÉ TERREIRO

1. Introduction

The birth of a new terreiro or candomblé is fraught with challenges. The ability of the ialorixá or babalorixá (female and male leader of a terreiro, respectively) to attract a community of followers is the first and crucial step. In some ways, however, it is also the easiest. At this stage, the terreiro may simply consist of a private practice of sorts, where an initiated individual provides consultations and spiritual remedies for neighborhood clients. Girls looking for love potions, housewives with straying husbands, and young men seeking good luck charms constitute the bulk of the clientele. The ialorixá or babalorixá may even hold occasional *sessões*, small gatherings where she or he incorporates a caboclo spirit or another entidade that provides guidance and advice to those present. In many cases, this is as far as the endeavor to form a terreiro will go and efforts to transform a loose client base into a formal community will fail or never be attempted.

The true test of a leader's abilities comes when she decides to open a proper terreiro. Apart from the elaborate ritual obligations that precede the official inauguration, the person must count on a small group of devoted followers to fill necessary roles in the internal hierarchy. Certain areas of the house need to be transformed into sacred spaces or new structures need to be built. The terreiro must establish a calendar of regular feasts and begin to train potential initiates. Through the following years, the maintenance of a stable membership and client base will prove decisive in allowing the congregation to grow and become established as a full-fledged, 'serious' house. Thus, the religious devotion of existing members is an important stabilizing force for the terreiro.

While the success of any religious community is be partly determined by the commitment and effort of its members, extraneous circumstances also play a role. These may be endemic to any group-formation process, related to broader sociological trends, or specific to the case of each group, since terreiros are extremely variable in their composition and membership. Some have been established for decades, others have branched-off from larger and older communities, and some even emerge independently. The internal dynamics that operate in each house may be quite distinct. For example, a terreiro that increases its membership too fast may loose aspects of cohesiveness that at first made it an attractive choice. Smaller groups are expected to be more cooperative (e.g. Alencar *et al*, 2008; Boyd and Richerson, 1988; Olson, 1971) and growing into a larger community may alienate original members. On the other hand, larger terreiros tend to be wealthier and better-known, qualities that make them desirable for many people. In Candomblé, another important factor may be that tourist visits have increased in the last few years and become an enviable source of income. It is possible that new aspects related to terreiros' ability to attract visitors now play a role in their survival.

The importance of factors independent from the commitment of members may be particularly important in the case in the case of Candomblé and other religious groups that lack the support of a larger organization. Unlike congregations that are part of institutionalized religions, each terreiro is a completely self-governing entity. This independence has proved beneficial to the survival of the religion as a whole because it has given it sufficient flexibility to adapt to difficult and changing circumstances. However, the autonomous nature of terreiros makes each individual community more vulnerable to disintegration. When difficulties arise, a terreiro cannot depend on any kind of outside aid. Undoubtedly, the charisma of the leader

and the resourcefulness of its members play a crucial role in the survival of each terreiro, but stochastic circumstances that surround the founding of each house and its subsequent continuance can prove equally important in the long term.

Thus, the aims of this dissertation are twofold: first, to investigate the relationship between signals of religious commitment signals and intra-group cooperation in the context of evolutionary theory. Second, to contribute to the ethnography of Candomblé by exploring aspects of the social organization of the religion that have not received extensive attention.

2. Methodology

2.1 Research Design

While the idea that religion facilitates social cohesion and solidarity has long been an assumption in the social sciences, costly signaling theory provides a mechanism to understand how this process can occur. It also allows us to understand religious requirements that at first glance appear absurd as ultimately beneficial to the individual. The organization of Candomblé presents an ideal setting to test this notion because adherents display high levels of both commitment and cooperation. In the first case, initiates must comply with numerous and constant religious obligations that represent investments of time, effort and resources; in the second, the success of a terreiro requires the collective efforts and coordination of all members.

The research was carried out in the city of Salvador from July 2005 to October 2006 and consisted of a preliminary stage and three subsequent stages:

Preliminary Research (July and August, 2005): During the first two months, I collected material to compose a survey questionnaire that would allow me to explore the variability present in the population of terreiros in the city. I also conducted

informal interviews and observations to begin to explore the social organization and belief system of Candomblé.

First Stage (October 2005 – January 2006): During the first period of systematic data collection, I distributed the survey questionnaire to 80 randomly-chosen terreiros around the city and subsequently collected completed responses. This also allowed me to construct a general database of terreiros, gain access to potential informants, and identify specific terreiros for further research.

Second Stage (February 2006 – May 2006): I chose a sub-sample of approximately 20 terreiros from the larger database. I conducted extensive interviews and observations to create the paper-and-pencil instruments that I used in the last stage of the project.

Third Stage (June 2006 – October 2006): The final part of the project focused on the administration of paper-and-pencil instruments and an economic game to members of 13 terreiros from the sub-sample. At the same time, I continued conducting interviews and observations to understand the context in which to interpret more systematic results.

An important aspect of the research design was the use of both quantitative and qualitative methodology. This combined the rigor of hypothesis-testing with the detail of ethnographic investigation. Qualitative methods include informal interviews, semi-structured interviews, and participant observation at Candomblé terreiros. These were used to construct measurement instruments for further stages of the research and to provide context to situate more systematic findings. Quantitative data collection centered on three components: expressions of religious commitment, intra-group cooperation, and social cohesiveness. Religious commitment was assessed through questions on individual involvement with the religion and the terreiro itself, and

through a religious commitment scale created explicitly for Candomblé. Cooperation was measured in two ways: structured questions that obtained information on frequently-occurring cooperative acts among terreiro members and an experimental economic game.

Results from the investigation are presented in the ensuing chapters. First, I focus on descriptive and exploratory analyses of the general characteristics of terreiros. The systematic data presented here were collected during the first stage of the project, while interviews and observations were conducted throughout the duration of fieldwork. This chapter is aimed at uncovering some of the internal group dynamics that operate in these religious communities and identify areas where further ethnographic research would be fruitful.

The subsequent chapter is centered specifically on hypotheses-testing at the individual level. The primary hypothesis that emerges from costly signaling theory can be conceptualized as follows: *expressions of religious commitment that are costly or hard-to-fake are honest signals of the individual's willingness to cooperate with other group members.* In turn, this gives rise to the following predictions related to individual religiosity and cooperation:

a.) Individuals who display higher religious commitment will display more willingness to cooperate with fellow terreiro members (as a corollary to this prediction, those who display higher religious commitment should also *receive* more cooperation).

b.) Individuals who have the greatest need of belonging to the terreiro (i.e. who have the greatest need of the services the terreiro provides) will display higher religious commitment.

c.) Individuals with more kin members in the terreiro will display higher levels of cooperation, but less religious commitment (since kin members are expected to cooperate with each other more than with other people, they may feel less need to publicly communicate their commitment).

d.) Members who participate in more than one terreiro will display lower levels of commitment and cooperation than those who attend one exclusively.

Each of these questions is analyzed separately through statistical methods supplemented by ethnographic illustration. The results seek to provide substantiation for the signaling theory of religion, to investigate dynamics of intra-group organization, and to explore understudied aspects of Candomblé sociology.

2.2 Research Setting

Today, Salvador has a population of two million which swells to four if the suburbs are taken into account. This makes it the third largest city and fifth largest metropolitan area in Brazil. The Northeast, where Salvador is located, has some of the highest rates of poverty and unemployment in the country. This region is also widely considered the center of Afro-Brazilian culture; it is estimated that 75% to 80% of Salvador's inhabitants are descendants from enslaved Africans. This, of course, is directly due to its historical past as a main port of entry for the slave trade that dominated the colonial economy of Brazil. After abolition in 1888 (Brazil was the last country in the New World to abolish slavery), massive internal migration began from former plantation workers to urban areas in search of work. The poor communities that formed on the outskirts of cities like Salvador were the predecessors of current-day shantytowns or *favelas*. The city continues to be a target of migration from the poor rural interior. As a result, it has grown rapidly and chaotically. This, added to the enormous income disparity of Brazil, has resulted in a two-tier economic, social and

racial system, reflected on the spatial distribution and living conditions of its inhabitants. The mostly white elite of professionals, politicians and heirs of wealthy families live near the beaches in large apartment buildings or walled mini-mansions. The shantytown neighborhoods of the poor majority, composed largely of Afro-Brazilians, are interspersed throughout the city and dominate the landscape as one gets farther from the center of the city into the suburbs. With a handful of exceptions, it is in these underprivileged communities that most Candomblé terreiros are located.

Salvador is located on naturally hilly terrain, which contributes to the precarious nature of its informal settlements. Low-income dwellings are established wherever a minimum of space is available, often on squatter settlements, called *invasões*, and the dangerously steep sides of hills, or *ladeiras*. These communities form the continuous backdrop of the city; small, brick-and-plaster houses crowded together in maze-like confusion. Street signs are often missing and house numbers, when present, follow no particular order. Basic services such as electricity and water are available in neighborhoods closer to the center, but the suburbs often lack appropriate utilities. Most of these neighborhoods or *bairros* are only negotiable on foot, through labyrinths of narrow alleys, steep ramps and crude stairways of broken pavement, stones, and dirt compacted by the steps of its many residents. Apart from the non-trivial danger of mudslides during the rainy season, ladeiras, invasões and favelas are hubs of small-time drug-trafficking. Killings, shootings, robberies and drug addiction are domestic occurrences, worsened by the continual threat of violent and arbitrary police incursions. Even long-time residents avoid particularly dark corners and late night strolls, and strangers are strongly advised against it.

On the other hand, these bairros are close-knit and self-contained: children walk to the closest public school and play outside unsupervised, groceries are bought

at family shops ran out of homes, weekend entertainment is provided at neighborhood bars. In some ways, these areas exist as small islands of almost rural character in the larger context of the city. Chickens are commonly kept by families and it is not entirely unusual to see a couple of goats or even a horse. Because bus fares are expensive and few people own cars, those who do not work outside the bairro may spend weeks within walking distance of their home. Houses, built piecemeal with the help of relatives and neighbors, stand within a couple of meters from each other. It is common to while away the day sitting on the open doorsteps watching the neighborhood walk by. Residents of a bairro know each other well or at least by sight. Candomblé terreiros are easily recognized by neighbors, even by those who do not attend them. The public feasts of terreiros function as entertainment for both devotees and the merely curious who stop by to have a look and chat with friends.

Mott and Cerqueira (1998) estimate that the total number of terreiros in Salvador approximates 2000, but interviews with members of the Bahian Federation of Afro-Brazilian Worship[13] (*Federação Baiana do Culto Afro-Brasileiro* or FEBACAB) place this number closer to 3000. The IBGE estimates that 1.5% of the population of the country follows an Afro-Brazilian religion. It is likely that these numbers are under-reported for various reasons. During my research, I never visited a terreiro without finding that there was at least one other within a 10 minute walk – in

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[13] The FEBACAB, I eventually discovered, has an ambiguous role in the Candomblé community. In Bahia, the main administrative posts are held by Candomblé adherents, mostly male and associated with famous terreiros, such as Casa Branca. The purported role of the organization is to protect terreiros from discrimination and to provide Candomblé adherents with legal consultations, medical aid, and even retirement pensions. The FEBACAB also organizes and participates in events such as conferences, seminars, festivals, and such. Enrollment in the organization is entirely voluntary, but it requires comparatively hefty registration fees and subsequent yearly payments. Additionally, terreiros need to provide details on traditionally sensitive information, such as number of filhos-de-santo, initiation dates and anniversaries. The perception of the FEBACAB by most Candomblé adherents I talked to is quite negative. I heard numerous stories of FEBACAB officials coming to the terreiro and threatening its closure if fees were not paid, and of services being denied despite the person having completed all requirements. Although most terreiros display a copy of their FEBACAB registration somewhere on their terreiro, this is mostly out of caution and many discontinue membership after a while.

some cases, separated only by a couple of houses. Continued discrimination against Afro-Brazilian religions makes many individuals wary of admitting an affiliation with Candomblé. Additionally, occasional clients or visitors to a terreiro may not consider or identify themselves as followers of the religion *per se*. Converts to Evangelical and Pentecostal congregations are particularly vehement at denying any past association with Candomblé, although it is likely that many were associated with Candomblé in the past. For example, exorcisms or *descarregos* (literally, discharges) I witnessed at neo-Pentecostal churches such as the Universal Church of the Kingdom of God[14] (*Igreja Universal do Reino de Deus*) are aimed at liberating the person from the evil spirit of Exú, the orixá often associated with the Devil. The possession prior to exorcism follows the patterns of Candomblé, so that the person undergoing it must have had experience with the religion at some point. Thus, Bahians who live in low-income areas where terreiros are widespread have at least a passing acquaintance with Candomblé.

2.3 Preliminary Research and Composition of Survey Questionnaire

From July 2005 to August 2005, I collected material to compose a survey questionnaire. The purpose of this questionnaire was to understand the diversity of Candomblé terreiros in Salvador, gather group-level data to conduct exploratory analyses, and to serve as a sampling frame for further phases of the research. I began by conducting interviews and observations at terreiros identified through various sources. First, I approached the FEBACAB, which keeps records of terreiros throughout the city and organizes tourist visits to Candomblé feasts. Joãzinho[15], an administrative assistant at the FEBACAB who also officiates as the ogã of a terreiro,

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[14] The Universal Church of the Kingdom of God was founded by a Brazilian pastor in the 1970's. It is now one of the fastest growing, wealthiest, and politically-active congregations in the country and has expanded to Spanish-speaking Latin America, Europe and the United States. It is also very hostile to Afro-Brazilian religions.

[15] The names of all individuals have been changed to protect their privacy.

initially participated in exploratory interviews and provided information on upcoming public feasts at additional terreiros. I attended two public feasts at Joãzinho's own terreiro and was able to conduct informal interviews with various members of the house during two additional visits.

The famous Candomblé terreiros of Salvador, or *grandes casas* as they are often called, have celebrations constantly which are open to the public. I attended two feasts at one of these, and conducted informal interviews with those present. Finally, I visited terreiros listed in a catalogue composed by Mott and Cerqueira (1998). At this stage, I chose to limit my visits to terreiros in the neighborhoods of Garcia and Federação, as they are easily accessible through public transportation. Additional visits yielded interviews with two babalorixás or pais-de-santo, clients of a terreiro, and feast attendees at various public ceremonies. Finally, during a week-long visit to the nearby town of Cachoeira, I visited various terreiros and conducted further informal interviews and observations.

The information I gathered during this time was used to compose a 36-item household-level questionnaire that would serve to create an initial database (for the full questionnaire and translation, see Appendix 1). The questionnaire was composed in Portuguese and revised with the aid of a field assistant. Questions included aspects of belief and ritual, such as name of the terreiro, patron orixá of the house, number and dates of public feasts and nação or ritual style. Other questions dealt with aspects of social organization, such founding date of the terreiro, household size and income, changes in membership size and client base, consultation fees for clients, and principal terreiro expenses.

2.4 Data Collection

A random sample of 80 terreiros was chosen from a catalogue compiled by Mott and Cerqueira (1998). The catalogue lists 500 Candomblé houses in Salvador, including name of the house, nação, name of the person responsible, address, and telephone number when available (which is not often). As explained earlier, terreiros differ in details of ritual practice according to nação, or ethnic nation. Most terreiros in Salvador identify themselves as Ketu. Angola is the second most prevalent category while the remaining vary widely (Jeje, Nagô, Umbanda, Candomblé de caboclo, etc.). In an effort to obtain a homogeneous sample, initially only terreiros belonging to the Ketu nação were included. I excluded those with no defined nação affiliation, those with no contact information (neither address nor phone number), and those affiliated with Ketu and another nação, such as Ketu/Angola or Ketu/Jeje. This yielded a sample of 255 terreiros distributed all over the city, each of which was coded as a number from 1 to 255. I then used randomly-generated numbers to obtain the random sample of 80 candomblés.

Although the original intent was to use only terreiros from this sample to create a general database, this proved impractical for various reasons. Often, the address listed on the catalogue was impossible to find or the terreiro was no longer active and I was directed to existing candomblés in the immediate surrounding area. Additionally, some of the terreiros listed as Ketu in the catalogue self-identified as Angolan or something else in my own questionnaire. I ultimately decided to include these cases in the sample because differences due to nação are limited to details of ritual practice and do not significantly affect beliefs or social organization. Additionally, every terreiro has its own version of what Ketu or Angolan means, so that differences and characteristics attributed to each nação are inconsistent.

Questionnaires were distributed and collected from October 2005 to March 2006 in approximately 80 terreiros located in central and suburban neighborhoods or *bairros*. It was determined that the most effective method of obtaining responses was through personal visits accompanied by a field assistant. Because public transportation is slow and unreliable and in many cases terreiros are located a long way from the nearest bus stop, only three or four houses could be completed in the same day. At each terreiro, I would ask for the 'person responsible' for the house (*pessoa responsável*), which generally was the ialorixá or babalorixá (in cases where neither was available, details were provided to an elder member of the terreiro). I explained that I was conducting an investigation or *pesquisa* on Candomblé and that I would leave a questionnaire to be filled by the leader of the house at the earliest convenience. I also asked the person to consider the possibility of further participation in follow-up work. I then obtained a telephone number (often from a mobile phone) to call back and find out when I could return to pick up the completed questionnaire. For most terreiros, the completed form was collected within a two-week period.

Personal visits to terreiros were instrumental in building rapport with terreiro members and begin the identification of potential key informants. In some cases, simply leaving the questionnaire led to informal conversation, an invitation to the next public feast of the terreiro or an arrangement for further interviews. In some cases, people readily consented, others invited me to return to a feast or to visit before committing themselves, and still others declined to answer the questionnaire or returned it but explained they were uninterested in further participation.

2.5 Descriptive Results

I was able to collect 55 responses to the survey questionnaire, 24 of which were not in the original catalogue (all surveys had at least a few missing answers). Of

these terreiros, 37 were located in what are considered central neighborhoods of the city proper and 18 in the suburbs. As expected, the majority of terreiros reported Ketu as their nação (n = 37), followed by Angola (n = 10) and various others (n = 8). The mean years since founding date was 25.86; s.d. 17.56 (n = 45, 10 responses missing) with responses varying from terreiros that were still in the process of recruiting members to one that had been active for 72 years. A few more than half (n = 30) reported being led by the original founder rather than a successor. Consistent with the traditional view of Candomblé leadership, more terreiros in the sample were headed by women (n = 37) than by men (n = 18). Only about 25% of terreiro leaders reported being married or living with someone, while the rest were single, separated, divorced or widowed. The distribution of these categories varied according to sex. Six women reported being married, ten single, and fourteen separated, widowed or divorced; males were split only between married (n = 5) and single (n = 10). The mean age for terreiro leaders in this sample was 53.15; s.d. 13.26 (min. 29, max. 76, n = 41), although on average women were significantly older than men (58.27 vs. 44.27, $t = 3.752$, df = 39, $p = .001$). Approximately 40% of terreiro leaders described an additional source of income or employment apart from religious activities. These included receiving a retirement pension, owning a bar, selling Candomblé paraphernalia (*coisas de santo*), and working as a cook, nurse, administrative assistant, government employee and a doctor.

The nature of Candomblé as a loose network of religious houses is apparent in this sample, since 31 terreiros reported having ritual obligations with other houses (23 did not and 1 did not answer). Missing responses were common for questions about membership size of the religious house, some ritual activities, and financial situation. The average number of public feasts given in a year was 6.37; s.d. 5.21 (min. 0, max.

26, n = 38). Frequency of tourist visits at feasts was distributed across four categories (*nunca, poucas vezes, algumas vezes, muitas vezes*): 12 terreiros stated that they never received tourist visits, 14 a few times, 14 some times, and 10 many times.

In terms of the composition of the community, the mean number of members for terreiros was 51.29; s.d. 120. 61 (n = 31). Although there is wide variety, the estimate of 50 stable members for a typical terreiro is consistent with work from other researchers (e.g. Prandi, 1996). In terms of number of filhos-de-santo, which theoretically should only include those initiated or on the path to initiation, the mean was 51.95; s.d. 105.56 (min. 1, max. 600, n = 39).

Clients constitute the terreiro's main source of income. The average number of clients of a terreiro, or the total size of the client base, was 66.96; s.d. 71.61 (min. 5, max. 300, n = 23) and the average number of clients in a month was 28.25; s.d. 25.47 (min. 3, max. 100, n = 28). The consultation fee ranged from 15 to 100 Brazilian reais[16] (mean = 43. 26, s.d. 19.53, n = 39). While consultations usually have a fixed fee, the amounts charged for trabalhos (the ritual treatment ensuing consultation) depends on the severity of the problem. Twenty-five terreiros provided estimates, which varied widely from 30 to 5000 Brazilian reais and tended to be given as a range. Using the mid-point of ranges, the average was 440.94 reais, s.d. 697.87, but the modal response was 100 reais.

Only 11 of the houses surveyed provided an estimate of monthly income, which ranged from 120 to 20 000 Brazilian reais. Based on the other responses, the average number of clients, consultation and trabalho fees, somewhere between 500 and 1500 reais seems a realistic estimate of a typical terreiro's monthly income. The most significant expenses of a terreiro can be divided into religious activities and

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[16] At the time of the research, the exchange rate was approximately 2.25 Brazilian reais to the American dollar.

those that have to do with the general upkeep of the house. Among the former, the most often cited were obrigações[17], feasts, offerings, sacrificial animals, food and candles for the orixás. The latter included utilities (i.e. electricity, water, gas, telephone), food for the household, maintenance, construction materials and renovation costs.

2.6 Exploratory Analyses

The data gathered during this part of the research were intended to provide a broad understanding of typical terreiros in Salvador. Exploratory analyses revealed that aspects that determine a terreiro's income have the most significant effect on other relationships. Consultation fee is positively correlated with number of clients per month (Pearson's $r = .402$, $p = .047$, n = 25), and total number of clients (Pearson's $r = .450$,

$p = .047$, n = 20). Number of clients per month is also positively related to the number of public feasts per year (Pearson's $r = .648$, $p = .002$, n = 20). An increasingly common source of income is involvement with Salvador's booming "cultural tourism" industry. Terreiro members may independently seek out visitors at popular tourist spots or have an arrangement with local travel agencies. As mentioned earlier, an arm of the FEBACAB also organizes regular visits to Candomblé feasts throughout the city. A percentage of the amount charged to tourists comes to the terreiro in these transactions. Nonparametric correlations were used to assess the relationship between frequency of tourist visits and other variables. Frequency of visits is positively correlated to number of public feasts (Spearman's $rho = .551$, $p = .001$, n = 33), number of filhos-de-santo (Spearman's $rho = .549$, $p = .001$, n = 34), total number of

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[17] The word obrigações is used in two senses: in general, it refers to offerings, rites, and miscellaneous ritual obligations; more specifically, to anniversary feasts that celebrate the date of initiation and are supposed to take place at 1, 3, 7, 14, and 21 years. Since these are expensive, it is not unusual for obrigrações to be delayed by months or even years and some people never fully complete them.

clients (Spearman's *rho* = .509, *p* = .026, n =19) and number of clients per month (Spearman's *rho* = .347, *p* = .089, n = 25). Athough the difference does not reach significance, terreiros located in central bairros received tourists more often than those in the suburbs (*t* = -1.854, df = 48, *p* = .07). Location had no effect on number of filhos-de-santo, number of clients, or number of feasts.

Measures of terreiro affiliates are consistently inter-related. Number of members and filhos-de-santo (Pearson's *r* = .392, *p* = .032, n = 30), number of members and clients (Pearson's *r* = .805, *p* <.001, n =19), and number of filhos-de-santo and clients (Pearson's *r* = 486, *p* = .026, n = 21) all show significant relationships. The size of the community seems to increase with years since foundation (Pearson's *r* = 350, *p* = .08,

n = 26). Sex of the person responsible also appears to influence membership size. Males, on average, reported significantly more filhos-de-santo than females (110.58 vs. 25.89, *t* = -2.461, df = 37, *p* = .019) but not more clients nor number of feasts. Ketu terreiros reported having more average feasts per year than those from other nacões (7.48 vs. 4.23, *t* = 1.885, df = 36, *p* = .067), although nação had no other effect.

It is important to note that there are limitations to the results presented here. Because of the tradition of secrecy that governs Candomblé, there are many missing answers. Terreiros are wary of revealing information that might incite jealousy or be misused by a jealous rival to bring ill-fortune though ritual means. A related concern is that some responses may not be completely accurate. In later months, I was able to observe first-hand the number of regular members at some of the terreiros in the survey and my observations did not always correlate with the responses that had been provided. In some cases, it was clear that their numbers had been greatly exaggerated.

Exaggerations on questions related to the prestige of the terreiro are not uncommon. Unfortunately, these are inherent problems of any data-gathering instrument that relies on self-report.

2.7 Discussion

The previous analyses reveal some of the general trends that operate within terreiros and across the Candomblé community. Because the ialorixá or babalorixá is the central and most important component of a terreiro, it is useful to begin by identifying the profile of terreiro leaders. The data presented here suggest some general trends: most terreiro leaders are females, female leaders are older than males, terreiro leaders tend to be single regardless of sex, and for most, the terreiro is their only source of income. The fact that there are more ialorixás than babalorixás is not surprising, since the prevalence of women has been noted since the earliest studies of the religion (e.g. Carneiro, 1969; Landes, 1947/1994; Ramos, 1946; Rodrigues, 1935). Although the historical reasons for the unequal gender proportion in Candomblé leadership continue to be analyzed (e.g. Butler, 1998; Harding, 2000; Matory, 2005) more immediate sociological factors may be equally important in sustaining this pattern.

For example, among the segment of the population most widely represented in Candomblé (poor and Afro-Brazilian), there are already high incidences of households in which the primary breadwinner is a woman. Teenage pregnancy, low marriage rates, and high fertility contribute to a pattern of households centered on matrilineal kin. A terreiro, despite the demands it entails, can be the source of a steady income for its leader. Ialorixás that do work are usually self-employed or have occupations compatible with their religious obligations, such as small neighborhood

bars or *acarajé* food stands[18]. Although this is undoubtedly due in part to the lack of better employment opportunities, it may also reflect the fact that a person can make a modest living by opening a terreiro. This may make it an attractive option for single women with family responsibilities. While the fact that most ialorixás in this sample are well past reproductive age appears to suggest that supporting a family is not a primary concern, this is not entirely accurate. Middle-aged women often come to the aid of unmarried daughters, grandchildren, elderly relatives, *filhos de criação* (adopted children) and other relatives who cannot fend for themselves. This suggests that hindrances to opening a terreiro are the demands of a husband and young children, rather than family members or dependants in general.

As often occurs in Candomblé, symbolic and practical reasons for this are impossible to separate. Spiritually, a ialorixá is "wedded" to her orixá. A ialorixá starts out as a ião (an initiate capable of possession) which is widely understood by Candomblé adherents to mean "wife" (see Bastide, 1958/2000; Lima, 1977; Matory, 2005). Being able to incorporate the orixás entails profound spiritual obligations and rites. The person must be perpetually on guard because she is particularly vulnerable to receiving contaminating or dangerous influences. One of the principal ways to avoid this is to follow strict and frequent periods of sexual abstinence, called *resguardos*, which are especially important for a ialorixá. Breaking the resguardo can bring on all kinds of misfortunes and tragedies, but complying with it can be quite difficult for a married woman. Matory notes that these ritual obligations are often mentioned by Candomblé adherents as "inconsistent with marriage to a man" (2005: 214). In addition to resguardo, running a terreiro efficiently is a full-time job that takes enormous effort. The ialorixá is responsible for every detail of the house,

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[18] Acarajé is a typical Bahian dish typically sold on street stands by women dressed in Candomblé garb, called *baianas de acarajé*. In general, food street commerce in the region has long been associated with Afro-Brazilian women (see Butler, 2001; Harding, 2000).

secular and religious. All aspects of the terreiro, from mediating conflicts among filhos to financing construction materials for renovations, contribute to sustaining the axé of the ialorixá, and by extension, the terreiro as a community. Thus, for any ialorixá, the ritual constraints of the post, coupled with the practical demands of the terreiro, may make it impossible to meet the demands of a husband and a young family. The life history of ialorixás I encountered in Salvador suggest that it is not the case that men leave their wives because they become ialorixás, but rather that women do no take on the role unless a husband is absent or not a significant impediment. This may mean that the husband is willing to support his wife's religious role, but usually that the couple is older and he simply "leaves her alone", a euphemism used to imply he is no longer sexually interested in her. In contrast, ialorixás often rely on adult children and other members of the extended family to run the terreiro.

These dynamics may also help explain why female terreiro leaders tend to be older then their male counterparts. The case of male terreiro leaders or babalorixás is usually quite different. One of the reasons why men may be able to cope with the responsibilities of the terreiro at an earlier age is that they tend to lack the responsabilties of a spouse and family. Unlike women, who are evenly split between the different marital status categories, no males reported being separated widowed or divorced, but most were single. The absence of an extended family in the terreiro is often quite noticeable compared to those led by women. One likely interpretation that has been discussed by a large numbers of researchers (e.g. Amaral, 2002; Birman, 1985; Fry, 1982; Landes, 1947/1994; Prandi, 2005) is that many babalorixás are homosexual. Of course, there are many heterosexual men that are part of the religion, but they usually take on the role of ogã. Ogãs are a crucial part of the terreiro, but they cannot incorporate spirits through possession. This ability, essential to the role of

babalorixá, has pervasive sexual connotations that place the recipient in a passive, female role. Apart from the meaning of the word ião described above, the language that describes possession is related to sexual intercourse. A person possessed is a *cavalo*, or horse, and he is *montado*, or ridden, by the orixá. Thus, although exact figures are non-existent (at least to my knowledge) it is perceived as common knowledge that most male iãos are homosexuals. Over the course of my research I encountered a similar pattern. With a couple of exceptions, the majority of babalorixás were either openly gay or were assumed to be by other members of the community.

Fry (1982), the first scholar to deal with the subject of male homosexuality in Candomblé since Landes (1947/1994), laid out the principal themes that continue to dominate the discussion in more recent literature (see Cole, 2003). One brand of explanation focuses on ascribing exploitative motives to *viados* or *bichas*, pejorative terms for effeminate men in general and particularly for passive male homosexuals. These include the idea that viados use the feasts of Candomblé to "show off" by dressing in the elaborate costumes of the orixás or that viados enjoy possession by female orixás because it allows expression of their deviant tendencies. Another regular criticism I heard often in the context of inter-terreiro competition is that a Candomblé center is not a "serious" house because its filhos-de-santo are viados looking for relationships with other men. This is problematic because sexual relations between certain members of the same terreiro are strictly prohibited at the risk of incurring great misfortune. The incest taboo is most important between a ialorixá or babalorixá and their filhos-de-santo and between members of the same barco de ião, that is, those that were initiated together and become irmãos-de-santo (symbolic

siblings). One of the worst defamations against a terreiro is an accusation of breaking the taboo, which is often directed at houses led by homosexual babalorixás.

Regardless of the sexual restrictions of Candomblé, it is certainly more tolerant of transgressive sexualities than alternative religious systems. Male passive homosexuals or *adés* are generally accepted as an integral part of the religion. Part of the reason for this is that adherents are expected to share in the qualities of their dominating orixá. There are at least three sexually-ambiguous orixás and any person can "belong" to a male or female orixá regardless of gender. If a person belongs to Logun-Ede, who is male half of the year and female the other half, it is almost expected that he or she will also exhibit an irregular sexuality. Because of its more inclusive nature, Candomblé can provide a space of support for homosexuals who find it difficult to carve a social niche elsewhere. A young gay man in the city, especially if he is poor and Afro-Brazilian like most Candomblé adherents, has few options if he finds himself without the support of family or friends.

The case of Pai Adriano, a babalorixá from the Jeje tradition, provides an illustration. Pai Adriano lives in a miniscule house that is also his terreiro. He talks fast and constantly, peppering his conversation with humorous Bahian slang and constant phrases in the ritual language of Candomblé[19]. He knew he was gay or *entendido*, as he puts it, since he was very young. His father and older siblings beat him constantly to "toughen him up". He left his rural home at age 11, after coming out to his family and receiving a particularly brutal beating that left him a little deaf on his right ear. Adriano eventually migrated to the city, where he now lives alone. Today, Pai Adriano does not have a relationship with his family, whom he describes as, "That type from the country, rough. With a mind *this* size, smaller than a bean seed" (*Esse*

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[19] Most religious terms in Candomblé are from Yoruban origin.

pessoal da roça mesmo, grosso. Com a mente deste tamanho, menor que um caroço de feijão). Consultations and trabalhos are Pai Adriano's only source of regular income. To attend to clients, he incorporates a widely-known spirit called Pomba-Gira or Maria Padilla, a mythical prostitute that enjoys drinking, smoking, and flirting. On the days when Pai Adriano receives Maria Padilla, there is a steady flow of visitors sitting in his living room. In addition to payment, clients bring gifts of cigarettes, wine, and liquor for Maria Padilla and often stay talking to her late into the night.

Although Pai Adriano's involvement with Candomblé has not been constant throughout his life (he even became a *creente*[20] as a teenager), today the religion dominates his life. He divides his time between his home in the city and the terreiro where he completed his obrigações outside of Salvador, which he considers his second home. Part of the reason is that this terreiro is led by his irmã-de-santo, a woman he was initiated with and with whom he has maintained close personal and religious ties. His ritual responsibilities there often take him from home for days or weeks. When he is in the city, he has constant duties at other candomblés where he participates in initiations, rituals and feasts. In addition, many of Pai Adriano's clients have become close friends and his principal social companions. They help him organize feasts, accompany him to other terreiros, and pay his bill at the neighborhood bar.

Pai Adriano's personal history is reflective of the paths that lead some to Candomblé and of the opportunities that the religion can offer. The fictive kin network that is recreated in a terreiro may be particularly appealing to those who, like Adriano, find themselves without family ties or a more typical network of social support. More broadly, the povo-de-santo or Candomblé community is sufficiently

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[20] Creente literally means "believer". Creente is used to refer to Evangelicals and Pentecostals, who are generally hostile toward Afro-Brazilian traditions.

tight-knit and self-contained that it is not difficult to find companionship. Even in my short time in Salvador, it happened often that I ran into someone at a feast that I knew from a different terreiro. It is easy to envision how chance meetings such as this can eventually develop into more solid friendships, especially for those whose lives revolve around the religion.

So far I have said little about female homosexuality, mainly because there is much less material on the topic. Unlike openly gay men who can obtain high posts within Candomblé, lesbians are subject to near-universal disapproval and scorn. The passing references in the literature dedicated to the issue recount the aversion to female homosexuals shown by most members of Candomblé. Matory (2005) tells the story of a young woman passed up for an important post in her terreiro because of her rumored homosexuality. Amaral (2002) discusses the disgust of an elderly ialorixá to the idea of a lesbian ialorixá, in sharp contrast to her understanding view of adés as inevitable and even integral to the practice of Candomblé.

As Fry (1982) notes, whatever the original reasons for the prevalence of homosexuals in Candomblé, today it may also be something of a self-fulfilling prophesy. Both inside and outside of the Candomblé community, the close association of the religion with gays is treated as matter-of-fact, common knowledge. In fact, the language of Candomblé has been adopted by the Brazilian gay scene as a whole, not just in Bahia (Van de Port, 2005). It is unsurprising, then, that gay men and women often find a means of social inclusion through the religion.

Apart from shedding light on the general characteristics that may lead someone to open a terreiro, these findings provide some clues into the general functioning of these religious houses. It appears that a host of inter-related factors contribute to a terreiro's size and wealth. Clients, consultation fees and tourist visits

act together to increase a terreiro's income and reputation. The initial building block is obtaining clients. As Pai Adriano phrased it, "the client is the beginning of everything" (*o cliente é o inicio de todo*). There are two reasons for this. One, clients are the primary source of income for the house. Second, becoming a client is a first step toward initiation. Most filhos-de-santo came to the terreiro as a result of illness or personal problem. If they obtain the desired results, many continue to regularly consult the ialorixá or babalorixá in times of crisis or simply to learn what the future holds. From being an occasional client, the person begins to attend the public ceremonies, contribute offerings to the house deities, and help in the preparation of feasts. Eventually, he may request or be asked to begin official training in the appropriate category (ião, equede, or ogã). In other cases, he simply becomes a regular member of the community without formal initiation.

With time, a larger client base means an expandable pool of potential filhos-de-santo. Terreiros that have many filhos-de-santo find it easier to harness the logistical and financial resources needed to organize the large public celebrations that constitute the primary proselytizing element of the religion. Terreiros that have frequent ceremonies with many initiates, spectacular ritual clothes, and abundant food are particularly likely to attract regular tourist visits. These visits are directly profitable by obtaining fees from visitors, but also by transforming tourists into potential clients. Having clients from large Southern cities like São Paulo or Rio and especially from other countries is particularly desirable. Since a large and cosmopolitan clientele is a source of prestige, cultivating more clients allows a ialorixá or babalorixá to set higher fees for her or his services. Fees from consultations are the primary means of purchasing materials for offerings and daily worship activities, and also allow the terreiro to sponsor larger and more elaborate

public celebrations. These feasts, in turn, attract additional clients and tourists which further contribute to the terreiro's finances.

However, the relationship between wealth and prestige in Candomblé is more ambiguous than at first appears. The standard for achieving high status within the community has long been centered on concepts of "tradition" and "purity" as defined by links to the religion's African roots (see Butler, 2001; Capone, 2004). This implies eschewing Europeanized affluence and celebrating the struggles of enslaved ancestors. A too-wealthy terreiro is likely to be criticized and scorned as having lost its true spiritual force or axé. At the same time, being able to beautify the terreiro and having the resources to celebrate an expensive feast are the goals of any ialorixá or babalorixá. As a group grows there is an inherent tension between increasing its wealth and maintaining closeness to the heart of the religion.

An additional consideration which also applies to non-religious groups is related to the distribution of wealth. Wealthier terreiros may have more resources to offer, but these need to be distributed among a larger group. In the particular case of terreiros, the ultimate decision of how and to whom resources are doled out falls upon the leader of the house. While the entire terreiro may bask in a sort of reflected glory, the monetary advantages as well as the prestige and reputation of a terreiro (and their immediate benefits) overwhelmingly favor the ialorixá or babalorixá and perhaps a few close associates. An understanding of group success centered on wealth and size may only be an apt description when it refers to central and important members of the group. In a larger community, it is more difficult for any given person to forge close bonds with high-status members and this may negatively impact those on the fringes or low in the social and religious hierarchy. For them, a smaller setting may be a better option in terms of receiving attention, attaining a place of importance in the

group and forging social ties with other members that may eventually prove beneficial. Thus, if the success of a group is measured in terms of social solidarity, cooperation or the benefits that all members receive, rather than wealth or size, it may be that smaller groups are more efficient.

3. Four Candomblé Terreiros

While the results presented above reflect some of the diversity encountered in the terreiros of Salvador, the history of each religious house is unique. Terreiros are located in almost every neighborhood or *bairro*, range from wealthy to very poor, and vary from well-established temples that count their members in the hundreds to single individuals struggling to acquire a steady following. Here, I will attempt to complement the previous findings with four short portrayals of what might be described as typical Candomblé terreiros. Although these descriptions are necessarily not as detailed as each terreiro merits, they hopefully provide more substance to the individual histories of ialorixás and babalorixás and their communities.

The terreiros described below are neither very poor nor very wealthy. They are all active in terms of having a steady membership and regular feasts. However, they also differ considerably from the handful of grandes casas on which so much has been written, and which, by virtue of their very fame, are now very far from the mainstream characteristics of the religion. With each description, I have attempted to highlight one or two aspects of the terreiro that are repeatedly found throughout the Candomblé community. These case studies are representative of what I encountered in the city, but certainly do not exhaust the diversity of the religion.

3.1 The Conflicts of Tradition

The terreiro of Ilê Axé Omin[21] has been in existence for approximately 70 years. The hilltop area where it is located was once the site of a sugar plantation not far from the historic downtown center. Today, this neighborhood or bairro is a mosaic of low-income family residences interspersed with luxurious apartment buildings and surrounded by brick shantytowns. The original founder of the terreiro died in 1992 and his widow, Mãe Neuza[22] is now in charge with the help of her two adult daughters. Family members living at the house, in addition to Mãe Neuza, include her son, her daughter Hilda, and her grandson. Her youngest daughter Nadia, who is a teacher, lives in a different neighborhood with her husband but she spends much of her free time at the terreiro.

This is not a wealthy terreiro by any standards, but it is certainly not among the poorest. The land on which it stands is actually quite larger than most, extending backwards from the main entrance in a narrow strip. Apart from the main house and barracão, there is a central open patio surrounded by various structures that have been built over time, each of which consists of a couple of rooms. One of these is occupied by an elderly ogã who helps with house chores, and another by Leonardo, a young man with wispy blond hair and clear blue eyes who is a ião. Leonardo is originally from São Paulo and came to Salvador during a soul-searching phase of his life when he had dabbled in Eastern meditation, Spiritism, and other mystical practices. He found his spiritual home in Candomblé and moved permanently to Mãe Neuza's terreiro. He works as a chef at a high-end restaurant in a popular tourist beach.

Mãe Neuza is a stocky woman in her early seventies, with a face that resembles the dark, wooden carvings characteristic of Bahian artisans. Her daughters

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[21] This is not the actual name of the terreiro. All terreiros have an individual name and most begin with the words Ilê Axé, which translates as "House of Axé".

[22] Candomblé priestess who lead a terreiro are usually referred to by their followers as Mãe (Mother), while males are Pai (Father).

are tall, rather massive women with smooth faces and kind smiles. Mãe Neuza was initiated at one of the grandes casas and runs her terreiro in the strictest tradition of hierarchy and secrecy. She can appear serious and aloof, but her filhos-de-santo and her daughters are devoted to her and treat her with deference bordering on reverence. Although she moves slowly and with difficulty, she personally carries out every daily ritual and presides over all public feasts. No decision, however small, can be taken without her approval. When she incorporates her orixá at a feast, Mãe Neuza is capable of twirling and dancing without rest for hours, although this leaves her exhausted for days afterwards.

For the past few years, the activities of Neuza and her daughters have been split between the terreiro and the small non-governmental organization (NGO) they founded to honor their dead father, who always lent a hand to neighbors in need. This consists of a day-care center for severely underprivileged children from the surrounding slums. The organization provides daily supervision and meals for about thirty children, ranging from three to twelve years of age. Finding volunteers to mind the children or provide lessons on recreational activities (e.g. dance, music, *capoeira*[23]) is always a struggle. It is usually Hilda who ends up taking responsibility for their care. Although the family has been able to secure some backing from governmental programs and occasional private donors, many expenses come from their own pockets. In addition, the space is not nearly large enough to comfortably accommodate groups of boisterous children and solemn religious activities. Once week, the children must be packed into a small room while Mãe Neuza performs the sacred (and secret) placement of mid-morning offerings. The children are endlessly reprimanded for running through the barracão (the ceremonial room), disturbing the

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[23] Capoeira is a Brazilian martial art that incorporates dance and music and originated with African slaves. For a study of the relationship between capoeira and Candomblé, see Merrell, 2005.

animals kept for sacrifice, or getting too close to the offerings found at various corners of the patio.

As with many terreiros, this one will probably pass down to another family member at Mãe Neuza's death. Since Hilda, the eldest daughter, is an equede and does not receive orixás or entidades, it is likely it will be Nadia who will inherit the post. The presence of the current ialorixá looms so large that is difficult to imagine how current filhos-de-santo will respond to the inevitable change in leadership. It is also uncertain whether the activities of the NGO, which seem to grow with time, will eventually take precedence over the spiritual role of the terreiro. For now, however, this terreiro has a solid reputation as a serious, orthodox house and is mostly exempt from the rounds of gossip that permeate the Candomblé community. The only censure sometimes leveled at Mãe Neuza's house is that it can be stand-offish and favor the rich and white - and even this cannot be stated with much conviction, since the family dedicates much of their time and effort at helping children from the community. Nevertheless, this criticism reflects a familiar conflict facing terreiros that become wealthier or better-known than most (this is especially true in the case of the famous historical houses like Casa Branca or Opô Afonjá). The appearance of prosperity is deeply contradictory to the underlying spirit of a religion founded on struggle and poverty. At the same time, attracting wealthy clients and initiates, especially if they are from the South of Brazil or from other countries, is a desirable goal for any terreiro. Tourists, who are overwhelmingly white, are a mark of the terreiro's prestige and its expanding fame. In addition, those who eventually become initiates are able to contribute more resources to the terreiro, since white Candomblé adherents are usually significantly wealthier than their Afro-Brazilian counterparts.

Feasts, which serve to display the best of the terreiro, are the scenario where this tension is most clearly played out. In the case of this terreiro, it is difficult not to notice the number of white filhos-de-santo, the uniformed waiters serving food to visitors, the prosperous appearance of many visitors in sharp contrast to the local attendees. This is offset by the uncompromisingly old-fashioned strictness that governs the celebration: no photography or videos are allowed, males and females are separated on opposite sides of the room, and Mãe Neuza's place at the hierarchy is continually reinforced through the submissive gestures and bowing of her filhos-de-santo, who must rigorously don ritual clothing whenever in the house.

In the daily life of the terreiro, apparently disparate elements are reconciled through a constant rhetoric that emphasizes authenticity and African-ness. The following exchange provides an illustration. I once asked Mãe Neuza if being white was an impediment for belonging to Candomblé. She looked at Leonardo, the ião who lives in the terreiro, and answered: "He is my son. He is white but is my son, because for me a filho-de-santo is like a blood son. He is white but has a foot in the *senzala*[24]" (*Ele é meu filho. Ele é branco mais é meu filho, porque para mim filho de santo é como filho de sangue. Ele é branco mais tem um pé na senzala*). Leonardo smiled and countered: "Both feet, my mother" (*Os dois pés, minha mãe*). This elasticity of race and color categories can occur within Candomblé because initiation into the religion represents a complete rebirth. The neophyte sheds his or her identity to acquire a new spiritual self, a new name, and a new family. The orixás, despite their African representations, are ultimately conceptualized as natural and universal forces that reside everywhere and in everyone. Thus, anyone that goes through the required processes can discover this internal essence. In this way, initiation creates or

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[24] Senzala is the name for the slave quarters of sugar plantations.

reinforces ties with inner African elements that reside in every person. Because most terreiros that attract white (and consequently, wealthier) initiates also include a majority of local initiates who are mostly Afro-Brazilian, this can create tension within the community. Wealthier initiates or clients are often treated deferentially by the leader of the terreiro and jealousies among other members can easily flare up. Nevertheless, this inclusiveness has certainly served Candomblé well in terms of broadening its appeal to a larger audience.

3.2 A Growing Terreiro

In the late 1970's, as Salvador expanded inland, the government urbanized large swaths of forested land and erected endless rows of grey and white apartment buildings reminiscent of Eastern bloc housing. The original vision of neat residential developments quickly gave way to growing shantytowns and bustling commerce. Located more than an hour bus-ride from the center of the city, these communities constitute the largest *bairro* in Latin America with over 600,000 inhabitants, predominantly Afro-Brazilian. In this setting, the home and terreiro of Mãe Cleo stands out. From the outside, it looks like a moderately prosperous middle-class home with a gated two-car garage. Nothing about it suggests that it is also a Candomblé temple. Unlike most ialorixás, Mãe Cleo, who was 39 at the time of the research, has held a regular job for over ten years as the human resources manager of a construction company. Her salary makes her relatively wealthy compared to most terreiro leaders. She has even bought the plot of land next door, where she plans to build a new barracão. The current one is already large, occupying almost the entire second story of the house.

Nobody in Mãe Cleo's immediate family had a history of being in Candomblé. Her involvement in the *seita*[25] can be traced back to the seizures she began having as a child, which she know realizes were the presence of the orixá Obaluaê. When she was 18 years of age, Cleo moved to São Paulo to live with relatives. Since the seizures continued despite medical treatment, she decided to visit a terreiro as a last resort. She was told to go return home and take care of her orixás, but since she had always thought Candomblé was a thing of the devil, she resisted the idea. Then, two years later, she was in a horrific motorcycle accident where her cousin died and Cleo herself lost her right leg. She knew then that the orixás where taxing her for her refusal (literally, *cobrando*) and that she must return to Salvador. She found a mãe-de-santo and began her training in the religion, but was determined to keep her worship private and avoid the responsibilities of a terreiro of her own. However, word of the abilities of Cleo's caboclo spirit soon spread and people began to consult her services. Before she knew it, the house was already filled with filhos-de-santo who wanted her to initiate them. Since she had not yet finished her own initiation process, Cleo finally resigned herself to the fate the orixás had set for her and began work on the necessary obrigações to become a ialorixá. She opened her terreiro in 2002, but it was during my time there that she finally completed all the final details, including determining the final name of the house.

Mãe Cleo has never married, but her two adopted daughters and her new boyfriend, Fabio, also live at the house. Fabio is also in Candomblé, and although he is a teacher, he was unemployed at the time. He is not terribly popular with other members of the terreiro who have been there longer and resent his newfound influence, but they know better than mention this to Cleo. The mãe pequena (the

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[25] Seita, literally "sect", is another way in which adherents refer to Candomblé.

second person in the religious hierarchy) also lives at the home with her teenage daughter and takes care of the daily rituals that Mãe Cleo cannot fulfill because of her work schedule. Most other members and filhos-de-santo are young people, not fully initiated, who live in the area or came as clients and gradually took on more defined roles. The house is a constant center of activity for both social and ritual purposes. The younger members congregate in the living room to watch DVDs in the afternoons, the older members busy themselves in the kitchen or other housework, and many stay overnight at any given moment.

At first, the atmosphere of Mãe Cleo's terreiro seems more informal than that of many others. She often joins her young filhos in dancing and drinking, and she likes to repeat that "*escravidão acabou*" (slavery is over) to explain why she will not impose exaggerated demands on her filhos. In reality, as any terreiro leader, she has found her own way of treading the fine line between nurturance and authority. Although helping one's followers is an integral part of any ialorixá's ministry, Cleo takes this role very seriously and clearly enjoys the role of benefactor. She is unabashedly vocal about her good deeds toward her filhos-de-santo and her charitableness to the poor of the neighborhood. But her considerable generosity is negotiable; filhos are expected to reciprocate through obedience and deference to her judgment. It only takes a word of defiance for Cleo's easy manner to become autocratic and commanding.

Atypically, when I first met Mãe Cleo, the closest associates of her terreiro were not immediate family members. Her sisters sometimes attended feasts and an aunt was an assiduous visitor, but her mother, Marcia, did not approve of Cleo's involvement with the religion and did not even attend her initiation ceremony. However, at the end of my time there, Marcia had come to live at the terreiro and was

preparing to become initiated. I suspect this had to do with Marcia's realization that the terreiro was no longer a tentative enterprise and that its members were increasingly important players in her daughter's life. As a terreiro coalesces into a fully-formed religious collective, it siphons more resources from members and especially from the ialorixá. While Cleo's financial security places her in a position to do more than most, her generosity to others had created a history of tension between her and her immediate family. Her mother especially felt that Cleo did not do enough for her and too much for others. When Marcia became sick, it offered a strategic opportunity for both mother and daughter to reconcile their differences. Cleo felt vindicated by being able to cure her mother with the aid of the orixás and receiving her at her home. On the other hand, by becoming part of the terreiro, Marcia was able to secure a position of greater control over her daughter's interests without sacrificing her initial resistance. Her conversion, rather than a capitulation on Marcia's part, was perceived by a triumphant Cleo as tangible evidence of the orixás' powerful intervention.

With the gradual inclusion of her family into Candomblé, Cleo is securing a lasting and more stable membership base for her terreiro. Unlike filhos-de-santo, who may switch terreiros or abandon the religion altogether, family obligation makes relatives more reliable participants in the life of the religious house. This may be particularly important in Cleo's case. Her recent initiation has limited her following to inexperienced filhos-de-santo who may yet balk at the continual demands of the religion. For the moment, her followers are enthusiastic and eager to learn, and the feasts of the terreiro are lavish and well-attended. For someone who has carved her way in Candomblé very much alone, Mãe Cleo has so far been very successful in forming a community that seems poised for growth and continuance.

3.3 A Successful Family Terreiro

The terreiro of Pai Adailton is on the edge of a large squatter settlement that runs up one of Salvador's many hills. The babalorixá himself occupied the land that is now his home and religious center. Adailton, who was 42 when I met him, become involved in Candomblé through his mother's influence and against the express wishes of his father. Eventually, a caboclo spirit helped bring his father around and Adailton opened his terreiro in 1990. Among the most central members of Adailton's terreiro are his wife and other members of his family. Even his four underage children are already important players in the religious hierarchy. Two girls are equedes, a teenage boy is a ião, and the youngest boy, only 8, is an ogã who plays the *atabaques* (drums) during feasts. His mother-in-law is a ialorixá with her own terreiro and also holds an important post in his house. In addition, some of Adailton's thirteen siblings also frequent his feasts, although others are Evangelical Christians and do not even visit his home. Adailton does not hold a formal job and supplements his income from consultations with a street food stand that sells acarajé. His wife works as a housemaid in a luxurious bairro of Salvador.

Pai Adailton is a pragmatist, and this is reflected in his beliefs as much as in the organization of his house. For many years before becoming initiated in Candomblé, he was a follower of Kardecian Espíritismo and the practice still influences his ministry. As he says, "We call them orixás, but they are also spirits, isn't it?" (*Nós chamamos eles de orixás, mais são espíritos também, né?*). In terms of his followers, Pai Adailton runs a tight ship but is well aware that some filhos-de-santo, as he bluntly puts it, *não prestão* – they are useless and not worth the trouble. Like many babalorixás and ialorixás, he reminisces nostalgically on his early days in the religion, when initiates were unquestioningly obedient and committed. During his

own initiation, Adailton recounts, he did not so much as set foot outside his pai-de-santo's house for three months.

In the case of his own terreiro, Pai Adailton is always clear at the beginning on what he expects from a filho and he does not expect or tolerate complaints later. Adailton explains that filhos-de-santo are like children in a family. Some need more attention than others, some are rebellious, and only a few are well-behaved. Since it is not possible to continually run after everyone, he lays out simple rules but expects his followers to fully comply with them. For example, all members must wear strict white within the confines of the terreiro; there is always a line of freshly washed robes and skirts hanging on the front patio. When Adailton's filhos complain that he is too strict and other terreiros are more lenient, he simply tells them they are free to leave and join another one.

This strategy has paid off, because Pai Adailton's terreiro is well-organized and growing. At the time of the research, he had about forty filhos-de-santo that attended feasts and ceremonies regularly. The terreiro holds *sessões de caboclo* (simpler feasts for the non-orixá spirits) every two weeks and these are always well-attended by locals and tourists alike. Apart from these regular ceremonies, the terreiro holds 10 large public feasts a year, in addition to special occasions like initiations or obrigações. The current space is not enough for the immediate family in addition to the familia-de-santo, some of whom live or stay at the house for extended periods of time. Adailton and some of his filhos are building a second floor to house extra bedrooms, a larger kitchen, and altar rooms for the orixás.

There are various factors that have facilitated Adailton's success. He is well-connected in the informal networks that constitute the Candomblé community. Both his terreiro and his mother-in-law's where in the sample I collected, even though they

are in different neighborhoods and I did not discovered they were related until much later. Adailton participates in both his mother-in-law's and the terreiro where he was initiated. In addition, he often joins forces with one of his co-initiates or irmã-de-santo who has her own terreiro. They and their filhos-de-santo attend each other's feasts and ceremonies and provide an additional network of support.

Another element that has played in Pai Adailton's favor is the central location of his religious center. Although the terreiro is at the entrance of a large slum community, it is just off an important thoroughfare and less than a five-minute walk from a busy bus stop. Its accessibility gives it an important advantage over terreiros situated in more remote or dangerous destinations. Filhos-de-santo and other members find it easy to attend regularly even if they live in a different neighborhood. In addition, its central location makes this terreiro an attractive and convenient destination for local tour guides and its feasts always play host to tourist groups. Income from these visits is significant because it helps finance the community's activities. Visitors and curious passer-bys are a normal and common feature of any Candomblé feast, so accommodating tourists does not necessarily imply any significant changes. In this case, not much more has been done other than placing benches along the walls of the room where feasts are held to seat tourists. Like many other terreiro leaders, Pai Adailton has been adroit in taking strategic advantage of the tourist industry while maintaining the integrity of his ceremonies.

3.4 A Terreiro in Transition

Mãe Terezinha is a small round woman in her mid-seventies. She has reddish-brown skin, half-closed eyes that notice everything, and a rich, unexpected laugh. She is a witty conversationalist with a dry sense of humor and a fondness for popular sayings. Mãe Terezinha's entrance into Candomblé came about through her father,

who was an ogã. She herself began participating in the religion at the age of seven, although she did not finalize her initiation rituals and obrigações until thirty years later. When she did, her mãe-de-santo told her she had the *dom* or gift to become a ialorixá herself. With eight children to raise, a husband who drank, and constant jobs as a laundress and a housemaid, the responsibilities of opening a terreiro were the last thing she wanted. She resisted the will of the orixás until 1992, when she officially opened her religious house. Mãe Terezinha's husband was curious at the beginning and even attended her feasts and ceremonies, until the day when he started feeling the orixás come over him. He immediately left the barracão and has wanted nothing to do with Candomblé ever since. Although he used to complain when her ritual obligations forced her to spend the night at the terreiro, he mostly left her alone. Today, Terezinha's husband spends his days on a sickbed in one of the two bedrooms at the back of their small house. It is a crowded space for the family, since three grandchildren live with them and some of their adult daughters often stay as well.

As in many cases, the core members of the terreiro are relatives and close friends. Mãe Terezinha's three daughters are all initiated in Candomblé and one of her older sons in an ogã. But the one who is set to inherit the terreiro is Janildo, her youngest son, who is already a babalorixá. Janildo is married and has a daughter from a previous relationship, although his current wife is not very involved in the religion. He is well-educated and has a technical degree which allows him to work temporary office jobs. Other regular members are mostly women. Some who came to the terreiro as clients, some live in the surrounding bairro and others are long-time friends who bring their adult children. There is a clear generational split among members, with the oldest preferring the company and guidance of Mãe Terezinha, and the younger clustering around her son. Although Janildo is not much older than many of the filhas-

de-santo, they refer to him as *Pai* (Father). However, they joke constantly with him and treat him with ease and affection. Unlike his mother, Janildo often socializes with his filhas-de-santo outside religious activities, such as going dancing or drinking.

The terreiro is located on a steep *ladeira* (side of a hill) that overlooks one of the main avenues of the city. To access the religious rooms one has to walk downhill to the side of the house and climb down an uneven staircase. This is hard work for Terezinha, who recently had knee surgery, so it is Janildo who is left in charge of daily rituals and offerings. This is partly Terezinha's choice; she claims she is too tired and too old for the constant demands of Candomblé. She prefers to spend the day sitting next to the open door watching *telenovelas* (soap operas), catching the cool breeze and playing with her little dog. When there is a feast, Janildo is the one who begins the ceremony and leads the chants. Terezinha laughingly admits that she often falls asleep during these long public events. Nevertheless, behind her casual manner, she remains the ultimate authority. She is in charge of all initiations and has the last word on who can become part of the terreiro.

Predictably, the divided leadership in this terreiro causes friction between mother and son. While Mãe Terezinha is still ultimately responsible for the house, Janildo has gradually implemented changes. He considers many of his mother's ideas archaic and impractical and believes that urgent modifications are necessary to keep the religion alive. One of the primary sources of conflict are the bi-weekly meetings that Janildo has organized to teach soon-to-be initiates, or abiãs, the fundamentals of the religion. He discusses the difference between nações, the meaning of Yoruban chants, and the proper way to conduct rituals. Terezinha deeply disapproves of her son's methods. She complains that he is "*dando o axé*" (giving away the axé), surrendering the secret knowledge that lies at the heart of Candomblé's power. In her

day, she explains, direct questions or open explanations were simply unheard of. An initiate gradually uncovered layers of understanding through many years in the religion, steady sacrifice and meticulous practice. Terezinha proudly remembers that when she finished her initiation at 39 years of age, she knew absolutely nothing at all!

Janildo, on the other hand, believes that such obfuscation only discourages potential filhos-de-santo. He takes his role as babalorixá and future leader of the terreiro very seriously, but he has his own ideas of what this implies. During the meetings, he makes a point of including practical matters in addition to Candomblé instruction, such as discussing safe sex and the dangers of AIDS. Even then, it took a lot of hard work on his part to convince his mother to attend, which she does only sometimes and always grudgingly. During the meetings, Mãe Terezinha does not speak much and glares disapprovingly at her son, occasionally breaking his long speeches with a sarcastic remark that makes the younger members of the audience burst out in giggles. This has the desired effect of undermining Janildo's authority, especially among the elder initiates who consider Terezinha the unequivocal leader of the terreiro. Janildo complains that because many of the older initiates have known him since childhood they do not respect him nor take him seriously.

Despite these conflicts, Mãe Terezinha's story can be described as a success. She has purchased a piece of land in the nearby town of Lauro de Freitas, where she plans to move the terreiro. The current space is small and located deep within the favela, so it is dangerous and difficult to access. By moving to a new area, she and her son feel that they will able to attract more visitors, clients and tourists. Despite his untraditional views, Janildo considers his role as babalorixá as a lifetime calling and compromise. Through him, the continuity of Mãe Terezinha terreiro appears to be assured.

CHAPTER FIVE: RELIGIOUS COMMITMENT
AND COOPERATION IN CANDOMBLÉ

1. Introduction

One quiet August afternoon, I took the bus to visit the terreiro of Mãe Neuza, located at the top of a hill next to a brand new Pentecostal church. In this bairro, like most of Salvador, religious traditions mix freely and chaotically. This neighborhood and its twin, another aggregation of populous hills, are divided by a busy avenue where a river used to run. Instead of the river, a canal in the center divider leads the city's sewage into the sea. In the past, these two areas were sugar mill plantations. Their names reflect their past: one is called Engenho Velho da Federação and the other Engenho Velho de Brotas[26]. Both bairros are incongruous mixes of luxurious high rises and mini-mansions, old apartment buildings, low and middle-class homes, busy local commerce of every imaginable kind, and shantytowns that cover the sides of every available hill. Mãe Neuza, an imposing woman in her mid-seventies, received me with her usual graciousness tinged with aloofness, an attitude becoming a well-respected ialorixá initiated in the strictest of traditions. In previous interviews, her answers to my questions were seldom direct and I had often simply listened to her and the conversations that she carried on with whoever happened to be there at the time. This time, however, I asked her to tell me what a person required to be part of Candomblé. She smiled at me and simply said, "Daughter, Candomblé is the faith of sacrifice" (*Filha, o Candomblé é a fé do sacrifício*).

Her answer was so apposite to my interests and the theme of my research, that I adopted it as the title of this dissertation. As Mãe Neuza recognized, the demands of Candomblé can be particularly exacting. From the forced seclusion of initiation to the

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[26] Engenho means sugar mill. The names are, respectively, Old Mill of the Federation and Old Mill of Brotas, the name of the surrounding area.

constant need of offerings and feasts, a member of the religion must be constantly willing to sacrifice time, effort, and resources. This, however, is not unique to Candomblé. Every religious system imposes demands on its adherents. These may take the form of physically challenging activities, investment of material and economic resources, compliance with taboos, rules and moral norms, participation in collective events, recognition of sacred symbols, and displays of affiliation to the particular group. For outsiders, displays of religious commitment can be a source of wonder and even horror.

The central thesis of this dissertation is that such religious sacrifices are instrumental to the creation and maintenance of intra-group cooperation precisely because of their costliness and apparent wastefulness. Cooperation in humans requires special attention because, unlike other primates, we possess the unique ability to establish long-term cooperation in large groups of unrelated individuals. This kind of cooperation is difficult to establish and maintain because there is a constant danger of defection or cheating by any of the involved parties. To explain this, scholars from various fields have posited religion as a mechanism by which long-term collective efforts can be sustained. In economics, Iannaccone (e.g. 1992, 1994) has hypothesized that religious groups that demand extreme and arbitrary displays of commitment (e.g. bans on smoking or dancing, wearing particular clothes) protect their communities from invaders and free-riders who are not willing to pay the costs of entrance, thus making the group stronger and more successful. Although his ideas have received some criticism (e.g. Bruce, 1999; Hadaway and Marler; Marwell, 1996), they have also inspired considerable interest.

Anthropologists Irons (e.g. 2001) and Sosis (e.g. 2000, 2003; Sosis and Bressler, 2003; Sosis and Ruffle, 2003) have used Iannacone's insight to focus on the

relationship between religious commitment and cooperation in the context of signaling theory. This theoretical framework rests on at least two assumptions:

- expressions of religiosity that predict cooperation need to be observable or communicated to others (and will be more predictive of cooperation than those that are private or difficult to assess)

- these expressions need to represent a cost to the actor in order to assure others of the honesty of his or her cooperative intent

Signaling theories of religion are primarily concerned with behaviors that can be monitored by others, or what might be termed public rituals. These activities can be performed individually or in a group. Kneeling to pray at a church or temple, for example, involves only one central actor but is easily observable by others. Reciting a prayer in silence while riding a bus, on the other hand, is not an action that can be monitored by others and must be subjected to an alternative explanatory framework.

Candomblé is an ideal setting to investigate the signaling theory of religion for two main reasons: one, rituals are both costly and extremely performative; second, the religion is organized in collectively-run communities that historically have been centers of cooperation for members. A particularly interesting aspect of exploring these issues in the context of Candomblé is its status as a minority religion that, nonetheless, has managed to successfully maintain and attract members. Various reasons have contributed to its relative isolation from mainstream society. Partly because it has been viewed through the lenses of discrimination and suspicion, partly because of a conscious effort on the part of adherents to protect their worship, and partly because of the value placed on secrecy inherent to its practice, Candomblé has maintained a distinct worldview and identity while surrounded by external influences. In the last few decades, the increased migration of poor Afro-Brazilians from rural

areas to cities has accentuated Candomblé's nature as a primarily urban religion (see Prandi, 1991). This has presented growing difficulties for adherents, who must struggle to maintain traditional values and rites (see Voeks, 1997). For example, it is often impossible to raise farm animals for sacrifice at the terreiro and these must be bought at the market. A filho-de-santo employed at an office or any other regular job cannot take off entire weeks at a time to perform obrigações. For someone who lives in a different area of the city, attending the terreiro regularly for feasts and obrigações can become a significant problem.

If costly signaling increases group solidarity and cohesion, it is perhaps these difficulties that have allowed Candomblé to become the only growing Afro-Brazilian religion (in Prandi, 2005). Adherents, unless they were born in the religion, must line up their worldview with beliefs and values that often place them outside the norm. As with other religious systems that lay outside the normative practices of society, this dynamic may create particularly strong attachment levels in followers. Similar examples of high commitment in groups separated from the norm are Anabaptists groups such as Hutterites and the Amish, Islamic fundamentalists, or doomsday sects. Thus, investigating how commitment and cooperation interact in Candomblé can shed light on more general mechanisms of religious faith and group-belonging. In the case of Candomblé, the rewards of group-belonging seem fairly obvious. Much work has emphasized the nature of Candomblé terreiros as paragons of mutual aid (e.g. Harding, 2000). However, thinking that terreiro leaders simply open their doors indiscriminately to those in need is naïve. As in any other group, there are requirements for entering and remaining in the group and it is expected that there are also control mechanisms to avoid free-riders. Perhaps groups that do not manage to find a balance between required commitment and provided cooperation do perish.

This investigation seeks to gain a more complete understanding of how the sacrifices of the religion interact with the patterns of cooperation that operate in such groups. In this chapter, I present data that tests the relationship between religious commitment and cooperation and investigate how demographic and sociological factors impact these behaviors at the individual level. A challenging part of this project was finding ways of measuring religious commitment and cooperation. Both are multi-layered concepts that involve various levels of motivation and action and any single measure will only capture a fraction of that. In this case, I understand cooperation and religious commitment as implying costs to the actor. These costs can be described as investments of time, effort or economic resources. The difference between these costs is that, in the former case, they are incurred in the interest of fellow group members, while in the latter they are incurred for the sake of a supernatural reality. This may not be always easy to differentiate, but methods and measurements were carefully chosen to avoid potential confusion or circularity.

2. Methodology

After completing preliminary research and collecting the house-level survey questionnaire discussed in the previous chapter, the research focused on a smaller number of terreiros chosen from the larger database. These terreiros were the focus of the second and third stages of the research described here, which took place over a period of nine months. From February to May 2006, I focused on developing paper-and pencil instruments for the final part of the project and on choosing a purposive sample of terreiros for continued research. From June to October of 2006, I administered written instruments to members of thirteen Candomblé terreiros and conducted an economic game at these locations. Throughout these months, I

continued to carry out informal and semi-structured interviews with Candomblé

adherents. All written instruments and interviews were in Portuguese.

2.1 Purposive Sample of Terreiros

Beginning in the month of February 2006, I began to approach terreiros from

the larger database as potential participants in the subsequent phases of the research.

Based on the information gathered from the survey questionnaires, at first I

concentrated on terreiros that met two general characteristics: they were active (i.e.

held public feasts) and had a somewhat regular membership base. I was able to attend

at least one public feast at all participating terreiros during the course of the research.

Terreiros excluded from the sample presented various scenarios that were

incompatible with the aims of the research. These included a ialorixá that had tried for

years to establish a following and failed but still provided consultations to occasional

clients; a terreiro that had recently lost its leader and had suspended all public

ceremonies and initiations for a long mourning period; a new babalorixá that was still

in the process of organizing his house and gathering followers; and a terreiro where

the successor of the original founder had not been able to retain its members.

Sixteen religious houses were ultimately selected for the final sample. These

were chosen to maximize variation in areas that might affect levels of religious

commitment by members, such as membership size, location in the city, and degree of

relatedness to other members of the community. Of course, this was constrained by

each terreiro's willingness to participate in the project. Unfortunately, in two cases the

ialorixá of the terreiro passed away during the course of the research. In another case,

the ialorixá conceded various interviews and permitted attendance at feasts, but

ultimately declined to participate in the systematic part of the research. In the final

sub-sample of cases, one terreiro actually comprised two separate religious communities who often celebrated feasts and ceremonies together.

2.2 Data Collection Instruments

I used informal and structured interviews, attendance at feasts, visits and participant observation at terreiros to gather material to create an individual questionnaire and religious commitment scale. I also collected data on terreiro membership to construct a social network matrix for individual terreiros and used an economic game as an additional measure of cooperation. These tools are described in detail below.

2.2.1 Individual Questionnaire (Appendix 2)

A 37-item instrument was constructed to obtain data on demographic variables (e.g. sex, age, marital status, education, employment), involvement with the religion and the terreiro itself (e.g. years in Candomblé and years in the terreiro, position in hierarchy if initiated, number of completed obrigações), and cooperation among members of the same terreiro. For the last section, commonly occurring acts of cooperation were identified as a result of interviews, conversations and observations. These were ultimately condensed into two sets of eight instances of cooperative acts. One set asked whether subjects had ever provided each instance of cooperation to another member of the same terreiro, the other used the same questions to inquire whether the subjects had ever received each type of help from other members. Subjects were asked to mark "yes" or "no" to indicate their answers. The eight instances of cooperation included lending money, getting a job for someone, buying medicine for someone, taking care of someone's child, taking care of someone while they were sick, letting someone stay at your home, buying materials for Candomblé, and helping to pay someone's debts. For each set of questions, "yes" answers were

added to create the composite variables "Given Cooperation" and "Received Cooperation". In practice, this method works as a scale with dichotomous answers (yes/no). The "Given Cooperation" scale had high internal reliability (Cronbach's alpha = .808), while the "Received Cooperation" was somewhat lower (Cronbach's alpha = .675).

2.2.2 Religious Commitment Scale (Appendix 3)

Mockabee *et al* (2001) identify four dimensions of religious commitment that are measured by existing paper-and-pencil instruments: attendance at religious services, active participation (e.g. volunteering activities, Bible studies, praying), giving (monetary donations to the Church or congregation), and salience (influence of religious beliefs on the person's life and decisions). Because these tools are designed for use on Judeo-Christian faiths, the items they use are inappropriate in the context of Candomblé. However, the four dimensions can be adapted to encompass the kinds of activities that are important to Candomblé followers.

It is important to keep in mind that the focus of this scale was signals of religious commitment, rather than religious commitment itself. The latter is an internal state that cannot be directly observed, the former are behavioral expressions that can be monitored by others and are thought to be honest because they are hard-to-fake. For this reason, I decided to focus on aspects of Candomblé that reflected attendance, active participation and giving, and omitted salience. Salience is an internal state that cannot be directly observed, thus, it cannot be a signal (salience may be understood as actual religious commitment, and as such, the underlying quality that signals are expressing).

To create a religious commitment scale for Candomblé, I followed the steps outlined in De Vellis (2003). Material for a 37-item preliminary scale was gathered

from progressively more detailed interviews with informants and observations at terreiros that sought to uncover the range of obligations of a Candomblé adherent. It was determined that the best format for the scale was a 7-point Likert scale that focused on level of agreement with the statement. The following is a translated example of a scale item:

I have never missed a feast at my terreiro.

1	2	3	4	5	6	7
Completely Disagree					*Completely Agree*	

  The preliminary scale was tested with Candomblé adherents in the town of Cachoeira, which is located a two-hour bus ride from Salvador. Cachoeira was chosen for several reasons. First, public transportation in Salvador is slow and unreliable, making it unrealistic to find sufficient respondents that would not be part of the final sample within a reasonable time frame. Cachoeira, on the other hand, is a small town that can be easily covered on foot and where Candomblé followers and terreiros are well-known. Since this was the hometown of my primary field assistant, contact with the Candomblé community was facilitated. Additionally, Cachoeira is widely considered the heart of Candomblé worship and many Candomblé adherents from Salvador have ties to terreiros in the area. I was confident that changes in ritual would not significantly differ between the two communities.

  The same method used for the survey questionnaire was used to collect responses to the scale. Personal visits to Candomblé adherents in their homes and terreiros were necessary to explain the nature of the project and distribute the preliminary religious commitment scale. I made periodic two or three-day visits to Cachoeira over three weeks to distribute and collect completed scales. I was able to obtain 52 responses over this period. DeVellis mentions that a ratio of five to ten respondents per scale item is desirable, so that the numbers used here are somewhat

below the minimum. However, it was decided in the interest of time to use this small sample for further work rather than wait for additional respondents. Visits to collect completed scales were also used to obtain feedback from respondents to improve the external validity of the scale.

Factor analyses were conducted on the 52 completed responses to determine which items should be used in the final version. This statistical method detects the presence of underlying factors by measuring the level of variation among items in a scale. In this case, the underlying factor that the scale aims to capture is religious commitment. Ideally, every item in the scale correlates highly with each other and loads perfectly onto a single underlying factor, a relationship represented as 1. This, of course, is an ideal representation. In scales that attempt to measure complex, multi-layered concepts such as religious commitment, factor loadings of over .5 can be sufficient.

The final scale was composed using two criteria: items that had high loadings on a single factor (over .550) and not others, and items that had responses with high standard deviations. High variation is desirable because an item that is answered uniformly by most respondents will not reflect differences in religious commitment that the scale aims to capture. I excluded items that were deemed unclear or incorrectly worded by the original respondents from Cachoeira. This resulted in a final 14-item scale (originally, it was a 15-item scale but after further analyses one item was eliminated). Despite the small size of the preliminary Cachoeira sample, the scale had high internal validity (Cronbach's alpha = .87). Subsequent analyses of the final 242 completed responses from Salvador revealed equally high consistency (Cronbach's alpha = .875). Comparison between the two samples revealed that means and standard deviations were similar (Cachoeira mean = 69.04; s.d. 18.79 vs.

Salvador mean = 63.66 s.d. 18.70), although the Cachoeira sample had somewhat

higher scores ($t = 1.694$, df = 240, $p = .092$).

As in a typical Likert scale, the Religious Commitment Scale score was

produced by adding responses to all items. Scales with multiple answers to the same

item or more than one missing item were excluded from the analysis (n = 23). To

avoid further loss of data, scales with only one missing item (n = 21) were recoded

using the person mean substitution method (PMS) described by Downey and King

(1998). In PMS, the mean of a person's completed responses substitutes the missing

value. This may cause spurious correlations if it is applied to a majority of responses,

but in this case the treatment was applied to only 8.3% of the total, which falls under

the maximum of 20% recommended by the authors.

2.2.3 Economic Game

A Public Goods economic game was used as an additional measure of

individual willingness to cooperate with other group members. Experimental

economic games are particularly useful estimates of willingness to cooperate because

they are independent from self-report. Various kinds of economic games have been

widely used by researchers to measure trust, cooperation, willingness to punish, and

related topics (e.g. Henrich *et al*, 2004; Roth *et al*, 1991).

The PGG is designed so that everyone wins more if more people cooperate,

but individuals do better by not cooperating. It provides an approximation to the level

of cooperation that each individual is willing to provide for the benefit of all at the

expense of self gain. Subjects are randomly assigned to *n*-person groups that remain

anonymous. An equal amount of money is given to each subject, who then decides

how much to keep and how much to donate to his or her *n*-person group. The

donation is termed the game offer and is the measure of cooperation. The offers given

by members of individual groups are added up and duplicated by the researcher. The resulting amounts are then divided equally among members of each *n*-group. Participants are allowed to keep the initial quantity they retained as well as what they earn from their *n*-person group.

I followed a technique similar to that used by Gurven (2004) to administer the game. Each person received a closed envelope containing an endowment of 10 Brazilian Reais in bills of 1s and 2s (the minimum monthly wage during the research period was roughly 11.60 Reais per day). Subjects were instructed to remove from the envelope any integer amount from 0 to 10 (*i.e.* 0, 1, 2, 3…10) that they wanted to retain and afterwards to return the envelope enclosing the offer or amount they wished to donate to their anonymous group. Players were specifically instructed to remove the money covertly and to avoid discussions of their decisions. Field assistants monitored the room to ensure subjects complied with this request. Details on the administration of the questionnaires and the game are described below.

2.2.4 Administration of Instruments

The individual questionnaire, religious commitment scale, economic game and social network matrix were administered to members from the thirteen terreiros that made up the purposive sample. Of the thirteen terreiros that did take part in this stage of the research, members of one did not participate in the economic game because of scheduling conflicts.

The same procedure was followed at each terreiro. A day was pre-determined with the ialorixá or babalorixá when terreiro members could attend to answer the written instruments and play the economic game. Although terreiros differed in size and wealth, most chose to conduct this part of the investigation in the barracão, the part of the house destined to most ritual activity, and which often doubles as a

general-purpose living room. The exception was a terreiro considerably larger than the rest that had an outside area separate from the main barracão. The entire procedure lasted between 2 and 3 hours depending on the number of people participating at each terreiro.

When I arrived most members were already there and I seldom had to wait more than a few minutes to begin. I began by explaining that the day's activities would consist of two stages, a questionnaire packet and an economic game. I then gave detailed instructions on how to fill out the materials in the packet, which included the individual questionnaire, the religious commitment scale and the social network matrix. Finally, I explained that instructions for the economic game would be provided after everyone had finished the first part of the activity. A questionnaire packet was then handed to each of the participants. Although illiteracy was not a significant problem and the majority of subjects were able to answer all paper-and-pencil instruments on their own, a few cases involving elderly subjects required additional help. In addition to myself, two field assistants were available to help those individuals and clarify any doubts.

After all participants had completed these instruments, field assistants collected the questionnaire packets and I began instructions for the economic game. I explained all procedures following a script and mock practices of the economic game were carried out with volunteers from each terreiro. Subjects were then randomly assigned to 4-person groups with the other members of the terreiro present, but only I was aware of who composed which group. When the number of participants was not divisible by four, one or two groups of three or five players were composed. This was done in order to include the maximum number of players at each terreiro and avoid offending anyone by excluding them from the activity. I did not specify this change to

participants and was never asked to explain how groups of four were formed when the number of total players clearly was not divisible by that number. Since the variable of interest is the game offer and not the final amount players obtain after dividing the final sums among all players, and since players were not aware to which group they belong, this modification was not expected to influence the results.

Once it was clear the proceedings of the game were understood, envelopes with the original endowment inside were given to all participants. Originally, I had planned for subjects to retire to a different area to remove the money they wished to keep from the envelope. This was not always feasible because homes were usually small and there were no extra rooms available or the ialorixá or babalorixá simply did not want to use other areas of the house. Instead, participants were asked to remove the amount they wanted to retain from the envelope as privately as possible and without allowing anyone to see them. Two field assistants were on hand to ensure that decisions regarding the game remained anonymous and subjects could not discuss them with each other before the end of the game. Extra precautions proved generally unnecessary, since most subjects were actually anxious to hide from others the amount they retained. Players would usually retire to a corner of the room, face the wall, or step outside in order to remove money from the envelope discreetly. Even after the entire procedure was over, most refused to discuss with each other the amount they had taken, resulting in much speculation and jokes on the subject. After all envelopes with the individual offers had been returned, I did the calculations for each group and participants received their final amount. In lieu of a participation fee, I sponsored a small *asado* or barbeque at each of the participating terreiros.

In all cases, the questionnaire and the game were administered in the same order (questionnaire first, game after) while all participants where in the room. The

reason was that the questionnaire packet took at least 30 minutes to complete. I suspected that if the game was played first, participants would be less motivated to fill out the written instruments carefully and thoroughly. There may be some concerns that the framing effects of the questionnaire, especially questions related to given and received cooperation, or that reputation concerns motivated players to cooperate more. Both framing (Cronk, 2007) and the feeling of being observed (Haley and Fessler, 2005) have been shown to bias the results of economic games toward more cooperativeness. I do not believe this was the case here. As mentioned before, subjects were generally anxious to prevent others from seeing how much money they took out of the envelopes and two field assistants were able to monitor players to ensure the anonymity of decisions. Additionally, although the modal offer for the game was high (R$10, the full amount), subjects did not display excessive generosity. On the contrary, the majority of players (63.6%) actually contributed half or less of their stake.

3. Results

3.1 Demographic and Descriptive Variables

Two-hundred and fifty-three subjects (138 female, 115 males) from thirteen terreiros participated in the study. The terreiros were located in various areas of the city, varied in size from 10 to 300 members (mean = 53.67, s.d. = 93.313) and ranged from 4 to 37 in years since foundation (mean = 19.33, s.d. = 10.8). Number of participants at each terreiro ranged from 11 to 30 (mean = 20.17, s.d. = 6.33). Mean age of subjects was 34.51 (s.d.= 13.74) with women being slightly but significantly older than men (36.91 vs. 31.55, $t = 3.076$, df = 241, $p = .002$). Marital status was included in the analyses as a dummy variable (58.8% of subjects were single, 28.4% married or living with someone, and 10.8% separated, divorced or widowed). In terms

of education, 3.6% declared no formal education, 11.7% education up to the 4th grade of elementary school (*serie 1-4 de ensino fundamental*), 26.6% from the 5th to the 8th grade of elementary school (*serie 5 -8 de ensino fundamenta*l), 26.2% some high school education (*ensino medio*), 19.8% completed high school education, 3.2% pre-university courses (*prevestibular*), and 8.9% some or completed university. Education was included in the analyses as an ordinal variable. A large portion of participants reported being unemployed (29.9%), in addition to those who were students (13.5%), homemakers (5.6%), and retirees (8%). The remainder (43%) described a wide array of occupations, including housemaid, seamstress, fisherman, capoeira teacher, computer technician, car mechanic, cook, systems analyst, administrative assistant, teacher, nurse, policeman, food merchant, shop clerk, bar owner, waiter, doctor, handyman, security guard, and government employee.

Because obtaining self-reported income accounts had proved difficult and largely unsuccessful in the terreiro-level questionnaire, in the individual questionnaire I decided to provide participants with a fixed set of choices. The categories of household income were based on those used by the IGBE, the Brazilian agency in charge of the national census. The seven categories were based on monthly minimum wage, which at the time of the research was R$350 Brazilian reais or about $165 US dollars. The percentage break-down was the following: 22.4% from no income to half a minimum wage, 27.2% from half to 1 minimum wage, 26% from 1 to 2 minimum wages, 10.4% from 2 to 3 minimum wages, 4.8% from 3 to 4 minimum wages, 3.6% from 4 to 5 minimum wages and 5.6% more than 5 minimum wages.

Anecdotal evidence suggests that a report of "no income" is seldom strictly accurate. Many families subsist through an informal economy composed of loans from family members, temporary jobs, bartering household items, and offering

services from home (manicures and hair-braiding are popular examples). In addition,

in this characterization of income there are unequal distances between the categories

(i.e. the difference between half a minimum wage to one minimum wage and between

two and three minimum wages is not the same). To more appropriately capture the

different levels of income and account for these factors, instead of using income as an

ordinal variable as I had done previously (Soler, 2008), I calculated the median

amount of each category and used that number for all further analyses. For example,

"no income to half a minimum wage" was transformed into 87.5, "from half to 1

minimum wage" was transformed into 262.50, and so on (the last category was

calculated as the mid-point between 5 and 6 minimum wages). The differences

resulting from these alterations were minimal.

Race identification in Brazil is notoriously ambiguous, even in this context

where there is a close association between the religion and Afro-Brazilians. More than

half the subjects (57.5%) identified as *negro*, which essentially means black. The next

most common category was *moreno* (light brown) (22.1%), followed by the similar

pardo (12.8%). Other races, including *preto* (an older and more negative term also

meant to signify black), *branco* (white) and *indígena* (indigenous) were limited to less

than five mentions and together comprised about 7.5% of the total. Another sensitive

category I attempted to identify was sexual orientation. The majority of subjects

reported being heterosexual (82.7%), 13.1% being homosexual and 4.2% bisexual.

Subjects were asked the number of years they had been part of the religion

(mean = 14.82 years, s.d. 12. 22) and the number of years frequenting the terreiro

where the questionnaire was administered (mean = 9.62, s.d. 8.94). More than half of

subjects (55.6%) reported having "blood relatives" (*parentes de sangue*) at the same

terreiro and 31.3% being related to the leader of the terreiro. Partly because of this,

36.3% were either living at the terreiro at the time of the research or had done so in the past. Slightly over half of participants (56.2%) claimed to have felt discriminated against because of their religion at some point in their lives. These last four questions were included in the analyses as dichotomous variables.

3.2 Religious Commitment Measures

Various measures of religious commitment were used in order to attain more reliable results. The primary tool to obtain an individual measure of religious commitment was the Religious Commitment Scale (hereafter RCS) described above. Results of the RCS indicate a bias toward higher scores (mean = 69.67, s.d. 20.04; min. 14, max. 98). Factor analyses on the results of the RCS from this sample revealed that scale items loaded differently onto two factors, indicating a split into two subsets or subscales. I termed these subscales the "Collective Commitment Scale" (CCS) and the "Individual Commitment Scale" (ICS). CCS items had loadings of over .615 in one factor and under .33 on the other, while ICS items had loadings of over .700 and under .310 on the inverse factor. Items that scored equally high on both factors were excluded from the subscales. The CSC included the items "I never miss a feast at my terreiro", "When I attend a feast I stay until the end", "I visit my terreiro at least once a week", and "I always help on the preparations for feasts for my terreiro". All these items relate to activities that take place collectively in the presence of other terreiro members. In contrast, ICS items were all activities that, although potentially visible by others, are performed individually and do not necessarily take place under the scrutiny of other terreiro members. These included "There are foods I never eat because of Candomblé", "I always wear my (Candomblé) beads on the street", "I always wear white on Fridays", "I always have a candle lit at home for the orixás", and "I always give money for feasts". Subscales were correlated to each other

(Pearson's r = .551, *p* < .001) and both had good reliability scores (Cronbach's alpha = .721 for the CCS; Cronbach's alpha = .788 for the ICS).

Another set of questions was designed to gather data on individual participation at religious centers other than the terreiro where the questionnaire took place. In the vast majority of cases (95.6%), respondents answered the questionnaire at the terreiro they attend most often. In fact, only 32.4% regularly attended other terreiros in addition to the primary one, although 43.9% of subjects also attend the Catholic Church. Less than 4% reported attendance at other religious congregations (e.g. Evangelical churches, Umbanda and Spiritism centers).

Subjects were also asked to indicate their role and position in the internal hierarchy of the terreiro. Posts were dominated by women, with the exception of the roughly equivalent charges of ogã and equede, which are respectively male and female. Ogãs were the majority (n = 55) compared to equedes (n = 26). In all other categories of participation, females outnumbered men. Seventeen female respondents were ialorixás compared to 9 males who were babalorixás. Seven females reported being mãe pequenas and 4 males pai pequenos (the terms of for the second-in-command of the terreiro). Of 53 respondents who identified as iãos (initiates capable of possession), these were also more females (n = 34) than males (n = 19). Abiãs, those not yet initiated, also were a majority of females (n = 22) over males (n = 11). Finally, those with no hierarchical post who described themselves as frequenters of the religion also included more females (n = 28) than males (n = 15). The remaining were missing answers

Although in theory only full initiates are part of the religious hierarchy, in practice many individuals who are on the track to initiation identify themselves with a formal role. For this reason, a more reliable measure of commitment is information on

the number of obrigações a person has performed. Obrigações are elaborate feasts that commemorate the date of initiation. The terminology for initiation depends on the charge the individual will occupy in the terreiro. Initiation for those who will become iãos is referred to as *feitura*, roughly meaning "making of", while the ceremony for those who become ogãs or equedes is a *confirmação* or confirmation. An individual who is undergoing preparations for the feitura or confirmação is *suspenso* or suspended, but not yet initiated. Obrigações take place at 1, 3, 7, 14, and 21 years *after* the feitura or confirmação. Because of the expense and work they entail, few initiates are able to go through with all of them. This makes it reasonable to assume that only the most committed will be willing to complete their obrigações. In this case, 38.7% of respondents reported being neither initiated nor ready to be initiated ("nem feito nem confirmado"), 17.3% being initiated but without any obrigaçãoes yet, 16% had celebrated their 1-year obrigação, 12% had 1 and 3-year obrigações, 7.1% had 1,3, and 7-year obrigações, 4.4% had had 1,3,7, and 14-year obrigações, and 4.4.% had celebrated all their obrigações (1,3,7,14, and 21-year). These categories were coded as an ordinal variable. There were 28 missing answers. In order to assess the validity of the different measures of commitment, I examined the relationships between these different tools. All measures of religious commitment were highly correlated with each other (Table 1).

3.2.1 Discussion of Religious Commitment Measures

The data presented here reveals patterns of religious activity among Candomblé adherents. First, it is important to mention that there may be an element of self-selection to these results, since those who are more committed are expected to be increasingly represented among the participants of the study. This may also explain why scores on the RCS tended to be quite high. Other finds are consistent with the

ethnography of the religion. Most participants in the religious hierarchy were female.
As discussed earlier, women have long dominated the religion. Not only that, but
there is a trend for increased religiosity in females of which Candomblé appears to be
a part (for a review of the literature, see Francis, 1997). Additionally, subjects report
being part of Candomblé for a longer time than part of the terreiro. This is consistent
with the manner in which most followers become involved with the religion. A period
of a few years when the individual tests the waters at different houses often precedes
initiation or exclusive membership at a particular terreiro. A more surprising
discovery is that regular attendance at more than one terreiro is an uncommon
occurrence and that syncretism with Catholicism, at least in practice, is
overwhelmingly widespread. This may be due to the increased legitimization of
Candomblé from an obscure sect to a state-sanctioned religion, which allows
adherents to concentrate their commitment on only one alternative.

Table 1. Correlations between Religious Commitment Variables

	Religious Commitment Scale (RCS)	Collective Commitment Scale (CCS)	Individual Commitment Scale (ICS)	Yrs in Candomblé	Yrs in terreiro
Collective Commitment Scale (CCS)	.847** n = 230				
Individual Commitment Scale (ICS)	.874** n = 230	.551** n = 230			
Yrs in Candomblé	.310** n = 219	.239** n = 219	.247** n = 219		
Yrs in terreiro	.287** n = 208	.208** n = 208	.245** n = 208	.612** n = 222	
Obrigações	.438** n = 207	.300** n = 207	.408** n = 207	.580** n = 216	.501** n = 204

**Pearson's *r*, correlation significant at the .01 level, 2-tailed

A particularly suggestive result is that factor analyses revealed consistent
differences in expressions of religiosity as measured by the RCS. It appears that some
individuals display their religious engagement through participation in collective

rituals, while others emphasize personal and individual demonstrations of faith. In a previous paper, only the subscale that deals with collective rituals (CCS) was found to be positively related to increased cooperation in the economic game (Soler, 2008). The implications of this relationship constitute the central theme of this dissertation and are explored in detail in subsequent sections. For now, it is important to highlight that these differences raise important questions of what elements characterize religious commitment.

Psychologists have long tried to understand religiosity, or religious commitment, in terms of its different elements or dimensions (e.g. Cornwall *et al*, 1986; Glock, 1962). Perhaps the best-known framework is Allport's (1950; Allport and Ross, 1967) conceptualization of religiosity as intrinsic and extrinsic (IE). According to this distinction, an intrinsic religious orientation represents true and "mature" religiosity because it involves the internalization of religious ideas and the pursuit of spirituality for its own sake. Extrinsic religiosity, on the other hand, refers to individuals who are more interested in the "selfish" or "immature" rewards of religion, such as obtaining a good reputation or belonging to a social network. Allport maintained that intrinsics had a healthier spirituality associated with hope and positive moods and demonstrated as decreased prejudice and racism. Other researchers have argued that the apparent tolerance of intrinsics was simply due to their desire to appear socially acceptable (e.g. Batson, 1976; Batson *et al*, 1978; Leak and Fish, 1989).

Although Allport's value-laden characterizations seem inappropriate today, the concept of extrinsic and instrinsic religious orientation can be a starting point to understand different expressions of religious commitment and their associated attitudes and behaviors. Of course, different aspects of religiosity are not expected to

be mutually exclusive. The subscales that capture differences between collective and individual expressions of religiosity (CCS and ICS) are highly correlated, as are all other religious commitment measures in this sample. It seems likely that increased religious activity corresponds to a more profound internalization of beliefs. Scholars have speculated that aligning the beliefs and values embodied in religious rituals reduces cognitive dissonance (e.g. Barrett, 2004; Boyer, 2001; Sosis, 2003). Trivers (2000) suggests that such cognitive biases may be adaptive because supporting our behaviors with corresponding beliefs facilitates convincing others of the honesty of our intentions.

An explanation may be that individuals strategically emphasize the religious strategy that best suits their circumstances. If this is the case, extrinsic or outward-directed religiosity can be understood as based on increased attachment to a social community due to perceiving greater benefits from group-belonging. In this dimension, hard-to-fake signals of commitment (i.e. costly collective rituals) are expected to acquire more significance because they demonstrate the signaler's honest intentions and foster cooperation from others. On the other hand, intrinsic or inward-directed religiosity can be characterized as the internalization of the belief system. Belief is emphasized over actions and private rituals gain importance over public ones because there is a decreased concern or need for group-belonging. The associated attitudes and behaviors that have been found to correspond to these different religious styles can be examined in this new light. Affects that are considered negative, like prejudice, may well be evolved psychological mechanisms that were adaptive in the past. Prejudice against outsiders, which has been found to be associated with extrinsic religiosity, may be particularly important in groups where inter-group conflict occurs often and internal cohesion is important. Of course, in multi-cultural and multi-

religious societies (such as the US where most of traditional studies of IE have been conducted), feelings of intolerance toward others are likely to result in increased stress. In this case, the inclusivity displayed by those characterized as intrinsics may be more efficient and predictably result in positive moods and feelings of well-being.

I have suggested that the religious orientation that an individual demonstrates is related to individual needs and circumstances. This appears to be the case in this sample. The Collective Commitment Subscale is significantly and inversely related to income (Pearson's $r = -.165$, $p = .013$), but there is no relationship between income and the Individual Commitment Subscale (Pearson's $r = .054$, $p = .419$). This suggests that an extrinsic or outward-directed religious orientation that emphasizes collective rituals is linked to economic difficulties and presumably, greater dependence on group cooperation. Even if both extrinsics and intrinsics are expected to be found within any congregation, it may be that religious systems are biased to one type over another. Candomblé, because of its history and current social organization, seems conducive to an extrinsic religiosity that stresses behavior over belief, collective over private ritual, and dependence on in-group solidarity. The religion is more focused on ritual than doctrine and it is only through action and performance that an adherent can gain a true understanding of the religion. Additionally, its development in the hostile climate of racism and prosecution and the extensive rivalry that exists between terreiros has emphasized the importance of the internal community. As mentioned above, the religious experience of a Candomblé adherent often does becomes exclusive to a single religious house, since only one third of subjects reported attending more than one terreiro simultaneously. Maintaining a cohesive and distinct group identity may be essential for the survival of a terreiro and its effective functioning. Still, Candomblé is distinguished by its flexibility and ability to adapt to novel

environments and situations. The elements that it currently emphasizes are not expected to remain fixed over time. As political and social changes affect adherents, new and alternative expressions of religiosity are expected to develop and change the face of the religion.

3.3 Cooperation Measures

Individual willingness to cooperate with other group members was assessed using two different tools. One was an index composed from a series of questions related to common cooperative occurrences in the community; the second was the Public Goods economic game. The former was completed as part of the individual questionnaire. It related to both the number of cooperative acts the individual had performed for other group members in the past and to parallel acts received from fellow group members. This resulted in the creation of two variables composed from eight items each, "Given Cooperation" and "Received Cooperation".

Items for "Given Cooperation" were phrased as, "Have you ever lent money to someone in your terreiro?" while items for "Received Cooperation" asked, "Has someone in your terreiro ever lent you money?" The breakdown of answers for "Given Cooperation" items was the following (the number in parentheses indicates the percentage of subjects who marked "yes"): lent money to someone (39.8%), gotten a job for someone (22.5%), bought medicine for someone (23.7%), taken care of someone's child (24.1%), taken care of someone while they were sick (25.7%), let someone stay at your home (20.9%), bought Candomblé materials for someone (34.1%), and helped pay someone's debts (21.7%). Adding all "yes" answers yielded a mean of 2.12 (s.d. = 2.28, min. 0, max. 8). The same instances were used to create a measure of "Received Cooperation". This had a mean of 2.06 (s.d. = 1.89, min. 0, max. 8). In terms of frequency of receiving these cooperative acts, people responded

as follows: someone in your terreiro has lent you money (34.9%), gotten you a job (26.9%), bought medicine for you (22.5%), taken care of your child (12%), taken care of you while you were sick (37.8%), let you stay at their home (23.7%), bought Candomblé materials for you (34.9%), and helped pay your debts (13.7%). In essence, these variables can be understood to represent scales of cooperation that seek to identify an underlying factor. In this light, "Given Cooperation" has high internal reliability (Cronbach's alpha = .808), while "Received Cooperation" has a lower score (Cronbach's alpha = .675).

Results from the Public Goods game were quantified as the offer (amount left in the envelope for donation to the group of 4 or 5). The mean offer was 4.82 reais (s.d = 3.15) with a modal offer of 10 reais (n = 41 or 16.9% of players) and a second mode of 2 reais (n = 37 or 15.3% of players) (Figure 1). Exploratory analyses revealed that income was a crucial mediating variable for the game offer. In the analyses, I present results from both the raw game offer score and game offer as a proportion of income. To create this second variable, I calculated game offer as a proportion of the monthly median income described above and obtained a mean of 1.88 (sd. = 2.51; min. 0, max. 11.43). When this is done, the mean of the distribution is 1.14, with approximately 50% of players offering a minimal amount between 0 and 1 monetary unit (Figure 2).

The different measures of cooperation show some relationship to each other, although to a less extent than religious commitment measures (Table 2). The two measures that indicate individual willingness to cooperate (i.e. game offer and "Given Cooperation") are modestly but significantly correlated, indicating that performance in the economic game can bear some relationship to self-report and perhaps to actual

iterated instances of cooperation. However, when game offer is calculated as a proportion of income, the relationship vanishes.

Figure 1. Frequency Distribution of Game Offer
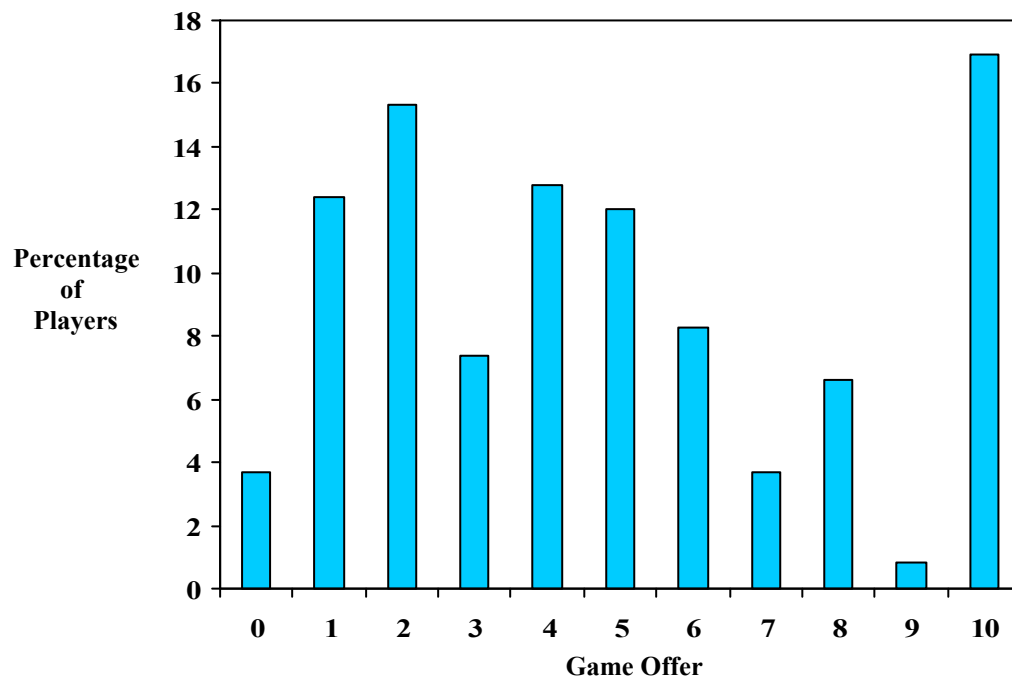
Figure 2. Frequency Distribution of Game Offer as a Proportion of Income
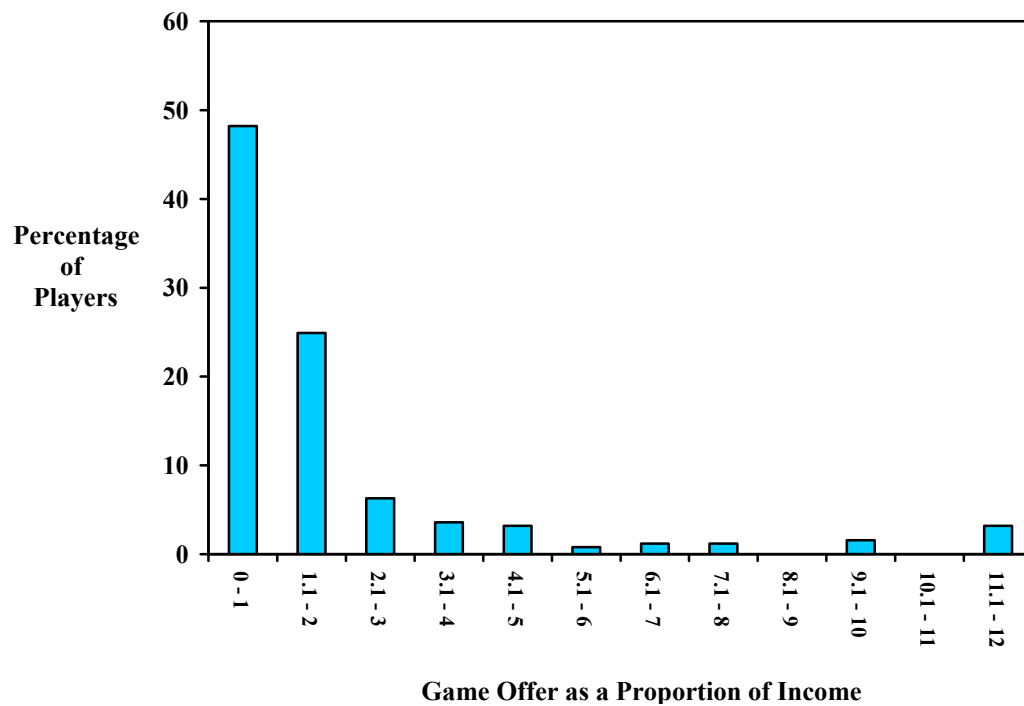
3.3.1 Discussion of Cooperation Measures

Studies using a variety of economic games have been conducted on field

settings (Henrich *et al*, 2004; Roth *et al*, 1991) with a wide array of communities,

ranging from hunter-gatherers to university students. This kind of tool undoubtedly

has many advantages. Perhaps the most significant is that economic games provide a

behavioral measure of cooperation rather than one bas

ed on self-report. Depending on the amount used and the format of the game,

it can provide a real temptation to players to defect and, consequently, a more

accurate assessment of individual willingness to cooperate.

Table 2. Correlations between Cooperation Measures

	Given Cooperation	**Received Cooperation**	**Game Score**
Received Cooperation	.433 $p < .01$ n = 249		
Game Score	.189 $p < .01$ n = 238	.114 $p = .078$ n = 238	
Game as Proportion Of Income	-.020 $p = .758$ n = 235	.030 $p = .650$ n = 235	.408 $p < .01$ n = 239

Pearson's *r*, 2-tailed

Nevertheless, it is important to be careful about the claims that can be

extracted from the result of a game. Some researchers have used results from

economic games to make claims about a mechanism of "strong reciprocity" that

represents a departure from what is commonly understood as the evolution of human

cooperation (e.g. Gintis, 2000; Gintis *et al*, 2003; Gintis and Bowles, 2004). The

claim is that any departure from strictly rational behavior, such as cooperating on a

game, demonstrates an innate cooperative instinct in humans. An economic game,

however, represents a one-shot interaction that does not mimic the reality of

cooperative relationships. Other researchers have forcefully refuted these claims on several grounds (e.g. Burnham and Johnson, 2005).

Here, the results from the economic game point out additional advantages and weaknesses of the use of such games (especially in field settings). One of the strengths of the game was pointed out to me the very first day I administered it. The babalorixá of this particular terreiro had listened to my explanations quietly and with a serious expression on his face that had gradually transformed into an ironic smile. As I finished, he raised his arm and said he had a question. I was afraid I had somehow offended him or committed some terrible faux pas, but instead he asked, "Listen, but is this being done only for the axé? Because it has a lot to do with it" (*Vem cá, mais isso esta sendo feito só pra o axé? Porque tem muito a ver*). I asked him to explain what he meant. He continued to say that although all need to work together for the terreiro, someone is always trying to get away with doing as little as possible and taking the most advantage. He went on, "Some come here with only their shirt under their arm, and others with a sack (of beans) on their backs. And it is the one with the sack that ends up taking more beans than the other!" (*Algums chegam com a camisa debaixo do braço e outros com a sacola nas costas. E é aquel com a sacola nas costas que acaba levando mais feijão que o outro!*). At this, the entire terreiro started laughing sheepishly and some members began loudly protesting that it was not always the case, that they were many examples of solidarity, that they all tried to help one another, and such things. Later on at other terreiros, similar comparisons between the game and the functioning of the religious house were spontaneously pointed out by various individuals in post-game interviews. In this setting, then, the economic game was a recognizable format of how collective effort functions. Ensminger (2004) mentions a similar case where her Orma subjects

equated an economic game with a local form of organization that takes contributions for public good undertakings. This similarity not only facilitates the subjects' comprehension of the procedure, but also makes the game a closer analog to a real-life situation than other methods. If this is the case, results from the game may reflect actual behavior and decision-making more accurately than simply a questionnaire.

The use of economic games can also have disadvantages. The principal issue that came up in this project was due to the lack of economic homogeneity in the sample. The majority of Candomblé adherents come from similar socio-economic backgrounds of urban poverty. Here, fully half the subjects reported earnings of less than 1 minimum wage. In those cases, 10 reais (the size of the stake in the game) is a tempting amount to earn in one day. However, for wealthy members of the religion the same 10 reais is a negligible amount. A small minority of 5.6% reported more than 5 minimum wages, half of whom were young professionals who belonged to a terreiro led by a babalorixá who also happens to be a doctor with a successful private practice (none of the other terreiro leaders in the study had university degrees). Controlling for income in statistical analyses may not be enough, because in this case subjects are ascribing widely different values to the same amount of money. For each group at the tails of the distribution curve, the size of the stake represents a qualitatively different measure.

De-contextualized measures such as the economic game are divorced from commonly occurring behavior and focus exclusively in one currency of cooperation (i.e. money). It is advantageous to use additional tools that attempt to quantify cooperation costs in terms of effort or time and that tap into actual examples of daily behavior. While this is certainly more difficult (which is why economic games have become so popular in the first place), I used the "Given Cooperation" variable to

capture some of this variation. These examples of cooperative acts had been often seen or heard in terreiros or elicited through interviews. Of course, there is an ever-present difficulty in determining how accurate comparisons are across individuals within these categories. Time or effort expended may be quite insignificant for a woman who is single and unemployed when compared to another who works and has the responsibilities of a husband and young children. However, these data may reveal information that more closely approximates the types of costs that people are willing incur for each other.

Half of the instances used to create the variable "Given Cooperation" have to do with economic resources: money lending, buying medicine, buying Candomblé materials, and paying someone's debts. Although they may seem to capture the same idea, in practice each of these actions represents different degrees of investment, intimacy, and need. Lending money implies that the recipient will eventually return the amount. Being on intimate terms with the person may not be as important, since the expectation of payback is set out clearly and the transaction is more formalized. On the other hand, buying medicines or helping pay a debt (usually utilities or a cell phone bill), implies a closer relationship between the parties and a more urgent need on the part of the receiver. Such debts may or may not be paid back and tend to occur only among relatives or very close friends. Buying Candomblé materials is something that obviously occurs in the context of the terreiro and may be due to an obligation imposed by the group rather than generosity. For example, the ialorixá of the terreiro may determine that all members are required to sponsor an initiate's "coming out" feast. Contributions may include fabric and adornments for ritual clothes, animals for sacrifice, a kilo of beans for offerings, and such.

Here, there is a statistically significant relationship between the "Given Cooperation" score and the results of the game. This might mean that individuals who have the means or willingness to cooperate more, either because they are wealthier or simply more generous, will do so even in different scenarios. However, when game offer is calculated as a proportion of income, this relationship disappears. This suggests that relative to others, wealthier people are not necessarily more cooperative and that the only reason they appear to be so is because the cooperation they show in the game is related to the fact that the stake does not mean a loss to them. This highlights the complications of using the game as the equivalent of some general or broad form of cooperation instinct.

4. Hypotheses Testing

4.1 Hypothesis One: Individuals who signal higher religious commitment will be more cooperative with other terreiro members.

4.1.1 Results

If religion functions as a an honest sign of cooperation, those individuals who report higher religious commitment should also behave more cooperatively in the economic game and report more instances of provided cooperation toward other terreiro members. Preliminary analyses revealed that income was an important predictor of both cooperation as measured by the economic game offer (Pearson's $r = .350$, $p < .001$) and, inversely, to score on the Religious Commitment Scale (Pearson's $r = -.137$, $p = .039$). Income did not predict "Given Cooperation" (Pearson's $r = .073$, $p = .252$) and did not have a significant relationship with years in Candomblé (Pearson's $r = -.045$, $p = .493$), years as a member of the terreiro (Pearson's $r = -.076$, $p = .262$, *two-tailed*), nor the the number of obrigações has person has completed

(Pearson's $r = .119$, $p = .076$), although in this last case the relationship was close to significance.

To control for other intervening variables, I used multivariate regression analyses to test the relationship between cooperation as measured by the game offer and RCS score (Table 3). In the first model, age and income predict the amount of game offer, with older and wealthier individuals cooperating more. Living at the terreiro or having done so in the past also increased the game offer. Religiosity as measured by both the RCS and years of involvement in the religion had no effect.

Table 3. OLS Regression of Game Offer on Religious Commitment Scale and Other Variables ($R^2 = .235$, $p < .001$)

	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	1.412	1.055		1.339	.182
Sex	-.155	.448	-.024	-.346	.730
Age	.067	.021	.277	3.181	.002
Income Median	.002	.000	.402	5.688	.000
Married or living with someone	-.347	.511	-.049	-.679	.498
Separated, widowed or divorced	-.578	.830	-.053	-.696	.487
Lives or lived at the terreiro	1.217	.512	.184	2.377	.019
Has relatives in the terreiro	-.490	.479	-.077	-1.024	.307
Years in Candomblé	-.019	.024	-.070	-.762	.447
Years in the terreiro	-.051	.033	-.137	-1.559	.121
Religious Commitment Scale (RCS)	.010	.013	.058	.767	.444

Although previous cross-cultural studies have not detected individual factors that consistently explain behavior in economic games (Henrich *et al*, 2004), it is likely

that the stake offered in the game will have different significance in cases where there is great economic disparity among players. As mentioned earlier, economic inequalities in this sample may impact the way players value their original stake and consequently, how they behave in the game. To control for this problem, I calculated game offer as a proportion of reported income. I repeated the regression analysis using this variable with considerably different results (Table 4).

Table 4. OLS Regression of Game Offer as a Proportion of Income on Religious Commitment Scale and Other Variables ($R^2 = .136$, $p = .002$)

	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	-1.540	.780		-1.974	.050
Sex	.078	.354	.016	.220	.826
Age	.054	.017	.300	3.261	.001
Married or living with someone	-.882	.401	-.167	-2.201	.029
Separated, widowed or divorced	-1.047	.661	-.129	-1.583	.115
Lives or lived at the terreiro	.587	.405	.118	1.449	.149
Has relatives in the terreiro	.098	.381	.020	.258	.797
Years in Candomblé	-.034	.019	-.172	-1.759	.080
Years in the terreiro	-.032	.026	-.114	-1.224	.222
Religious Commitment Scale (RCS)	.032	.010	.257	3.275	.001

This analysis retains age as a predictor of game offer. It also indicates that individuals who are married or live with someone give less money in the game relative to those that are single. Most importantly, in this case the RCS score is a significant predictor of game offer (see Fig. 3). This is consistent with the hypothesis that individuals who signal higher religiosity, independently of years in the religion or as a member of the terreiro, are also more cooperative. To investigate an additional

dimension of cooperation, I performed the same regression analysis using "Given Cooperation" as the dependent variable. In addition to the RCS, covariates that predicted more instances of cooperation were income, living or having lived at the terreiro, and years as a member of the terreiro (Table 5). Age was not significant in this case, but the relationship between reported religiosity and cooperation was more robust in the expected direction (Figure 4).

Figure 3. Partial Regression Plot of Game Offer as a Proportion of Income on Religious Commitment Scale
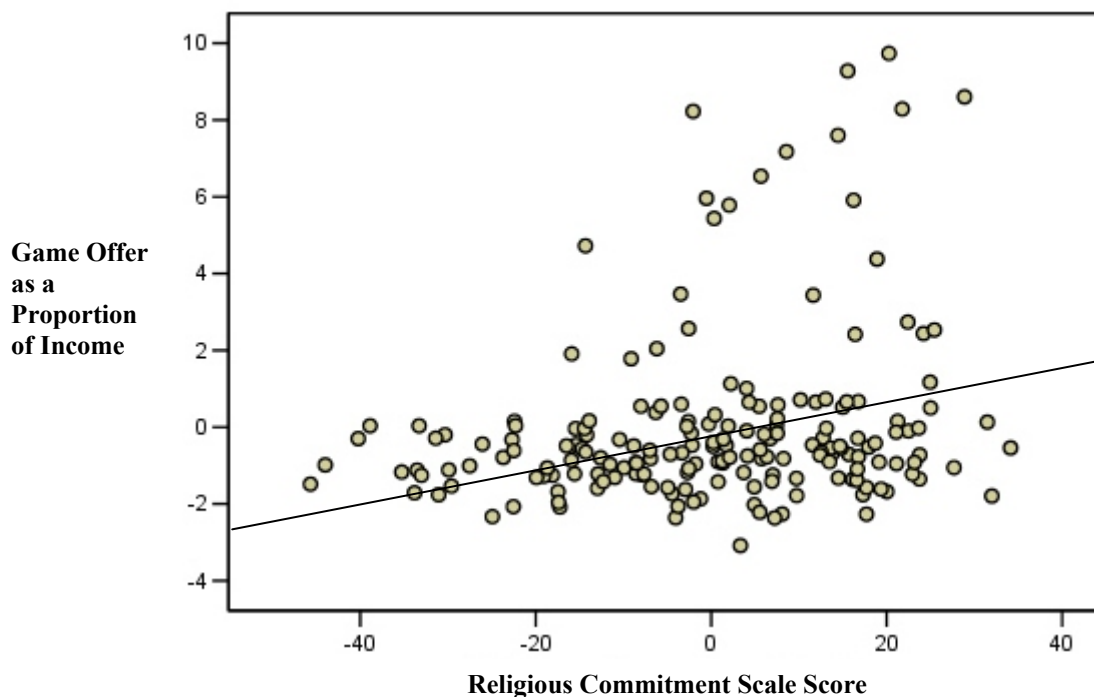
A corollary of the main hypothesis is that individuals who report higher religious commitment will also report receiving more cooperative acts from group members. This is because individuals who signal stronger religious commitment to manifest their cooperativeness should do so in the expectation of receiving more generosity from their fellow group members. This appears to be the case. The "Received Cooperation" variable is correlated to various measures of religiosity, including the RCS (Spearman's $rho = .236$, $p < .001$), years in the terreiro (Spearman's $r = .301$, $p < .001$), and number of obrigações (Spearman's $rho = .255$,

$p < .001$), but not to years in Candomblé (Spearman's *rho* = .082, *p* = .206).

Additionally, individuals who are more cooperative also report more instances of

received cooperation. The "Received Cooperation" and "Given Cooperation" indices

are significantly correlated (Spearman's *rho* = .475, *p* < .001, two-tailed), and

"Received Cooperation" is correlated to both game offer (Spearman's *rho* = .124, *p* =

.055) and game offer as a proportion of income (Spearman's *rho* = .150, *p* = .022).

Table 5. OLS Regression of "Given Cooperation" variable on Religious Commitment Scale (R² = .458, *p* <.001)

	Unstandardized Coefficients		Standardized Coefficients	*T*	Sig.
	B	**Std. Error**	**Beta**		
(Constant)	-2.765	.631		-4.378	.000
Sex	.248	.268	.053	.923	.357
Age	.012	.013	.066	.921	.358
Income Median	.001	.000	.211	3.649	.000
Married or living with someone	-.096	.311	-.018	-.308	.759
Separated, widowed or divorced	.388	.511	.048	.759	.449
Lives or lived at the terreiro	1.470	.311	.303	4.729	.000
Has relatives in the terreiro	.043	.289	.009	.150	.881
Years in Candomblé	.015	.015	.077	1.006	.316
Years in the terreiro	.069	.020	.250	3.445	.001
Religious Commitment Scale (RCS)	.036	.007	.293	4.806	.000

4.1.2. Discussion

Despite the extensive theoretical interest in signaling theories of religion, there

has been remarkably little empirical work on the subject. The only other systematic

test of the hypothesis is the pioneering work of Sosis and colleagues mentioned

earlier. Another issue is that most theoretical work focuses on the practice and

doctrine of major world religions to the exclusion of traditional or local religious

systems. The results presented here are particularly relevant because they provide

additional empirical support for the theory and do so in the context of a local religion.

Figure 4. Partial Regression Plot of "Given Cooperation" Variable on RCS

Religious Commitment Scale Score
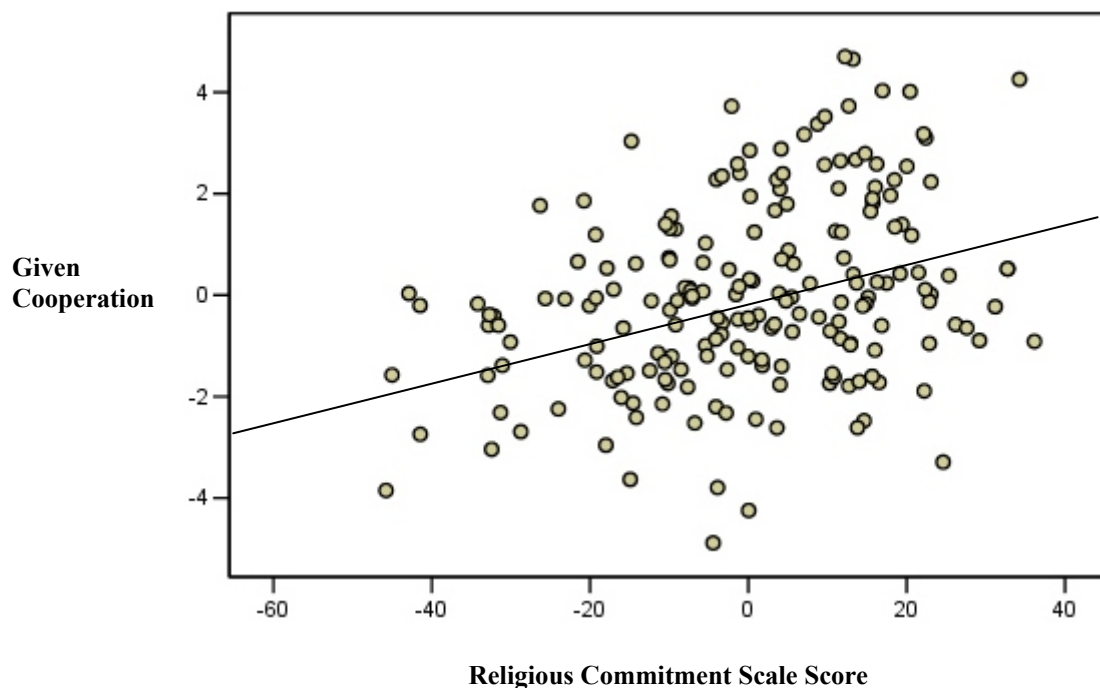
The RCS was shown to be predictive of independent measures of cooperation

used in the study. In the case of the Public Goods game as an assessment of

cooperation, it was necessary to create a variable that took into account the economic

status of players. The reason why income differences affect the result of the game

appear to be related to the value placed on the stake amount by participants. Thus,

controlling for income in a regression analysis is not sufficient. An alternative way of

standardizing the value of the game offer across players is by calculating the

proportion of monthly income it represents. When this is done, the regression analysis

shows that individuals who score higher on the RCS do indeed cooperate more on the economic game.

Two additional measures of involvement with Candomblé predicted game offer. Those who lived at the terreiro or had done so in the past cooperated more in the game (as a raw score), while those who have been part of Candomblé longer cooperated more when game offer is calculated as a proportion of income. In the first case, it is difficult to separate practical objectives from religious commitment as causal motives for increased cooperation. Generally, individuals who live at the terreiro are either relatives of the ialorixá or babalorixá or followers who find themselves without a home. It is rare for someone to reside at the terreiro solely because of religious obligations, although individuals who do so tend to become more active in their religious participation. However, living at the terreiro also implies increased and closer contact with other terreiro members, which may also impact the level of cooperation. Having belonged to Candomblé for many years, on the other hand, can be more unambiguously construed as a sign of religious commitment. This appears to be the case, since longer involvement in the religion is correlated to higher scores on the RCS.

The only demographic factor that consistently impacted game results apart from income was age. Older individuals contribute more in the game both when it is presented as a raw score or as a proportion of income. It may be that older individuals are in a better position to help others because they have accrued more resources over the years. Another possibility is that older individuals in the sample are more likely to have children and other young relatives as part of the same group and this makes them more likely to cooperate via a kin selection psychology, although having relatives at the terreiro had no effect on game offer in either regression model. Age also does not

predict "Given Cooperation", which casts doubt on the notion that older individuals are more generous overall.

It seems more likely that the effects of age are related to the dynamics of the economic game itself. A possible interpretation is that younger individuals, being more impulsive, are more influenced by the instant gratification of earning money rapidly and are less likely to part with it. Alternatively, it may be that despite efforts to explain the procedure fully to all participants, some older individuals did not quite grasp the game mechanisms and contributed more by mistake. This seems unlikely since confusion in how the game is played is not expected to bias the results directionally as they are shown to do here.

When "Given Cooperation" was used as the dependent variable, the results were robust in the expected direction. RCS score is significantly correlated with more reported instances of cooperation provided to other group members. Other covariates with predictive power included income, living at the terreiro, and years as a member of the terreiro. Apart from providing support for the principal hypothesis, the latter suggests that level of religiosity serves as an honest sign of cooperation independently of how long an individual has been part of the terreiro or whether she has lived there. In other words, it is not sufficient to become part of the group but signalers must display their commitment regularly. While high entry costs may deter free-riders from penetrating a community, this will not be sufficient in the long run if cooperative benefits can be extended beyond an initial period. Demanding constant demonstrations of faith, as most religions do, ensures that deception and cheating will be more costly to carry out and easier to spot by other group members. In the case of Candomblé, periodic obligations that are costly and cumbersome may especially

necessary since the only way the terreiro can survive is through the renewed commitment of its members.

These results highlight the importance of recognizing that both willingness to cooperate and expressions of religious commitment are mediated as much by pragmatic factors (i.e. income) as by potentially evolved psychologies (i.e. religiosity, kinship, in-group bias). In order to provide help of any kind to others or to contribute resources to the religious community, an individual requires both material possibilities and willingness to do so. In the case of Candomblé, there is an implicit understanding that members' contributions to the terreiro's spiritual mission will differ according to the situation of each. A phrase I often heard in discussions of cooperation is *cada um ajuda da maneira que pode* (each helps in whatever manner he or she can). Affluent followers will provide substantially more economic resources while other members are expected to contribute in the form of materials for ritual purposes rather than money (e.g. food for feasts, animals for sacrificial rites, fabric for the orixá costumes). Often, time and effort will substitute economic donations. The costs that this implies for each member will differ depending on individual circumstances, but often can be quite high. Women who cannot provide money or materials may be made responsible of preparing offerings, cooking for the entire terreiro, washing ritual clothes, and other household chores. Men in the same situation may be called upon to decorate the barracão or aid in house repairs or construction work. Because not all members of the group are expected to demonstrate their commitment in the same way, the actions of each will be evaluated by others according to different standards.

The case of Cida, a member in the terreiro of Mãe Cleo, provides an illustration of how investments of time and effort can effectively signal commitment.

As sometimes happens, in this case the line between ritual and secular contexts can be hazy. Because many rituals in Candomblé are restricted to the initiated, participation in secular activities that aid in the functioning of the terreiro may become an alternative avenue to demonstrate commitment for those who are not part of the internal hierarchy of the house. This was the situation facing Cida, a quiet middle-aged woman with a square face and slightly masculine features. She was regular attendee at feasts and ceremonies and a constant presence at the terreiro's kitchen, where she was perpetually cooking or washing dishes. Other terreiro members did not seem to like her much and tended to treat her contemptuously or simply ignore her. I could partly understand why. Cida had a disconcerting way of intently observing those around her with piercing black eyes and an ironic smile. She never talked much, but when she did it was to ask uncomfortably direct questions, like how much my plane ticket to Brazil had cost. In any case, she did not seem to mind her treatment by others and tended to keep herself a little far apart from the rest of the group.

During a visit at the terreiro, Mãe Cleo's informed me that she had set up an acarajé stand next to the closest bus station. She needed extra money for her house and its many expenses and such street stands are always decent business. Mãe Cleo also told me that Cida, who was in the kitchen as usual, was in charge of cooking the acarajé and manning the booth. Soon after Cida left the house to set up the stand, a violent tropical storm broke out. Various members of the terreiro came running into the house, soaking wet and shivering. I waited for Cida to return too, because the storm seemed ready to go on all night and nobody goes out to buy acarajé in the pouring rain. I asked Mãe Cleo about her and she responded unconcernedly that she would be fine; she probably had a tarp somewhere to keep the rain off.

I often wondered why Cida endured the unpleasant treatment from others in the terreiro and even from Mãe Cleo, who could be quite rude to her. Over the months, I had witnessed various other instances of what I felt was unjustly advantageous treatment of Cida. Others who actually lived at the terreiro or spent most of their days there did not seem to share half of her duties nor were they treated in the same way. Eventually, I heard the story from Cida herself. Three years earlier, she had been unemployed, drinking too much, and involved with *um homem ruim*, a bad man. She came to Cleo's house as a last resort to turn her life around. Mãe Cleo took her in and she lived at the terreiro for six months, during which the ialorixá supported her completely. When she finally moved to a house next door to the terreiro, she was between jobs and with few savings to sustain herself. Eventually, Mãe Cleo came up with the idea and the money to set up the acarajé stand. That way, Cida could get a little money to pay her rent while contributing to the expenses of the terreiro.

Cida clearly signaled her commitment to the terreiro and the ialorixá, even if the context was not strictly religious. Drawing a firm line between religiosity and secularity may be particularly difficult in Candomblé. Historically, terreiros have functioned as much as temples as social clubs of sorts. It is not uncommon for the social life of adherents to center around the terreiro. Members often drop by to chat with each other, play cards, drink a beer, or simply pass the day. These apparently non-religious situations, as in the above example, can be selectively used to monitor and evaluate the behavior of fellow members in similar ways to religious obligations. However, in other cases it may become problematic to distinguish between signals of commitment to the group and benefits received from group belonging. Visiting the

terreiro to socialize may be partly a requirement (demonstrating concern and care for other members) and a benefit (having a place to relax and talk to friends).

To more accurately assess the relationship between expressed commitment and received cooperation, it is necessary to focus on unambiguously religious signals. The prediction is that in addition to being more cooperative, highly religious individuals should also receive increased cooperation in return. In this sample, this appears to be the case. Various measures of religiosity, including the RCS, are positively correlated with reported "Received Cooperation". In addition, those who demonstrate higher cooperation, both in the economic game and through the "Given Cooperation" variable, also report increased instances of received cooperation from other terreiro members. In terms of the game, the results may indicate that an individual's willingness to behave generously or trust others in a one-shot interaction is informed by past experiences of obtaining cooperation from them. Whether this occurs through a process of direct reciprocity (I help you, you help me) or based on reputation effects (I help you, others see it, they help me) cannot be determined through these data because individuals did not specify to whom in the terreiro they directed cooperative acts.

Ethnographic evidence, on the other hand, suggests that cooperation in Candomblé is not directed equally throughout the group. Not all persons in the community are in the same position to help others, nor is help required in corresponding proportion to what is meted out. In many cases, cooperation flows unilaterally from the leader of the terreiro to the filhos-de-santo. The leader of the terreiro has not only the authority but the obligation to mediate disputes among her followers, dispense advice, and when occasion requires, take active steps to solve their problems. Partly this is done through ritual means, such as consulting the orixás

for the appropriate course of action. When supernatural intervention is not enough, the ialorixá is expected to find more practical means to help her followers.

I witnessed many occurrences of help on the part of ialorixás and babalorixás. In one case, a young man came to the terreiro of a ialorixá with what seemed a strange request: he needed to borrow the propane gas tank, which is normally used to run the stove in homes. The young man explained his family had run out and he had no money to buy a new one for that month. The ialorixá indicated where it was and he happily took it away, thanking her profusely. She informed me she always kept a spare gas tank in case one of her filhos needed it. In another instance, a young babalorixá often helped followers find a job and even provided one. Pai Emerson, who presided over a modest terreiro and was unemployed himself, employed an elderly widow and filha-de-santo as a general help around the house. This was mostly unnecessary, since the only other occupant of his small home was his mother who already tended to domestic arrangements. Pai Emerson paid his filha-de-santo a small fee per week, provided her and her grandson with daily meals, and covered her occasional debts.

These dynamics of commitment costs and cooperation on the part of the leader of the terreiro can be identified as characteristics of small groups. As Olson (1971) points out, in small groups there is often an individual who stands to gain more from the collective good and is thus more willing to provide a much greater proportion of it. This is undoubtedly the case in terreiros, where the possible benefits of increased status, economic gain and social mobility apply primarily to the ialorixá or babalorixá. This creates "a surprising tendency for the 'exploitation' of the great by the small" (1971: 35). In this sense, exploitation refers to the unequal distribution of the costs of running the organization, which undoubtedly rest on the shoulders of the leader,

accompanied by the enjoyment of the benefits of the terreiro on the part of followers who do not always reciprocate adequately.

For example, in many cases ialorixás or babalorixás offer a temporary home to needy filhos-de-santo, which implies additional expenses of food and utilities. The mãe pequena of Mãe Cleo's terreiro lived there with her teenage daughter and her newborn son. The father of the baby had abandoned her and she had no other employment, so that in practice the ialorixá was responsible for supporting her family. The terreiro of Pai João Carlos, a babalorixá with a successful and growing practice, served as the on-and-off home of about a dozen people. Although some of João Carlos' clients came from Rio de Janeiro and São Paulo and were wealthy enough to invite him to trips to Europe, regular attendees were mostly locals who relied on the terreiro's benefits. Pai João Carlos had already added two stories to his home to accommodate his growing flock and more were under construction when I was there. Even in modest houses, one or two people can often be found to be living there indefinitely.

While filhos-de-santo are expected to reciprocate these services by participating in ritual activities and demonstrating obedience and respect, they are often a source of aggravation for the head of a terreiro. Pai Laércio, an large friendly man with over 30 years as a babalorixá, laconically described the constant disappointments that terreiro leaders experience with regard to followers: "One takes a lot of punches. Lots of punches really" (*Um toma muita porrada. Toma muita porrada mesmo*). Yet, while practically every terreiro leader laments at some point the ungratefulness or unreliability of followers, few would see this as sufficient reason for abandoning the post. Since the leader of the terreiro has much more to gain from her role, some transgressions and defections on the part of her followers must be

tolerated. The rewards of a successful terreiro appear to compensate for the constant toil and vexation. Apart from material gains, terreiro leaders can count on having privileged access to the support network that the terreiro comprises. In this case, *t*-tests reveal that while ialorixás and babalorixás report significantly higher levels of given cooperation (3.034 vs. 1.944, $t = 7.393$, $p < .001$) they also receive increased cooperation from other members (3 vs. 1.97, $t = 2.596$, $p = .010$). There are no significant differences with regard to the economic game offer, where the mean for terreiro leaders was 5.19 vs. 4.78 for all others ($t = .628$, $p = .531$).

In many ways, leadership in these religious communities can be understood as a form of classic entrepreneurship. Unlike institutionalized religions where the organization is responsible for the support and advancement of members, the head of a terreiro can only rely on her abilities, judgment, and personality. She must be willing to constantly invest in the group in the hopes that her efforts will bear fruit and eventually she will reap the benefits. As Casson (2003) notes, this effort does not guarantee immediate or great success. The initial disadvantages of poverty, racism, and lack of education are usually too great to allow dramatic changes in financial situation or social position. Yet, "the significance of entrepreneurship is not that it is an easy avenue for personal advancement, but that in comparison to other methods of personal advancement it may offer the best prospects to underprivileged people" (2003: 200). This is undoubtedly the case in Candomblé. While only a tiny minority of terreiros will be able to acquire the grandeur or wealth of the *grandes casas*, most ialorixás or babalorixás will find that the costs of their religious commitment are sufficiently rewarded by the benefits of their post.

3.2 Hypothesis Two: Individuals who have the greatest need of belonging to a terreiro (i.e. low socio-economic status, low position in the hierarchy of the house) will advertise higher religious commitment.

4.2.1 Results

Individuals in situations of economic or social need might be more attracted to a religious community because the potential benefits of group belonging are more important in for them. Terreiros often provide services to members that cannot be obtained elsewhere, such as loans, childcare, healthcare, and a network of social and emotional support. Most participants in this study live under conditions of need as a result of a combination of circumstances. In Bahia, a common self-deprecating phrase used by Afro-Brazilians when relating an injustice or misfortune is referring to oneself as *pobre e preto*, literally, poor and black. This description, though crude, reflects a stark reality. Apart from poverty and discrimination, there are other circumstances of social marginalization that might make belonging to a terreiro additionally attractive. Women and especially single mothers, the unemployed, and homosexuals, for example, might be particularly motivated to embrace the requirements of a religious group that promises support of various kinds and opportunities for economic and social advancement.

Given that high signalers are expected to perceive increased cooperation from other members, I hypothesized that individuals who are particularly in need of the services the terreiro provides will strategically signal higher religious commitment. To explore this possibility, scores on the RCS were regressed on variables that reflect economic or social marginalization (Table 4). The results show that only income, martial status, and years in Candomblé predict score on the RCS. In line with the hypothesis, individuals in the lower income medians reported higher religiosity in the

scale. Married participants also had significantly higher scores when compared to singles, the excluded category. Those with more years as part of the religion also scored higher on the RCS, although years as member of the terreiro had no impact on the dependent variable. Contrary to what I expected, neither sex, employment status, nor past experiences of religious discrimination had any impact on reported religiosity.

Table 6. OLS Regression of Religious Commitment Scale Score on Items Reflecting Need for Cooperation and Other Variables ($R^2 = .195$, $p = .004$)

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	**Std. Error**	**Beta**		
(Constant)	67.188	6.898		9.740	.000
Sex	-1.889	3.370	-.051	-.561	.576
Age	-.247	.173	-.140	-1.424	.157
Income Medians	-.006	.003	-.164	-1.707	.091
Married or living with someone	8.518	3.655	.219	2.331	.022
Separated, widowed or divorced	2.626	7.349	.034	.357	.722
Has relatives in the terreiro	-2.284	3.516	-.062	-.649	.517
Has been discriminated because of Candomblé	2.730	3.403	.072	.802	.424
Is unemployed	2.700	3.522	.073	.767	.445
Years in Candomblé	.435	.229	.238	1.900	.060
Years in the terreiro	.315	.265	.151	1.190	.237

4.2.2 Discussion

The notion that religiosity is associated to situations of social vulnerability or emotional distress has long been a central concept in the social sciences. Marx, for example, decried the debilitating correlation of religiosity and poverty, while Freud

lamented the use of faith as a crutch for the problems of weaker minds. Contemporary

scholars have taken a more positive view of the influence of religiosity. A large body

of literature argues that religious belief and practice can have beneficial effects in

physical and mental health (for reviews, see Ellison and Levin, 1998; George *et al*,

2002; Hummer *et al*, 1999; Miller and Thoresen, 2003; Powell *et al*, 2003;

Strawbridge *et al*, 2001). Most authors that posit this view focus on religiosity's

capacity for alleviating anxiety and promoting emotional or psychological well-being

(e.g. Brown *et al*, 2004; Ellison, 1991; Ellison and Levin, 2008, Kirkpatrick, 204;

Montell, 2002).

However, belief in gods and spirits is just as likely to create anxiety and fear in

followers as feelings of protection and tranquility. Religious scriptures such as the

Bible are filled with alarming references to supernatural punishment and many

religious traditions abound with stories of appeasing wrathful gods. Thus, there is no

obvious reason why religiosity should increase subjective feelings of well-being in

times of hardship or personal troubles. Religion, however, can prove beneficial for

different reasons.

An alternative interpretation consistent with the theory of religious signaling is

that individuals in circumstances of greater need will be more likely to increase their

expressions of religious commitment in order to obtain cooperative benefits from the

social group. Here, two results suggest this may be the case. Individuals with lower

incomes and those married or in a stable relationship (compared to singles) score

higher on the RCS. In the case of income, it is fairly obvious that a more precarious

economic situation represents greater need. Marital status, on the other hand, may

reflect the responsibilities of supporting a household. In addition to children, a

married couple is often faced with the prospect of caring for extended family

members such as elderly parents, nieces and nephews, younger siblings, and other youngsters. In such cases, the benefits of belonging to the terreiro may be accentuated because the community can provide material and social support. It could be argued that this should be even more apparent in the case of people who are separated, widowed or divorced. However, the few such individuals in the sample (n = 27) tended to be older and are likely dependant on adult children and other family members.

If there is any expectation of extracting benefits from the group by communicating honest commitment, signalers should increase costly or hard-to-fake religious displays. As discussed in the previous section, higher scores on the RCS correlate with more instances of received cooperation, suggesting that religious signaling may be used by group members to evaluate and decide whether to cooperate with someone. This dynamic opens the door for deceptive opportunities if the costs of increased religious participation are differentially lower for some individuals and their demonstrations of faith are not honest. That is, for some members of the religious community, participating in ritual activities may not necessarily translate into increased cooperation toward others.

Within the Candomblé community, there are common narratives that recognize less than sincere motives for entering the religion. These were summed up succinctly by Mãe Luciana, the ialorixá of a small terreiro located in the suburbs of Salvador: "There are people that come in because of obligations, others for the prettiness, others to accept themselves (as homosexuals). And others for love of the orixás" [*Tem pessoas que entram por obrigação, outros por boniteza, outros por se-assumir (como homossexuales). E outros por amor aos orixás*]. Not all these are considered equally legitimate in the sense of true spiritual devotion. Joining a terreiro

just to socialize or because it is fashionable is universally discouraged and viewed with contempt. Conversely, becoming initiated after a health crisis, even if the person is initially resistant to the idea, is completely justifiable.

Thus, while there is an underlying ideology that accepts need as a valid reason for seeking to become part of the group, the individual must be willing to assume the costs. In this way there is no conflict in being attracted to Candomblé partly for the pragmatic benefits that the religion offers. As a young ogã named Guga told me, "In Candomblé, you invest millions, but to gain health, spiritual peace, tranquility, open roads" (*No Candomblé, você inverte milhões, mais para ganar saúde, paz espiritual, tranquilidade, caminos abertos*). The notion of *caminos*, or roads, is used in the sense of destiny, fate, and the future. *Abrir os caminos* is to open the roads of someone's life by providing the means and opportunities for a good job, recovery from illness or addiction, or a healthier relationship with the loved one. Alternatively, a ialorixá or babalorixá with the aid of the orixá Exú, can also close the roads, *fechar os caminos*, and cause someone's life to derail. Although the rewards of Candomblé extend far beyond the material, it is clear that practical concerns play an important part in an individual's rationale for complying with the demands of the terreiro.

This may also help explain why socioeconomic status acts as a proximate mechanism to regulate how followers display religiosity. In Candomblé, wealthier individuals are more likely to limit their involvement with the terreiro to a sponsor role rather than become an intimate part of the daily life of the community. This practice dates back to the irmandades of the 19th century, predecessors of terreiros, when a wealthy patron from the white elite would sponsor the activities of a black religious fraternity (Butler, 1998; Harding, 2000). If a person is able to contribute hard-to-come-by economic resources to the terreiro, the ialorixá is often more lenient

in her demands for ritual participation. Consequently, those who have little to offer but their time and effort will participate more consistently in the ritual obligations of the house. Observations at the different terreiros I came in contact with support the reoccurrence of this pattern. In cases where clients and filhos-de-santo included noticeably wealthier individuals, the dynamics of social intercourse at the terreiro differed considerably. Wealthier members tended to restrict their interactions to the ialorixá or babalorixá. They usually came to the terreiro only on feast days or for personal consults. They drove to the terreiro in their own cars, lived in distant, well-to-do neighborhoods, and tended to be overwhelmingly white. Their experience of Candomblé appears to be a more individualistic, personal religiosity. This is in marked contrast to the vast majority of members of the houses I studied. These individuals tended to be poor and Afro-Brazilian, lived closer to the terreiro and spent much more time at the house, either socializing with other filhos-de-santo or helping out with household chores. A central element of their religious practice is its communal nature.

These differences are explicable if individuals from heterogeneous backgrounds find different rewards in belonging to the religion. The material benefits that a terreiro can offer are not an attraction for someone who has few economic difficulties. Even within the general category of poverty, not all terreiro members can be characterized as being in desperate or significant need. Indeed, the occasional rewards of occasionally borrowing money or having someone take care of one's children seem meager payback for some of the more extreme demands of the religion. A slightly different possibility is that actively participating in the religious activities of the community serves as a sort of "insurance" for future uncertainties. Of course, anyone can fall victim to random misfortune of many kinds. But in the case of the

socially and economically vulnerable, uncertainty might be greater and more likely to be justified. Jobs are unsteady and the concurrent burdens of economic instability can include stress and related illnesses, involvement in crime and violence, alcoholism and other addictions, and crises in personal relationships. Participation in the religious community may give the person the security that a network of support will be ready when real urgency strikes. Although in this case the only measure of temporary need (i.e. unemployment) did not have an effect on RCS score, more sensitive measures might demonstrate that expressions of religiosity will fluctuate and increase during times of crisis.

It is important to note that other variables that might represent particular social disadvantages were excluded from the analyses for various reasons. Compared to whites, Afro-Brazilians are expected to have a greater investment in the terreiro as a source of support because they encounter widespread discrimination outside it. However, this comparison could not be carried out because the only race categories significantly represented in this sample were negro, moreno, and pardo, all of which are associated with Afro-Brazilians. All others had less than a handful of mentions and branco or white only had two. Brazilian *raça* (race) and *côr* (color) classifications are never clear and unambiguous. The same person might be variously described as negro, preto, moreno, and pardo depending on appearance, descent, social status, and even accent. Indeed, to my great surprise, I was often referred to as branca and noted that some individuals self-identified as negro when they were clearly of mixed descent or even branco. In my case, my status as a foreigner and a researcher weighted more than my physical appearance in terms of forming a judgment (being Mexican, I have never been described as "white" before or since). In the case of Candomblé adherents, strategically identifying as negro may be a way of reinforcing

the legitimacy of a person's role within the religion by becoming more "African" and "traditional".

Different problems were encountered with attempts to identify sexual orientation. The words commonly used to describe homosexuality in Bahia are pejorative and can be offensive (i.e. viado, bicha, sapatona, etc.). I obviously hesitated to use these in a questionnaire and opted for the politically correct *homossexual*, *heterossexual*, and *bisexual*. After reviewing the questionnaires and talking to respondents, I realized that many people were not entirely clear on what each of these terms meant but were embarrassed to ask. Thus, those data were not deemed reliable and were not used in the analyses.

4.3. Hypothesis Three: Individuals with kin members in the terreiro will display higher levels of cooperation in the game, but fewer commitment signals.

4.3.1 Results

Kin selection predicts that, everything else being equal, individuals will cooperate more with those who share a greater percentage of their genetic material. I hypothesized that because cooperation among close relatives is expected under most circumstances, there is less need for an individual to publicly advertise commitment to relatives. This implies that individuals with family members in the terreiro are expected to cooperate more but signal less to other group members. To test this idea, two questions were used to create dichotomous independent variables. One asked whether the respondent had "blood relatives" (parentes de sangue) in the terreiro (yes/no) and another whether the respondent was related to the terreiro leader (yes/no). Because these two variables generated very similar results, I will only present analyses that deal with the first variable, except in cases where the second question yielded a significantly different result.

As expected, individuals who had relatives as members of the same terreiro reported a higher number of provided cooperative instances as measured by the "Given Cooperation" variable, as opposed to those who reported no relatives (2.52 vs. 1.63, $t = 3.086$, df = 246, $p = .002$). These individuals also reported significantly more instances of "Received Cooperation" (2.42 vs. 1.62, $t = 3.374$, df = 246, $p = .001$). However, in terms of the game offer as another measure of cooperation, those with relatives in the terreiro actually cooperated less (i.e. had lower offers) (4.52 vs. 5.20, $t = -1.666$, df = 239, $p = .097$). Respondents who were related to the terreiro leader also reported a lower offer in the game, but the difference was not significant (4.59 vs. 5.19, $t = -1.206$, df = 201, $p = .229$). When the game offer is computed as a proportion of income, there is no significant difference between those with relatives and those without (1.949 vs. 1.809, $t = .424$, df = 236, $p = .672$).

Contrary to my prediction, individuals who reported having relatives in the terreiro had higher scores on the RCS when compared to those with no relatives (73.66 vs. 64.83, $t = 3.403$, df = 228, $p = .001$). Respondents with relatives in the terreiro also tended to have more years in Candomblé (16.05 vs. 13.50, $t = 1.60$, df = 236, $p = .109$) and as part of the terreiro (11.89 vs. 6.96, $t = 4.254$, df = 222, $p < .001$).

4.3.2 Discussion

One of the most firmly established principles of evolutionary theory is that cooperation should increase among kin members. The results are not entirely consistent with this prediction, since individuals with relatives in the terreiro do not contribute significantly more in the economic game. However, they do report providing and receiving more acts of cooperation in the past. To reconcile these results, it is necessary to refer to the social composition of terreiros. Most of these religious houses are family-centered. Of the thirteen terreiros that were part of the

final phase of the research, six had family members as central participants, four included relatives in some capacity, and only three (all led by single men) had no relatives at all as active members of the house (and even then, two of these had elderly mothers who lived at the terreiro and attended feasts). In addition, a terreiro often includes one or more clusters of relatives that frequent the terreiro as clients or become filhos-de-santo. These can be a mother and her adult children, a husband and wife, or various members of the extended family. Although respondents did not specify to whom cooperative instances were directed, it is reasonable to assume that a large percentage of these occur among relatives that happen to be part of the same terreiro. Cooperation in these cases can be ascribed to kinship relationships and family obligations rather than increased religiosity.

On the other hand, results also show that individuals with relatives in the terreiro actually cooperated *less* in the economic game. An alternative interpretation may reflect the element of uncertainty that is an inherent part of such experiments, since players do not know who exactly benefits by their donation. Those with relatives present might be particularly concerned to ensure their actions benefit kin and thus feel more pressured to save the money for their families rather than risk losing it to the broader group. Although close friendships do spring up in the terreiro, the primary loyalties of individuals remain with their families. Members of the same family appear to spend much more time together while engaged in terreiro activities, such as arriving or leaving from feasts together.

Subjects who report having relatives in the same terreiro have higher RCS scores and have been part of the religion longer than those who do not. These results go directly against the proposed hypothesis, since individuals with relatives in the terreiro appear to be unnecessarily signaling higher religiosity. Given the functioning

of terreiros, this relationship makes sense only if driven by those individuals who are actually family members of the ialorixá or babalorixá. This is because the leader of a terreiro often becomes the central element around which the immediate and extended family congregates. This is especially true if he or she is the primary breadwinner of the household, as often happens. In addition to the role of spiritual leader, the pressures of family obligations contribute to the authority the ialorixá or babalorixá can exert. This role can be effectively used to extract greater involvement from family members in the affairs of the terreiro. Thus, being related to others in the terreiro but not to the leader should not translate into greater religious commitment. Subsequent analyses reveal that indeed there is no difference in RCS score between those who have relatives in the terreiro but are not related to the leader of the house and those with no relatives in the terreiro at all (68.07 vs. 70.09, $t = 1.619$, $p = .536$).

It is important to note that the involvement of relatives may not necessarily reflect commitment to the religion, but rather an obligation to the head of the family. The terreiro of Mãe Elena reflected this dynamic. In her mid-fifties, this ialorixá has a large family of which she is the undisputable center. This consists of five adult children and their spouses, several grandchildren ranging from teenagers to infants, and even two great-grandchildren. Apart from the terreiro which provides her with a small income, Mãe Elena runs a small neighborhood bar. At the time of the research, most of her relatives subsisted from these two sources, with the exception of one daughter who worked as a nurse. Her son was unemployed and lived at home, as did a 17-year old daughter with a two-year old girl. The other daughters, who lived in the same neighborhood, spent most of their days helping out at the bar and the rest of the family congregated there almost daily. Mãe Elena, however, was always at the helm, keeping a sharp eye on all transactions and a strong hold over the cash machine.

Although Mãe Elena comes from a family with a long history in Candomblé, none of her children seemed particularly enthusiastic about her terreiro. Unusually, not one of her four daughters was being groomed for the role of successor to the post of ialorixá and important positions in the hierarchy were occupied by unrelated individuals. In spite of this, Mãe Elena's daughters, grandchildren, and sons-in-law were invariably in attendance at all feasts and her daughters were her regular helpers during consultations. Because Mãe Elena controlled the family's resources, it was easy for her to penalize a missed feast or a refusal to help in ritual activities. While this terreiro and others like it are in danger of disintegrating once the ialorixá passes away, its continuation is assured during her tenure. Her position as the primary financial support of the family is powerful leverage to ensure that relatives are constant participants in the terreiros's activities.

4.4 Hypothesis Four: Members who participate in more than one terreiro will display lower levels of commitment and cooperation than those who attend one exclusively.

4.4.1 Results

This hypothesis predicts that individuals whose loyalty to a single group is more extreme will honestly signal higher religious commitment and thus be more cooperative with fellow group members. This is because the potential benefits of belonging to a particular group are expected to be more important to someone who devotes all of his or her resources to that single place of worship. Thus, these individuals should be more concerned with maintaining cooperative relationships with other group members. To investigate these issues, a dichotomous variable was used to indicate whether participants attended other Candomblé terreiros in addition to the one where the questionnaire took place.

The results were not consistent with my predictions. In terms of "Given Cooperation" there were no differences between those who attend one terreiro exclusively and those who attend more than one (2.41 vs. 2.03, t = .982, df = 169, p = .328). Similar results were found with game offer (4.63 vs. 4.38, t = .491, df = 163, p = .624) and game as a proportion of income (1.762 vs. 1.595, t = .430, df = 160, p =.668). However, individuals who attend at least more than one terreiro have a higher mean "Received Cooperation" score (2.46 vs. 1.63, t = 2.93, df = 169, p = .004) and higher RCS score (76.06 vs. 67.95, t = 2.272, df =156, p =.024).

I also collected data on attendance at alternative centers of religious worship. The only significant number were those who in addition to their own terreiro attended the Catholic Church (n = 76). Mentions of other religious denominations and those that cited participation in multiple religions were excluded because their numbers were too small for statistical analyses (Spiritism = 4, Evangelical or Pentecostal = 2, other terreiros and Catholic = 19, other terreiros and other religions = 6).

The results indicate that there are important differences between those who are exclusively affiliated with their own terreiro and those who in addition attend the Catholic Church. In terms of measures of willingness to cooperate, individuals who attend the Catholic Church report fewer instances of "Given Cooperation" (1.53 vs. 2.64, t = -3.047, df = 169, p = .003), lower mean game offer (3.79 vs. 4.99, t = -2.515, df = 163, p = .013), and lower mean game offer as a proportion of income (1.32 vs. 1.90, t = -1.607, df = 160, p =.110). They also report lower "Received Cooperation" (1.52 vs. 2.2, t = -2.489, df = 169, p = .014), and lower levels of religiosity as measured by the RCS score (64.28 vs. 75.29, t = 3.303, df = 156, p = .001).

4.4.2 Discussion

As discussed earlier, religious commitment can be understood as the internalization of beliefs or the experience of solidarity with a social group. A related characterization that follows from this distinction is between religions that emphasize devotion to a general ideology and those that focus on a particular community. Major world religions, for example, span across nationalities, languages, and ethnic groups. Although a person may be an assiduous member of a particular congregation, teachings are the result of a generalized doctrine and members are part of an abstract community of worldwide believers. Localized religions like Candomblé function differently. Ritual is stressed over doctrine and the focus is on attaining solidarity within small groups of adherents. The autonomous nature of each religious house and the competition that governs inter-terreiro relationships facilitate a tradition of exclusive membership in a community. Given all these factors, it seems likely that individuals that limit their religious experience to a single group would display higher cooperation and religious commitment. Contrary to this expectation, attendance at solely one terreiro did not affect any measure of given cooperation. In addition, subjects who reported regularly attending more than one terreiro actually scored higher on the RCS and reported more instances of received cooperation from members of their primary terreiro.

Thus, exclusive participation at one religious house does affect religious commitment, but not in the opposite direction of what was predicted. It may be that participating in other terreiros is a strategic use of religious advertisement. The additional demonstration of religious commitment might motivate fellow group members to cooperate more with the actor. Additionally, if individuals who participate in more than one terreiro are the most committed, then they are expected to

also spend the most time at their own terreiro. In this case, they would be expected to receive more cooperation simply as a function of their participation at their own community.

The ethnographic evidence suggests a more complete interpretation. It is possible that more committed individuals seek out additional avenues for expressing their religiosity. It is certainly the case that as involvement in Candomblé increases, many adherents develop ties with other terreiros. There are various reasons for this. As ogã Joãzinho explained, candomblés are like trees. From one root or *raíz*, many branches emerge. Thus, every new terreiro has a link to at least one other. Filhos-de-santo, even if they become great terreiro leaders themselves, have an obligation to the terreiro where they were originally initiated. Additionally, those who belong to the same barco de ião (who were initiated together) often maintain close relationships throughout their lives and participate in each other's communities.

Another reason that increased commitment to the religion may lead to involvement with other houses is that advanced members of the hierarchy are often called upon to take part in ceremonies at other terreiros. They are invited as special guests or requested as expert counsel when a younger initiate or a new terreiro needs their help. I came across a young woman who was attempting to establish a terreiro at her home. Because she was an equede and had no mediumistic abilities, she often sought the help of an elderly ialorixá that lived nearby. This lady belonged to a different terreiro but was a regular participant at the ceremonies in the new community. Another duty that members of different terreiros perform is helping during initiations. Because it is taboo for biological relatives, husbands, and wives to initiate each other, in many cases someone from the outside must come in to perform

the necessary rituals. Pai Adriano, whom I described in the previous chapter, was much sought after for such occasions.

As a person becomes more involved in Candomblé and builds relationships with other members of the community, affiliation with the religion can become the defining characteristic of her identity. This can be displayed through specific clothing or accessories (commonly beads), peppering conversation with Candomblé vocabulary, frequenting bars and restaurants where Candomblé followers are known to gather, and even a preference for the many Bahian pop artists that regularly incorporate Candomblé elements in their music. While some adherents, especially the elderly, often criticize such displays on the grounds that they trivialize sacred things, there is no doubt that *ser do axé*, or being of the axé, has become much more popular in recent years. Although being part of Candomblé has long implied inclusion in a community that extends beyond the terreiro, the povo-de-santo (people of the saint), the primary affiliation of a member has always been to his or her terreiro. With the growing legitimization of Candomblé, it may be that the sense of belonging to a greater community will gain importance and change the group-specific nature of the religion.

Consider the case of Mãe Luciana, a middle-aged ialorixá who was once very accurately described as a *guerreira* – a warrior. She is well known within the Candomblé community and easily recognizable outside of it. She wears long African robes, turbans and beads, which accentuate her tall, stately frame. All her conversations end with the Candomblé salutation *axé* and she discusses her orixás in the same manner one would use to refer to dear friends. A few years ago, Mãe Luciana lost a son to crime and this became the catalyst that transformed her life. She became involved with a variety of community organizations that range from

environmental protection to the promotion of religious tolerance and human rights. Although she has her own terreiro, Mãe Luciana's activities are increasingly geared toward a different, more public form of Candomblé adherence. In this, she savvily carries the banner of Candomblé as her public front. For example, she is part of a conservationist group that promotes the protection of a large park situated in the suburbs of Salvador. Her primary argument for conservation of the park and other urban green spaces is their importance for practitioners of Candomblé, who require access to natural resources for crucial rituals. For Mãe Luciana, involvement with Candomblé has moved beyond the terreiro to encompass different causes that are relevant to the majority of adherents.

The tension between increased legitimization of Candomblé and continued discrimination may also have a role in explaining why individuals who frequent the Catholic Church display decreased cooperation and lower scores on the RCS. Those who remain on the fringes of involvement of Candomblé (i.e. less committed) may find it more difficult to completely abandon their affiliation with Christianity. For the more committed, there is less need to legitimize their spirituality by attending Catholic services. Breaking ties with the Catholic Church may represent a tipping point of commitment to the Candomblé faith. This is because the establishment of Candomblé as a religion in its own right has been an embattled, drawn-out process. A famous newspaper editorial by Mãe Stella de Oxóssi, published in 1983, refuted syncretism and set the precedent for a re-claiming of the faith in its own terms that continues to find fertile ground among followers. This transition, however, has been gradual and certainly not applicable to all adherents. Many Candomblé followers find ways to navigate the two faiths in innovative ways. In the terreiro of Mãe Neuza, for example, children from the daycare center she sponsors are taught a version of the

Lord's Prayer that substitutes, among other things, "Our Father" for "Olorun" and

"our daily bread" for "our daily manioc". The more traditional expressions of

syncretism remain strong. A look at most Candomblé altars reveals Catholic icons

side by side the statuettes of orixás and caboclos. In addition, traditional Catholic

holidays in Bahia continue to be marked by the participation of Candomblé adherents,

as they have been for decades. For example, O Lavagem do Bonfim[27] (literally, the

Washing of Bonfim) at the beginning of year, the largest religious feast in the state,

involves a massive procession across the city ending at the famous Igreja de Nosso

Senhor do Bonfim (Church of Our Lord of Bonfim). The climax of the celebration is

the washing of the church steps by ialorixás who come from all over Bahia.

While many adherents have no conflict interpreting their faith in the context of

Catholic concepts, this does not imply that they are active participants in any Catholic

church. The results here suggest that while syncretism in belief may not compromise

adherence to the faith, syncretic practices do. If ritual is crucial to internalization of

beliefs, as cognitive scientists suggest, it makes sense that participation and

attendance at alternative religious centers negatively impacts the degree of

cooperation and commitment that a person displays in the context of Candomblé.

Exclusive commitment may strengthen an in-group bias that results in increased

solidarity toward those that share the same religious orientation. On the other hand,

the tension or dissonance that belonging to more than one system creates may

compromise commitment to either and weaken affinity toward other members

because there is less feeling of truly belonging to the group.

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[27] Bonfim is composed of two words ("bom" and "fim"), which literally mean "good end". It is also the
name of a suburban neighborhood in Salvador where the church is located

CONCLUSION

In 20th century anthropology, the relationship between ritual and cohesion in the social world constitutes the basis of the work of many classic authors (e.g. Durkheim, Radcliffe-Brown, Rappaport, Turner). More recently, however, theory has stagnated on the issue. In this context, the evolutionary and cognitive science of religion has the potential to provide new answers to old questions. This dissertation is situated in this new literature and represents an attempt to apply this nascent theory to an ethnographic investigation. The findings presented here shed light on two general areas: one, the interaction of individual religiosity and cooperative behavior directed at other group members, and two, the dynamics that govern religious institutions organized through collective action. In so doing, the dissertation provides empirical support for one of the theories that has become a cornerstone of the field of evolutionary studies of religion.

The idea that ritual serves to honestly indicate commitment to the in-group has proved broadly appealing for theorists interested in explaining religious behavior as a natural phenomenon (e.g. Atran, 2002; Boyer, 2001; Bulbulia, 2004b; Irons, 2001; Sosis, 2003). The results shown here provide evidence that expressions of religious commitment can indeed serve to honestly signal willingness to cooperate with other group members. Different measures of religious commitment and two measures of cooperation toward others support the main thesis of the signaling theory of religion. However, as often happens, these findings also produce more questions than answers. A thorny issue encountered throughout this project was the difficulty of accurately capturing the notion of cost. A starting point to clarify the issue in the context of religious ritual may be Guilford and Dawkins' (1991) distinction of efficacy and strategic costs. Many expressions of religiosity, like attendance at services, are

efficacy rather than strategic costs because they represent the minimum investment necessary for communication of commitment to occur. For example, an individual may be very committed to her faith, but if she does not attend mass no one will ever know. Thus, within religious communities, honest signals of commitment should truly represent a drain on individual resources in order to resist to invasion by cheaters and free-riders.

An important complication is that the cost of an action will be perceived differently by both the actor and the audience. An individual who has fully internalized the religious beliefs of his congregation and finds enjoyment in religious services will find that attending church is less costly than someone who would much rather be at the movies. Sosis (2003) argues that the beliefs and narratives that are central to religious systems are crucial to their success precisely because they allow the internalization of short-term goals that make rituals appear less costly. While this may discourage skeptics from joining the organization, it does not prevent deception and exploitation of the group by individuals who are already members and therefore fully convinced of the religious teachings. As Cronk (1994) argues, religious signals can be effectively utilized by believers to manipulate audiences when their interests do not converge. This is particularly possible if religious commitment encompasses more than one dimension, as some of the data here appears to suggest in the case of Candomblé. A person may experience religiosity as deep internalization of belief or as commitment to the welfare of his fellow adherents, and more likely both. But when internalization of beliefs is the dominating force, performing costly rituals will not be perceived as expensive but also will not necessarily signal cooperation toward other group members. Moreover, the benefits of such signaling can serve the interests of the actor at the expense of others.

Another way in which religious signals may ensure honesty of intention is of they expose the believer to costly consequences (Enquist, 1985). Religions that suffer prejudice or discrimination are relevant illustrations of this last point. Public expressions of adherence to Candomblé, for example, may subject the individual to derision or malice. Informants related various incidents that confirmed this, from being fired from a job because of religious affiliation to an elderly man who carried his beads in his pocket to avoid unpleasantness on the street. As in Candomblé, religious groups whose members demonstrate faith in the face of threats or abuse can be expected to be increasingly cohesive.

A different aspect of the signaling theory of religion that emerges from this project is its relationship with classic questions of collective action. In this view, Candomblé terreiros are an ideal setting because they are organized as independent communities that depend on the efforts of all members to survive. The results of this investigation illuminate some of the dynamics of group formation and maintenance in the case of terreiros.

To clarify this discussion, it is helpful to understand terreiros as providers of collective goods. The necessary first question is, then, what collective good does a Candomblé terreiro provide? In the framework of the signaling theory of religion, the goods that these religious organizations provide are cooperation and social cohesion among members. Terreiro members certainly derive material and social benefits from group-belonging, ranging from economic aid to friendship and companionship. These goods can be provided either by other individual members or the organization as a whole. For example, Pai João Carlos leads a prosperous and even luxurious terreiro. He is always carefully dressed and well-groomed and counts as clients and filhos-de-santo several individuals from wealthy areas of Salvador and even other cities.

Despite this, when a filho-de-santo requires monetary help, he makes a point of organizing a meeting with all other members to solicit donations. Some may only be able to afford a pound of rice or beans, but João Carlos believes it is important to instill a spirit of solidarity among his flock. In other cases, needy terreiro members may live at a terreiro for extended periods of time. These expenses are at least partly paid for by other members who continue to contribute to the maintenance of the house. Simply maintaining an active congregation ensures that all members have an available pool of social resources and companionship.

Because all can benefit from belonging, Candomblé terreiros face the same problems as any other religious or secular group. As Olson points out, "organizations (cannot) support themselves without providing some sanction, or some attraction *distinct from the public good itself*, that will lead individuals to help bear the burdens of maintaining the organization" (1971: 15-16, my italics). These rewards are apparent in the case of terreiro leaders. As described in previous chapters, heading a Candomblé terreiro also represents an avenue for social and economic advancement. Ialorixás and babalorixás may achieve certain economic stability that is distinct from the cooperative actions of their followers. This comes primarily from clients and can grow as the reputation of the terreiro expands. In addition, these individuals can also become important and respected members of the community. The ialorixás of the major terreiros of Salvador are important public figures that mingle with politicians, intellectuals and artists, and have been the subjects of documentaries, books, and innumerable local festivals and events.

External incentives of this sort do have the potential to explain the efforts of terreiro leaders in terms of sustaining the organization, but they cannot fully explain the motivations of other members. In the best of circumstances, the majority of

members of a successful terreiro can aspire to a sort of reflected glory that comes from association with a prestigious house. The cooperative benefits that are the primary subject of this dissertation are likely important in explaining why individuals initially join a terreiro. However, an additional reason may be needed to understand why individuals continue to work towards maintaining the organization.

Previous work has shown (Sosis, 2000; Sosis and Bressler, 2003) that religious communities are more effective than similar secular organizations at sustaining long-term collective efforts, and that those who belong and participate in religious groups are more cooperative than those who do not (Sosis and Ruffle, 2004). There are various possibilities for why religious ideologies appear to be so successful at promoting in-group solidarity. While closed secular organizations tend to have high entry costs for members (e.g. "rush" at college fraternities, "boot camp" in the army), frequent and regular ritual activity such as is found in religious groups may be necessary to reinforce a sense of compromise among members. The expectation of a supernatural reality that transcends life or the notion of supernatural beings that monitor our actions may create emotional or spiritual rewards that secular organizations lack. Thus, what motivates religious followers appears be a quality inherent to religion itself. Whether the gods of a religion are punishers or benefactors, supernatural agency is, to paraphrase Geertz, powerful, permanent and uniquely realistic.

Why this should be so remains an open question, but cognitive accounts of religious belief may provide clues that can be beneficially integrated to signaling theories of religion. For example, many cognitive accounts of belief focus on processes of cultural transmission to explain why religious beliefs spread. In addition to random chance or even memorability, certain religious concepts may be retained

and passed on more successfully because they have adaptive benefits, as Fessler and Navarrete (2003) argue in the case of meat taboos. Concepts or ideas that catch our attention in everyday contexts may also be expected to dominate religious narratives. For example, religious stories that involve agents appear to be more interesting to audiences than those about inanimate objects (Barrett and Keil, 1996). Stories about important events in the life cycle, such as birth and death, may also be expected to be more emotionally compelling than those about mundane happenings.

Signaling theory focuses on behavior, but it is important to remember that participation and compliance with ritual is the external expression of an internal state. Although the virtue of signaling theory is precisely that it allows us to investigate internal sentiments and motivations through observable behavior, further work in the area should also be concerned with understanding the motivations and emotions that underlie ritual performance. This will give us a clearer understanding of the costs of religious commitment, the possible mechanisms of deception and manipulation, and the adaptive significance of religious behavior and belief.

APPENDIX 1. SURVEY QUESTIONNAIRE (Portuguese version)

Por favor responda as siguentes perguntas da forma mais completa possível. Todas as informaçãoes seram confidenciais. Obrigado pela sua participação!

1.) Nome do terreiro:

_____

_____

2.) Endereço do terreiro:

_____

_____

3.) Telefone:

_____

4.) Data de fundação do terreiro:

_____

5.) Nação:

_____

6.) Qual é o orixá que rige a casa?

_____

_____

7.) Quantas pessoas moram no terreiro hoje?

_____

_____

8.) Qual é a relação do resposável com as pessoas que moram no terreiro? (São parte da familia de sangue, da familia de santo ou tem outra relação?)

_____

_____

9.) Quem fundou o terreiro?

_____

_____

10.) Quantas pessoas tem sido responsáveis desde a fundação do terreiro?

_____

_____

11.) Hoje, quem é o responsável pelo terreiro?

_____

_____

12.) Qual é o cargo do responsável? (exemplo: mãe-de-santo, zelador, etc.)

_____

_____

13.) Quando foi que o responsável do terreiro hoje torno-se responsável?
_____
_____

14.) Como foi que o responsável do terreiro hoje torno-se responsável?
_____
_____

ATENCĀO:
Responda as perguntas da 15 a 18 se o responsável do terreiro hoje é o fundador do terreiro.
Se a pessoa responsável hoje NĀO é o fundador, responda as perguntas 19 a 23. Depois continue na pergunta 24.

15.) No começo do terreiro quantos membros, filhos-de-santo e clientes tinha o terreiro?

     Membros: _____
     Filhos/filhas-de-santo: _____
     Clientes:_____

16.) E hoje, quantos membros, filhos-de-santo e clientes tem o terreiro?

     Membros: _____
     Filhos/filhas-de-santo: _____
     Clientes:_____

17.) Quantas pessoas fundarom o terreiro?
_____
_____

18.) Quantas pessoas que fundarom o terreiro fazem parte da casa hoje?
_____
_____

****

19.) Qual é a ligação do responsável hoje com a pessoa que fundou o terreiro?
(exemplo: o responsável hoje é filha-de-santo do fundador do terreiro)
_____
_____

20.) Quantos membros, filhos-de-santo e clientes tinha o terreiro ao final do cargo do anterior responsável?

     Membros: _____
     Filhos/filhas-de-santo: _____
     Clientes:_____

21.) E hoje, quantos membros, filhos-de-santo e clientes tem o terreiro?

      Membros: _____

      Filhos/filhas-de-santo: _____

      Clientes:_____

22.) Quantas pessoas fundarom o terreiro?

_____

_____

23.) Quantas pessoas que fundarom o terreiro fazem parte da casa hoje?

_____

_____

****

****

24.) Quais são os meses de festa no terreiro?

_____

_____

25.) Quantas festas públicas faz o terreiro durante o ano?

_____

_____

26.) Qual e quando é a festa mais importante no terreiro?

_____

_____

27.) Qual é a media de clientes que o terreiro tem:

      Durante a semana?_____

      Durante o mes? _____

28.) Qual é a distancia do terreiro mais próximo daqui?

_____

_____

29.) O responsável tem obrigaçãoes com outros terreiros?

Sim _____ Não _____

Se a resposta é sim, com quantos?

_____

30.) Com que frequencia tem visitas turísticas no terreiro? (Por favor escolha só uma resposta)

Nunca _____ Poucas vezes____ Algumas vezes_____ Muitas vezes_____

31.) Mais o menos, qual é o valor por uma consulta e trabalho do terreiro?

      Consulta: _____

      Trabalho: _____

32.) A residencia do terreiro é alugada ou propia?

_____

_____

33.) Se a residencia do terreiro é alugada, quem é o responsável pelo aluguel?

_____

_____

34.) Se a residencia do terreiro é propia, quem foi responsável pela compra?

_____

_____

35.) Mais o menos, qual é o rendimento do terreiro ao mes?

_____

_____

36.) Em que gasta o terreiro durante o ano?

_____

_____

37.) Qual é o "terreiro da filiação" deste terreiro e onde localiza-se (nome do bairro ou cidade?

_____

_____

Dados da pessoa responsável do terreiro:

Idade:_____

Estado Civil:

Casado/a:_____   Coabitante:_____   Soltero/a:_____

Separado/a: _____   Divorciado/a:_____   Viuvó/a:_____

Tem filhos? (que não sejan de santo):   Sim _____   Não _____

Se a resposta é sim, quantos?

_____

Tem algum emprego fora do terreiro?   Sim_____   Não_____

Se a resposta é sim, qual é o emprego?

_____

_____

SURVEY QUESTIONNAIRE (English Translation)

Please answer the following questions in the most complete manner possible. All information will remain confidential. Thank you for your participation!

1.) Name of the terreiro:

_____

_____

2.) Address:

_____

_____

3.) Telephone:

_____

4.) Founding date of the terreiro:

_____

_____

5.) Nação:

_____

6.) What orixá governs the house?

_____

_____

7.) How many people live in the terreiro now?

_____

_____

8.) What is the relationship of the person responsible with the people that live in the terreiro? (Are they relatives, part of the *familia-de-santo*, or do they have another relationship?)

_____

_____

9.) Who founded the terreiro?

_____

_____

10.) How many people have been responsible since the foundation of the terreiro?

_____

_____

11.) Today, who is responsible for the terreiro?

_____

_____

12.) What is the charge of the person responsible? (example: mãe-de-santo, zelador, etc.)

_____
_____

13.) When did the person responsible take charge?

_____
_____

14.) How did the person responsible come to her/his charge?

_____
_____

ATTENTION:
Answer questions 15 through 18 if the person responsible for the terreiro today is the founder of the terreiro. If the person responsible today is NOT the founder, please answer questions 19 through 23. Then continue on question 24.

15.) At the beginning, how many members, filhos-de-santo and clients did the terreiro have?

       Members: _____
       Filhos/filhas-de-santo: _____
       Clients: _____

16.) Today, how many members, filhos-de-santo and clients does the terreiro have?

       Members: _____
       Filhos/filhas-de-santo: _____
       Clients: _____

17.) How many people founded the terreiro?

_____
_____

18.) Of the people who founded the terreiro, how many remain part of the house?

_____
_____

****

19.) What is the relationship of the person responsible today with the person who founded the terreiro? (example: the person responsible today is a filha-de-santo of the founder of the terreiro)

_____
_____

20.) How many members, filhos-de-santo and clients did the terreiro have at the end of the tenure of the previous person responsible?

      Members: _____

      Filhos/filhas-de-santo: _____

      Clients: _____

21.) Today, how many members, filhos-de-santo and clients does the terreiro have?

      Members: _____

      Filhos/filhas-de-santo: _____

      Clients: _____

22.) How many people founded the terreiro?

_____

_____

23.) Of the people that founded the terreiro, how many remain part of the house?

_____

_____

****

****

24.) What are the months of feasts of the terreiro?

_____

_____

25.) How many public feasts does the terreiro hold in a year?

_____

_____

26.) What and when is the most important feast of the terreiro?

_____

_____

27.) What is the average number of clients the terreiro has:

      During a week? _____

      During a month? _____

28.) How far is the closest terreiro from here?

_____

_____

29.) Does the person responsible have obligations with other terreiros?

Yes _____   No _____

If the answer is yes, with how many?

_____

30.) How often does the terreiro receive tourist visits? (Please choose only one answer)

Never _____ Few Times_____ Sometimes_____ Many times_____

31.) More or less, what is the value of a consultation and a *trabalho* in the terreiro?

      Consultation: _____
      Trabalho: _____

32.) Is the residence of the terreiro rented or owned?

_____
_____

33.) If the residence is rented, who is responsible for the rent?

_____
_____

34.) If the residence is owned, who was responsible for buying it?

_____
_____

35.) More or less, what is the monthly income of the terreiro?

_____
_____

36.) What are the expenses of the terreiro during the year?

_____
_____

37.) What is the "affiliation terreiro" of this terreiro and where is it located (name of neighborhood or town)?

_____
_____

Information of the person responsible for the terreiro:

Age:_____

Marital Status:
Married: _____ Co-resident: _____ Single: _____
Separated: _____ Divorced: _____ Widowed:
_____

Do you have children? (not filhos-de-santo):   Yes _____   No _____

If the answer is yes, how many?

_____

Are you employed outside the terreiro?   Yes _____   No _____

If the answer is yes, what is your occupation?

_____
_____

APPENDIX 2. INDIVIDUAL QUESTIONNAIRE (Portuguese version)

1.- Sexo: Masculino ☐   Femenino ☐

2.- Idade: _____

3.-Estado Civil: Casado/a ☐   Coabitante ☐   Víuvo/a ☐
Solteiro/a ☐   Separado/a ☐   Divorciado/a ☐

4.-Tem filhos (que não sejan de santo)?
Não ☐
Sim ☐
        Quantos?_____

5.- Qual foi o último ano de escolaridade que você cursou?
Ensino fundamental ☐   Serie _____
Ensino medio ☐   Serie _____
Pre-vestibular ☐   Universidade ☐   Sem escolaridade ☐

6.- Qual é a côr ou raça com que você mais se identifica?
Negro/a ☐   Indigena ☐   Branco/a ☐   Pardo/a ☐
Preto/a ☐
Moreno/a ☐   Amarelo/a ☐   Outro ☐ Qual?
_____

7.- Qual é a orientação sexual com que voçe mais se identifica?
Heterossexual ☐   Homossexual ou gay ☐   Bissexual ☐

8.- Qual é a sua situação de trabalho hoje?
Empregado/a ☐   Qual é seu
emprego?_____ ☐
Desempregado/a
Aposentando/a ☐   Estudante ☐   Dona de casa ☐

9.- Qual é a renda mensual aproximada da sua famila?
Sem renda ☐
Até meio salario mínimo ☐
Entre meio salario mínimo até 1 salario ☐
Entre 1 salario mínimo até 2 salarios ☐
Entre 2 salarios mínimos até 3 salarios ☐
Entre 3 salarios mínimos até 4 salarios ☐
Entre 4 salarios mínimos até 5 salarios ☐
Mais de 5 salarios mínimos ☐

10.- Em que bairro você mora?
_____

11.- Este terreiro é o que você mais frequenta?   Sim ☐   Não ☐

12.- Você mora ou já morou neste terreiro?   Sim ☐   Não ☐

13.- Tem parentes de sangue que faz parte deste terreiro?   Sim ⬡   Não ⬡

14.- Você é parente do responsável deste terreiro?   Sim ⬡   Não ⬡

15.- Qual é a sua posição dentro do Candomblé?
Ialorixá ou Babalorixá ⬡   Mãe Pequena ou Pai Pequeno ⬡
Iaô ⬡   Equede ⬡   Ogã ⬡   Abiã ⬡   Frequentador/a ⬡
Cliente ⬡   Outro ⬡ Qual?
_____

16.- Há quanto tempo faz parte ou frequenta o Candomblé?_____

17.- Há quanto tempo faz parte ou frequenta este terreiro?_____

18.- Há quanto tempo foi sua feitura ou confirmação? (Se não é feito, deixe em branco)
_____

19.- Quais foram as festas de obrigação que você já fez? (Pode marcar varias respostas)
Sou feito/a ou confirmado mais ainda não fiz festa de obrigação ⬡
Já fiz festa de obrigação de 1 ano ⬡   Já fiz festa de obrigação de 3 anos ⬡

Já fiz festa de obrigação de 7 anos ⬡   Já fiz festa de obrigação de 14 anos ⬡

Já fiz festa de obrigação de 21 anos ⬡   Não sou feito/a nem confirmado/a ⬡

20.- Se você frequenta outras congregações religiosas, por favor marque quais:
Outros terreiros de candomblé ⬡   Centro Espírita ⬡
Umbanda ⬡   Igreja Católica ⬡   Igreja Evangélica ⬡

21.- Alguma vez foi discriminado por fazer parte do Candomblé?
Sim ⬡   Não ⬡

- -

Quais das seguentes ações você já fiz para um outro membro deste terreiro?

Emprestei dinheiro	Sim ☐	Não ☐
Ajudei á conseguir emprego	Sim ☐	Não ☐
Comprei remedio	Sim ☐	Não ☐
Tomei conta de seus filhos	Sim ☐	Não ☐
Cuidei quando estava doente	Sim ☐	Não ☐
Deixei ficar ou morar na minha casa	Sim ☐	Não ☐
Comprei material para a sua obrigação	Sim ☐	Não ☐
Ajudei a pagar uma dívida	Sim ☐	Não ☐

Quais das seguentes ações alguém deste terreiro já fez para você?

Me empresto dinheiro	Sim ☐	Não ☐
Me ajudo á conseguir emprego	Sim ☐	Não ☐
Compro remedio para mim	Sim ☐	Não ☐
Tomo conta de meus filhos	Sim ☐	Não ☐
Cuido de mim quando eu estava doente	Sim ☐	Não ☐
Me deixo ficar ou morar na sua casa	Sim ☐	Não ☐
Compro material para minha obrigação	Sim ☐	Não ☐
Me ajudo a pagar uma dívida_____	Sim ☐	Não ☐

INDIVIDUAL QUESTIONNAIRE (English Translation)

1.- Sex: Male ☐ Female ☐

2.- Age: _____

3.-Marital Status: Married ☐ Co-resident ☐ Widowed ☐
Single ☐ Separated ☐ Divorced ☐

4.-Do you have children (not filhos-de-santo)?
No ☐
Yes ☐ How many?
_____

5.- What was the last year of school you attended?
Elementary School ☐ Grade _____
Middle School ☐ Grade _____
Pre-university ☐ University ☐ Without schooling ☐

6.- What is the color or race that you identify most with?
Negro/a (black) ☐ Indigena (Indigenous) ☐ Branco/a (White)
☐
Pardo/a (brown) ☐ Preto/a (black) ☐ Moreno/a (brown) ☐
Amarelo/a (yellow) ☐ Other ☐ Which? _____

7.- What is the sexual orientation that you identify most with?
Heterosexual ☐ Homosexual or gay ☐ Bisexual ☐

8.- What is your working situation today?
Employed ☐ What is your occupation? _____

Unemployed ☐
Retired ☐ Student ☐ Homemaker ☐

9.- What is the approximate monthly income of your family?
No income ☐
Up until half a minimum wage ☐
Between half to one minimum wage ☐
Between 1 and 2 minimum wages ☐
Between 2 and 3 minimum wages ☐
Between 3 and 4 minimum wages ☐
Between 4 and 5 minimum wages ☐
More than five minimum wages ☐

10.- In what neighborhood do you live?
_____

11.- Is this the terreiro you most frequent? Yes ☐ No ☐

12.- Do you live or have you lived in this terreiro? Yes ☐ No ☐

13.- Do you have blood relatives that are part of this terreiro?   Yes ☐   No ☐

14.- Are you related to the person responsible for this terreiro?   Yes ☐   No ☐

15.- What is your position within Candomblé?
Ialorixá or Babalorixá ☐   Mãe Pequena or Pai Pequeno ☐
Ião ☐   Equede ☐   Ogã ☐   Abiã ☐   Frequenter ☐
Client ☐   Other ☐ Which?
_____

16.- How long have you frequented or been part of Candomblé?_____

17.- How long have you frequented or been part of this terreiro?_____

18.- How long ago was your initiation (feitura or confirmação)? (If you are not initiated, leave blank)
_____

19.- What feasts of obligations have you already done? (You can mark several answers)
I am initiated (feito or conformado), but have not yet had a feast of obligation ☐

I have already done the 1-year feast ☐ I have already done the 3-year feast ☐

I have already done the 7-year feast ☐   I have already done the 14-year ☐

I have already done the 21-year feast ☐ I am not initiated ☐

20.- If you frequent other religious congregations, please indicate which:
Other Candomblé terreiros ☐   Spiritist Center ☐
Umbanda ☐   Catholic Church ☐   Evangelical Church ☐

21.- Have you ever been discriminated for being part of Candomblé?
Yes ☐   No ☐

****

Which of the following actions have you ever done for another members of this terreiro?

I lent money	Yes ☐	No ☐
I helped them get a job	Yes ☐	No ☐
I bought them medicines	Yes ☐	No ☐
I took care of their children	Yes ☐	No ☐
I took care of them when they were sick	Yes ☐	No ☐
I let them stay or live at my home	Yes ☐	No ☐
I bought materials for their obligation	Yes ☐	No ☐
I helped them pay a debt	Yes ☐	No ☐

Which of the following actions has someone from this terreiro ever done for you

They lent me money	Yes ☐	No ☐
They helped me get a job	Yes ☐	No ☐
They bought medicines for me	Yes ☐	No ☐
They took care of my children	Yes ☐	No ☐
They took care of me when I was sick	Yes ☐	No ☐
They let me stay or live at their home	Yes ☐	No ☐
They bought materials for my obligation	Yes ☐	No ☐
They helped me pay a debt	Yes ☐	No ☐

APPENDIX 3: RELIGIOUS COMMITMENT SCALE (Portuguese version)

1.- Eu nunca faltei a uma festa no meu terreiro.

1	2	3	4	5	6	7
Discordo						Concordo
Completamente						Completamente

2.- Por causa de uma obrigação, eu já fiquei direto num terreiro por mais de um mes.

1	2	3	4	5	6	7
Discordo						Concordo
Completamente						Completamente

3.- Sempre que eu vou a uma festa de Candomblé chego no começo e fico até o final.

1	2	3	4	5	6	7
Discordo						Concordo
Completamente						Completamente

4.- Sempre que meu terreiro vai ter festa eu passo varios dias ajudando na preparação.

1	2	3	4	5	6	7
Discordo						Concordo
Completamente						Completamente

5.- Tem varias comidas que eu nunca como por causa do meu orixá.

1	2	3	4	5	6	7
Discordo						Concordo
Completamente						Completamente

6.- Eu tenho dois ou mais dias de resguardo na semana por causa do Candomblé.

1	2	3	4	5	6	7
Discordo						Concordo
Completamente						Completamente

7.- Eu já fiz ou vou fazer minha "feitura" ou "confirmação" no próximo ano.

1	2	3	4	5	6	7
Discordo						Concordo
Completamente						Completamente

8.- Em casa eu sempre tenho uma vela acesa para o meu orixá.

1	2	3	4	5	6	7
Discordo						Concordo
Completamente						Completamente

9.- Eu uso as contas do meu orixá mesmo estando na rua.

1	2	3	4	5	6	7
Discordo						Concordo
Completamente						Completamente

10.- Toda sexta-feira eu me visto de branco.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

Discordo   Concordo
Completamente   Completamente

11.- Quando meu terreiro vai ter festa, eu sempre ajudo com algum dinheiro.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

Discordo   Concordo
Completamente   Completamente

12.- Eu não faltaria a uma obrigação por motivo nenhum.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

Discordo   Concordo
Completamente   Completamente

13.- Quando termina a festa do meu terreiro, eu sempre fico para ajudar na limpeza.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

Discordo   Concordo
Completamente   Completamente

14.- Eu visito meu terreiro uma ou mais vezes por semana.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

Discordo   Concordo
Completamente   Completamente

15.- Quando eu tenho uma dificuldade de vida, a primeira pessoa que procuro é á Ialorixá, ao Babalorixá ou alguma outra pessoa da minha roça.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

Discordo   Concordo
Completamente   Completamente

****

Porque você faz parte do Candomblé? Qual é sua maior motivação?

_____
_____
_____
_____
_____

************FIM DO QUESTIONARIO-MUITO OBRIGADO!!!************

RELIGIOUS COMMITMENT SCALE (English Translation)

1.- I have never missed a feast at my terreiro.

1	2	3	4	5	6	7

Completely
Disagree

Completely
Agree

2.- Because of an obligation, I have stayed at my terreiro for more than a month.

1	2	3	4	5	6	7

Completely
Disagree

Completely
Agree

3.- Whenever I attend a Candomblé feast, I arrive at the beginning and stay until then end.

1	2	3	4	5	6	7

Completely
Disagree

Completely
Agree

4.- Whenever my terreiro has a feast, I spend several days helping in the preparations.

1	2	3	4	5	6	7

Completely
Disagree

Completely
Agree

5.- There are several foods I do not eat because of my orixá.

1	2	3	4	5	6	7

Completely
Disagree

Completely
Agree

6.- I have two or more days of resguardo (fast days) per week because of Candomblé.

1	2	3	4	5	6	7

Completely
Disagree

Completely
Agree

7.- I am or will be initiated in the next year.

1	2	3	4	5	6	7

Completely
Disagree

Completely
Agree

8.- At home I always have a lit candle for my orixá.

1	2	3	4	5	6	7

Completely
Disagree

Completely
Agree

9.- I use my Candomblé beads even when I am outside/on the street.

1	2	3	4	5	6	7

Completely
Disagree

Completely
Agree

10.- I dress in white every Friday.

1	2	3	4	5	6	7
Completely Disagree						Completely Agree

11.- When my terreiro has a feast, I always help with some money.

1	2	3	4	5	6	7
Completely Disagree						Completely Agree

12.- I would not miss an obligation for any motive whatsoever.

1	2	3	4	5	6	7
Completely Disagree						Completely Agree

13.- When a feast at my terreiro ends, I always stay to help clean up.

1	2	3	4	5	6	7
Completely Disagree						Completely Agree

14.- I visit my terreiro once or more per week.

1	2	3	4	5	6	7
Completely Disagree						Completely Agree

15.- When I have a personal problem, the first person I look for is my ialorixá, babalorixá or someone else from my terreiro.

1	2	3	4	5	6	7
Completely Disagree						Completely Agree

****

Why are you part of Candomblé? What is your principal motivation?

_____

_____

_____

_____

_____

_____

*********END OF QUESTIONNAIRE – THANKS VERY MUCH!!!!**********

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