

# Shamanism, Christianity and Culture Change in Amazonia

Jeffrey B. Luzar · José M. V. Fragoso

© Springer Science+Business Media, LLC 2012

**Abstract** Among many indigenous peoples of Amazonia, shamanism and Christianity co-exist as central cultural elements shaping the ways in which people interpret and interact with the world. Despite centuries of co-existence, the relationship between shamanism and Christianity has entered an especially dynamic era as many of Amazonia's indigenous peoples abandon Catholicism for Evangelical and Sabbatarian churches. Testing the relationship between Christian church affiliation and shamanism in 23 Makushi and Wapishana communities in southern Guyana, we found that Evangelicals and Sabbatarians are less likely to visit shamans or accept their legitimacy than are Anglicans and Catholics. However, conversion does not necessarily imply a complete rejection of indigenous religious systems as many self-identified Evangelicals and Sabbatarians continue to adhere to some indigenous beliefs and practices. We conclude by positing possible implications of religious conversion for natural resource use on indigenous lands.

**Keywords** Shamanism · Guyana · Indigenous peoples · Religious conversion · Governance

## Introduction

Across Amazonia, indigenous belief systems associated with shamanism commonly attribute a spiritual dimension to the natural landscape with which humans interact through the course of their day-to-day activities, e.g., hunting (Balée 1985; Read *et al.* 2010), food preparation (Butt 1961), and treatment of illness (Butt 1961; Henfrey 2002). Appropriate interactions can bring various benefits such as good health,

productive farms and successful hunts or fishing expeditions. Conversely, violations of the norms for interacting with the spiritual world, or malicious manipulation of the spiritual world by a third party (e.g., an envious neighbor or other enemy) can bring negative outcomes such as illness (Butt 1961; Henfrey 2002; Whitehead 2002). Various means exist for influencing the spiritual realm for desired ends, including the recitation of songs and prayers to nature spirits and other spiritual entities and through related practices by shamans (Beyer 2009; Henfrey 2002; Hugh-Jones 1994).

In Amazonia, shamans are generally seen as ambivalent figures, capable of both healing and inflicting injury and death (Hugh-Jones 1994). Among the Makushi and Wapishana of the Rupununi region of southern Guyana, the shaman has historically served as a mediator between the spiritual realm and his community and a healer of various ailments (Im Thurn 1883; Soares Diniz 1971). As the highest-level specialist in his or her<sup>1</sup> community, shamans have historically performed various functions, including the calling of wild game by communicating with their guardian spirits and the treatment of illnesses among members of the community and surrounding region (Henfrey 2002; Im Thurn 1883). Additionally, chants or prayers of both indigenous and/or Christian origin serve a variety of purposes for many indigenous people of the Rupununi and elsewhere in Amazonia. Common motives include healing (Beyer 2009; Butt 1961; Henfrey 2002) and securing hunting success (Henfrey 2002; Vilaça 1997).

However, most indigenous peoples of Amazonia have long histories of directly or indirectly interacting with non-indigenous societies in the process integrating components of non-indigenous cultural systems into their own (Butt 1960; Lu 2007; Santos-Granero 2009; Staats 1996; Wirsing

---

J. B. Luzar (✉) · J. M. V. Fragoso  
Stanford University,  
Stanford, CA, USA  
e-mail: jeffluzar@gmail.com

<sup>1</sup> While most shamans in the study region are male, at least one female shaman currently practices in the Rupununi region.

*et al.* 1985). An important component of this process has been missionization and the gradual acceptance of Christianity by most indigenous peoples of the region. While Roman Catholic missionaries have been active in Amazonia since the earliest days of colonization (Hemming 1978), in the last half-century Amazonia, like much of Latin America, has undergone a rapid though patchy process of conversion (usually but not always of former Catholics) to Evangelical and Sabbatarian Christianity (Belaunde 2000; Grotti 2009; Santos-Granero 2009; Wright 2009). Guyana as a whole differs in some respects from most South American countries, including in its sizeable Hindu and Muslim minorities (among African and Indian-descended Guyanese). However, as in much of South America, membership in Evangelical and Sabbatarian churches has grown in recent decades largely due to conversion from Roman Catholic and, in the specific context of Guyana, Anglican churches.

We explore the complex relationships between shamanism among Makushi and Wapishana peoples and the three dominant types of Christianity—Evangelical, Sabbatarian and “established” (Anglican and Roman Catholic)—occurring in the Rupununi region of Guyanese Amazonia. We also characterize the conversion process to the various Christian churches in the region and examine the influence of each church type on adherence to key elements of indigenous belief systems, the use of indigenous prayers and interactions with shamans. While we do not focus specifically on the implications of indigenous and Christian religious systems for natural resource use, we examine the dynamics of the relationship between them. Given Evangelical and Sabbatarian church doctrines that are less accommodating of indigenous beliefs and practices perceived as non-Christian than the longer-established Anglican and Catholic churches, we posited that affiliation with Evangelical and Sabbatarian churches would be associated with a reduced adherence to indigenous beliefs and practices. Specifically, we anticipated that households belonging to Evangelical and Sabbatarian churches would be 1) less likely to use indigenous prayers 2) less likely to visit a shaman and 3) less likely to accept the shaman’s legitimacy than Anglican and Catholic households.

### **Background: History of Christianity in the Study Site**

Initial contact with Europeans in the Rupununi region of southern Guyana and adjacent regions of Brazil occurred in the seventeenth and eighteenth centuries through explorers and slave traders, followed by the establishment of Portuguese and Dutch forts in the region in the late eighteenth century (Farage 1986). During the era of initial contact, Benedictine missionaries accompanied the Portuguese military into the area, followed in the early 1800s by other

Catholic missionaries as well as Anglicans from Britain, beginning a gradual process of conversion to Christianity among the Makushi and Wapishana of the region. Several of the Rupununi’s largest and most populous villages were established and grew around these missions and the services they provided. In the early twentieth century, missionary activity came to include the establishment of boarding schools for indigenous children where the basic tenets of the Church were taught in addition to the national language, whether English or Portuguese (Forte 1996; Instituto Socio-Ambiental 2012).

This missionary activity resulted by the early 1900s in the gradual identification by most members of the Makushi and Wapishana with either the Roman Catholic or Anglican Church (Forte 1996). During this time there were limited efforts by priests and missionaries to discourage practices considered to be non-Christian, such as shamanism (elder resident of Tiger Pond Village, personal communication March 2011). However, the practical implications of conversion to Christianity largely concerned the observance of basic tenets and rites of the Church (e.g., belief in the divinity of Jesus, baptism, recitation of Christian prayers, celebration of Church holidays and monogamous marriage). As in other parts of Amazonia (e.g., Bonilla 2009; Vilaça 2002; Vilaça and Wright 2009) there has been no documented effort since the 1960s by Catholic or Anglican priests and missionaries to proselytize against indigenous rites of passage and healing ceremonies, beliefs in spiritual beings from non-Christian cosmologies, and the legitimacy of the shaman’s role in society to engage with the spiritual realm for the benefit of humans.

The advent of Evangelicalism was the next major transformation in the religious landscape in the Rupununi. Evangelical Christianity currently represents the fastest growing religion in Latin America, with more than 10 % of the region’s inhabitants considering themselves to be adherents (Bacchiddu 2009; Smilde 2005). This is especially true in Amazonia, where Evangelicalism has shown strong growth in recent decades and Evangelical missionaries have a greater presence among indigenous groups than do Catholic missionaries (Bonilla 2009; Wright 2009).

Evangelical missionary activity began among the Makushi in neighboring Brazil around the early 1940s and was first introduced into southern Guyana in 1949 through the work of the American-based Unevangelized Fields Mission (UFM), among the Wai Wai in the extreme south of Guyana and neighboring portions of Brazil (Grotti 2009; Instituto Socio-Ambiental 2012; see also Belaunde 2000; Grotti 2009; Wright 2009). Dowdy (1963) provides an account of this encounter and subsequent mass conversion in the book *Christ’s Witchdoctor*, an American Evangelical rendering of the story of Ewka, a prominent Wai Wai

shaman who was persuaded by UFM missionaries to embrace Evangelical Christianity and subsequently convinced the majority of his fellow Wai Wai to join him.

Sabbatarian churches were first introduced to various communities in the South Rupununi in the 1980s and have continued to expand with the assistance of Guyanese and American missionaries. The Sabbatarian churches, most notably Seventh Day Adventists, but also other less well known churches such as the United Church of God and the Philadelphia Church, are rooted in religious developments in nineteenth century North America and Europe that prioritized a return to the “full” 10 commandments, including the requirement to keep the Sabbath (Saturday) holy and the acceptance of delimited Jewish dietary restrictions, believed to be part of Biblical law applying to all humans. These prohibitions have been extended to analogous species found in Amazonia such as peccaries (*Tayassu pecari* and *Pecari tajacu*) and lowland tapir (*Tapirus terrestris*) (Santos-Granero 2009; Luzar *et al.* In Press).

### Study Location, Population

This study concentrated on 23 Makushi and Wapishana indigenous communities in the Rupununi region of southern Guyana. The Makushi belong to the Carib linguistic group whereas the Wapishana speak an Arawakan language. While cultural differences, particularly linguistic, exist between the Makushi and Wapishana, given their close similarities in terms of livelihoods, history of missionization and societal role of shamanism and Christianity revealed in ethnographic data collection, we considered both groups in this study. The Makushi number approximately 9,500 and Wapishana approximately 8,000 in Guyana (Luzar *et al.* 2011) and they are the principal inhabitants of the Guyanan Rupununi region, an area characterized by a mixture of upland and seasonally flooded savannas and tropical forests (Read *et al.* 2010; Fig. 1). The Wapishana tend to live in the South Rupununi and, with one exception, the Makushi inhabit the North Rupununi. Few villages are ethnically homogenous, however, and representatives of at least one other indigenous people besides the predominant group is usually present (Read *et al.* 2010). Aside from the multi-ethnic population and administrative center of Lethem (approximate population 2,000), all communities in the Rupununi are predominantly or exclusively indigenous.

Outside of Lethem, most households follow largely subsistence-oriented livelihoods relying heavily on swidden agriculture, fishing and hunting for both household consumption and occasional sale (Henfrey 2002; Read *et al.* 2011). Other sources of cash income include salaried labor, mostly as government health workers and teachers, and temporary wage labor on ranches and in urban areas

outside the region in both Brazil and Guyana (Read *et al.* 2011).

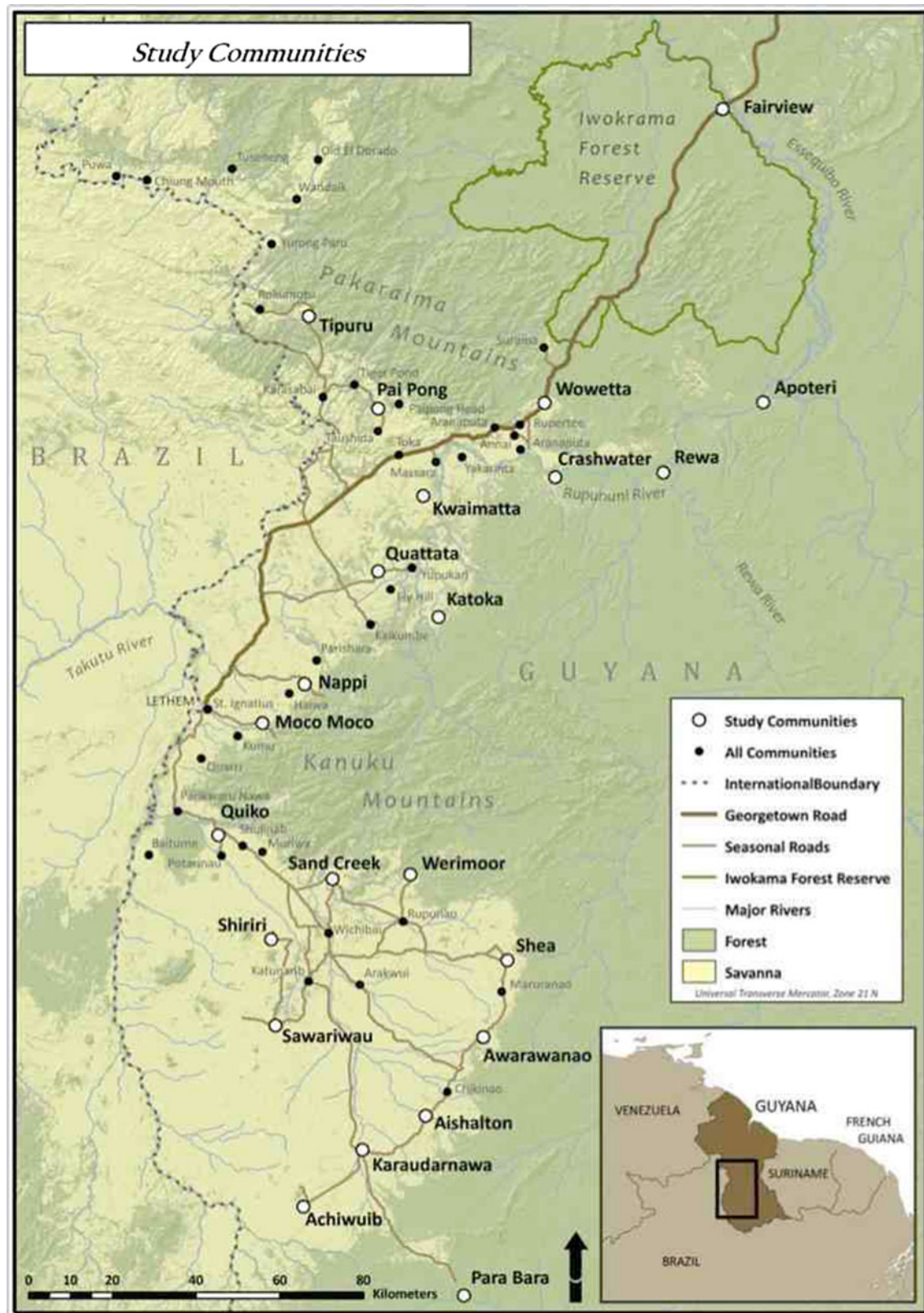
Government-run primary schools are located in most villages, resulting in the attainment of primary education and fluency or near-fluency in English among most young and middle-aged adults. While common under British rule in the early and mid-twentieth century, there are no religiously-affiliated schools in the Rupununi at present. Bilingualism (Makushi or Wapishana and English) is the norm, with some older individuals speaking only Makushi or Wapishana and some younger individuals speaking exclusively English.

### Methods

This study was part of a larger interdisciplinary research effort (Project Fauna) conducted between 2007 and 2010 to explore the relationships among indigenous culture, economic integration, hunting and wildlife dynamics in Guyanese Amazonia (Fragoso *et al.* 2005; Luzar *et al.* 2011). Members of collaborating communities were trained by project researchers to collect social and biological data in their villages (Luzar *et al.* 2011; Read *et al.* 2010).<sup>2</sup> Using a census approach, over the course of 2 years these trained individuals (who lived in the study villages) administered socioeconomic surveys to the heads of 1,774 households located in the 23 communities participating in the study. Socioeconomic surveys included information on church affiliation and visits to and acceptance of shamans. Household heads were asked to provide the age, sex, education and church affiliation of all individuals resident in the household. Household heads were also asked if any member of the household had visited a shaman in the past year and reason for visiting or not visiting. The variable “acceptance of shamans” was extrapolated from the reasons given for not visiting a shaman. All household visiting shamans are assumed to also accept shamanism given their action.

In six villages with resident shamans, local technicians conducted weekly “shaman visit” surveys with household heads ( $n=784$ ). Technicians recorded visits to shamans that had occurred that week, including information on reason for the visit and directives received. In these interviews 368 households reported visiting a shaman at least once (total surveys=1,170). Surveys were also conducted with the principal hunters in the study area ( $n=235$ ) (determined based on records of hunting for each household) regarding reasons for using or avoiding certain hunting areas or game species. Principal hunters were often, but not always, the heads of household. Local technicians recorded hunting

<sup>2</sup> While other data were collected in the course of the study, only data relevant to the present analysis are discussed here.



**Fig. 1** The location of the Rupununi study region in Guyana, South America

activity by residents of their communities through weekly hunting return surveys (Luzar *et al.* 2011; Read *et al.* 2010).

During these surveys other variables such as the purpose of the hunt and use of “prayers” in the hunting process were

noted. Given the sensitive nature of shamanism, we believe some level of under-reporting existed. In order to minimize this possibility, the research team emphasized to village councils the anonymity of respondents in all reports and publications arising from the study and trained all indigenous technicians in anthropological methods to encourage accurate reporting in surveys (Luzar *et al.* 2011) Project researchers also utilized key informant interviews ( $n=85$ ) and participant observation to develop a holistic understanding of indigenous and Christian beliefs and practices in Makushi and Wapishana society.

For the purposes of analysis, we grouped 15 of the 16 different church affiliations present in the study area (Table 1) into three broader categories: “established,” “Evangelical” and “Sabbatarian.” Due to its minimal representation in the region and its anomalous features, the Jehovah’s Witness Church was not included in the quantitative analyses. Similarly, we did not include in the quantitative analyses the 59 “mixed” households in which household members belonged to more than one church, nor the five households that claimed no particular church affiliation. We do, however, consider all three in the qualitative discussions.

We conducted Chi-Square tests of the relationship at the household level between church affiliation and acceptance of and visits to shamans. We also drew on household level data to determine the proportion of households in each church type visiting shamans in the past year.

## Findings

### Christianity in the Context of Makushi and Wapishana Society

Makushi dominated in 11 and Wapishana in another 11 of the 23 communities surveyed, and one community included a broad range of indigenous groups. Few household members chose not to be interviewed or were not present in the community when surveys were conducted ( $n=132$  or 6.9 % of all households ( $n=1,906$ ) in the study region). In the study site, 99.7 % of individuals in surveyed households ( $n=9,327$  of 9,352) listed one of 16 Christian denominations as their religious affiliation (Table 1). The majority of the population continued to be Anglican or Roman Catholic, with Anglicanism being dominant among the northeastern Makushi and Catholicism dominant among the Wapishana and southwestern Makushi. Follow up interviews revealed that most of the individuals claiming no church affiliation were non-practicing Anglicans or Catholics.

In 19 communities, the majority of households identified with Anglicanism or Catholicism while in the other four villages, households belonging to Evangelical churches were dominant (Table 2). Anglican or Catholic households

were represented in all communities. Evangelical households were present in all but four communities. Sabbatarian households were present in seven communities, yet always in the minority.

In most villages, the majority of residents attend church services on a weekly or more frequent basis. Despite some doctrinal differences among church leadership, the Anglican and Catholic churches are locally seen by many indigenous people in the region as interchangeable due to similar worship formats and teachings, similar histories in the region, and acceptance of most indigenous beliefs and practices. As a result, Anglicans resident in predominantly Catholic areas will generally attend the local Catholic church and vice versa. Given their historically central role in village life, combined with their general acceptance of indigenous culture, such as the homemade alcoholic cassava beer that forms a central part of many traditional village activities, many adherents consider Anglicanism and Catholicism to be fundamental aspects of Amerindian<sup>3</sup> identity and culture. Today, the Roman Catholic Church, while not actively seeking converts, does support existing congregations by sending priests and nuns to centrally located population centers in the North and South Rupununi.

### Religious Conversion and Household and Village-Level Implications

While the temporal extent of the study did not permit the collection of longitudinal data to quantitatively assess the process of conversion between these church types, the current distribution of churches among villages (Table 2) combined with evidence from qualitative information (including key informant interviews and the observation of new Evangelical and Sabbatarian churches being established during the study period) shows an on-going yet uneven expansion of Evangelical and Sabbatarian church membership at the expense of Anglican and Catholic churches. For example, as of the conclusion of the study (2010), the Evangelical Church of Christ was continuing to expand at a rapid rate through the influence of annual “crusades” by representatives of the church from the southern United States, some of whom have been returning annually to the region for a decade or more. The Jehovah’s Witness Church was growing at a more modest pace with the help of small numbers of short and long-term missionaries from the United Kingdom and from local members of the church who generally accompany foreign missionaries on their visits to other indigenous communities of the region.

<sup>3</sup> “Amerindian” is the official term for indigenous peoples used by the Guyanese government and is widely used by both indigenous and non-indigenous peoples in Guyanese as both an adjective and noun.

**Table 1** Proscriptions on shamanism, alcohol and meat by Christian church type in the study area, with households and individuals in each church type

Church type	Church denominations	Shamanism prohibited	Alcohol prohibited	Individuals (n)	Individuals (%)	Households (n)	Households (%)
Established	Roman Catholic	No	No	5931	63.4	1290	72.8
	Anglican			1008	10.8		
Evangelical	Assembly of God	Yes	Yes	87	0.9	354	20
	Baptist			2	0		
	Christian Brethren			1430	15.3		
	Christian Congre-gation			7	0.1		
	Church of Christ			493	5.3		
	Full Gospel			18	0.2		
	Word of Faith			14	0.2		
Sabbatarian	Church of God	Yes	Yes	28	0.3	52	2.9
	Living Church of God			37	0.4		
	Philadelphia Church of God			9	0.1		
	Seventh Day Adventist			184	2		
	United Church of God			27	0.3		
	Universal Church			3	0		
Jehovah's Witness	Jehovah's Witness	Yes	Yes	49	0.5	9	0.5
No Church				25	0.3	5	0.3
Mixed Church						60	3.4
Total				9352	100.1	1770	99.9

Conversion often occurs through interactions with neighbors or family members. An Anglican or Catholic may attend an Evangelical or Sabbatarian service either out of curiosity or due to family or health problems s/he hopes can be cured, and if the experience is positive may return. At times, individuals may be exposed to Evangelicalism while in other communities or urban areas for education or work purposes. However, the most frequent explanation given for conversion to Evangelical Christianity is a desire to abstain from alcohol. Among Evangelical and Sabbatarian churches, alcohol is strongly discouraged, though discreet or occasional transgressions are generally overlooked. A widespread perception exists in the region among many Evangelicals and Sabbatarians that the Anglican and Catholic churches do not offer sufficient moral guidance, particularly regarding alcohol consumption. For this reason, many Evangelical and Sabbatarian households will trace their initial conversion to a household member's (usually the husband/father) struggle with alcoholism and the perceived need by the individual or the entire household for a strong belief system and support network to make a successful break from dependency.

As has been documented elsewhere in Amazonia (Belaunde 2000; Bonilla 2009), among the Makushi and Wapishana conversion is widely perceived as a means of becoming immune to the allure of alcohol while promoting health and morality. The strong prohibitions against the

consumption of alcohol attract many Makushi and Wapishana individuals who have directly or indirectly suffered from the effects of alcoholism that plague many communities.

The gradual and patchy conversion process has led to the presence of "mixed" church households and villages, with implications for village cohesion and governance.<sup>4</sup> "Mixed" church families represented 3.4 % of households in the study. Such households come into being due either to inter-marriage between members of different church groups or when one or more individuals in a household convert. Key informant interviews, including with members of mixed and formerly mixed households revealed that the conversion of one spouse from a previously single-church household generally results in family conflict regarding the appropriate ways of raising the children (e.g., whether or not to perform indigenous prayers on newborns, in which church the child should be baptized, etc.), the household's social networks, how to treat sickness in the household, alcohol consumption, and in some cases, which meats are acceptable in the family pot.

<sup>4</sup> Ethnically mixed households and villages are also present in the study site (usually Makushi and Wapishana). While this can have profound implications for language transmission, as English is often used as a *lingua franca* in inter-ethnic households and villages, the implications for village cohesion and governance appear to be relatively minimal.

**Table 2** Percentage of households<sup>a</sup> reporting membership in a church type, visiting a shaman in the prior year and acceptance of shaman's authority among villages included in study<sup>b</sup>

Village	Evangelical (%)	Sabbatarian (%)	Established (%)	Jehovah's witness (%)	Mixed (%)	Visit shaman (%)	Did not visit shaman (%)	Accept shaman (%)	Do not accept shaman (%)
Majority Evangelical									
A	75.5	0	20	0	4.5	4	84	4	84
B	85.5	0	14.5	0		0	100	41	52
C	53	0	44	0	3	6	94	74	26
D	95.5	0	2	0	2	0	96	0	96
Majority Anglican or Catholic									
E <sup>c</sup>	1	0	99	0	0	20	81	99	2
F <sup>c</sup>	0	0	100	0	0	21	79	93	7
G <sup>c</sup>	0	0	97	0	3	38	62	78	22
H	0	0	97	0	3	9	91	100	0
I	0	0	99	0	1	37	54	88	0
J <sup>c</sup>	3.5	0	92	0	4.5	31	67	86	8
K	9	0	82	0	9	0	100	73	27
L <sup>c</sup>	8.5	1	90	0.5	0.5	33	63	94	1
M	2	4	93.5	0	0	4	82	19	7
N	5	0	95	0	0	11	57	68	0
Majority Anglican or Catholic with High (>10 %) Evangelical Presence									
O <sup>c</sup>	23	5	68	0.5	3	12	88	88	7
P	16	6.5	74	0	3	0	94	88	6
Q	20.5	0.5	75.5	0	3	8	75	48	26
R	20.5	0	66	10.5	1.5	14	84	61	36
S	35.5	0	59	0	5	24	73	76	16
T <sup>c</sup>	25	0	70	0	5	15	58	55	18
U	13.5	0	84.5	0		5	95	92	2
Majority Anglican or Catholic with High (>10 %) Sabbatarian Presence									
V	16.5	14.5	60.5	0	7.5	12	84	81	12
W	4	18	63.5	0	15	13	79	33	58
mean	22.3	2.2	71.6	0.5	3.2	14	80	67	22

<sup>a</sup> Due to households that were either not surveyed or did not provide a response to the question, totals for some villages are <100 %

<sup>b</sup> To protect anonymity, letters are used in place of actual village names

<sup>c</sup> Shaman resident in community

The presence of multiple churches can lead to conflict at the village level as well. For example, Evangelicals and Sabbatarians are often reluctant to participate in village festivities and communal work efforts when cassava beer or other alcohol is present. Furthermore, Sabbatarians, by abstaining from peccary and lowland tapir (*Tapirus terrestris*) meat, which are often served at village celebrations and, due to their large size, are especially likely to be shared among households, are further insulated from social interactions with the wider community. For their part, Anglicans and Catholics are sometimes resentful of proselytizing by missionaries invited to their community by Evangelical and Sabbatarian villagers. Furthermore, in multi-church villages after-service announcements of village-level importance (e.g., an up-coming village council meeting) may not reach

members of all churches in the community. Whereas churches play a central role in village social organization and governance, when multiple churches are present, disconnects generally emerge among the church communities within the village presenting difficulties when pan-community mobilization is called for, such as management of communal natural resources and lobbying government officials for infrastructure projects.

#### Indigenous Makushi and Wapishana Beliefs and Practices

Both Makushi and Wapishana cultures are characterized by religious syncretism between Christianity and indigenous beliefs. While many Makushi and Wapishana develop strong social networks within their church communities

and turn to Christianity for moral guidance and metaphysical questions, the indigenous system tends to address issues of day-to-day concern, such as health, healing and human interactions with the natural world that Christianity is less able to address. The Makushi and Wapishana, like many other Amazonian indigenous groups (Belaunde 2000; Farage 1986; Vilaça 1997; Whitehead 2002), rarely interpret illness and death as exclusively “natural” in origin. Collective memories of past disease epidemics, which have the power to recur and threaten the community’s survival, help inform belief systems about the spiritual world. Conversely, indigenous cosmologies form a lens through which such memories are interpreted. With the potential exception of accidents and old age infirmities, most illnesses and deaths among the Makushi and Wapishana are attributed, at least partially, to spiritual and/or human causes, such as the failure to observe food taboos or witchcraft by third parties (see also Henfrey 2002).

While early studies report shamans to have been present in most, if not all, indigenous communities of the region (e.g., Im Thurn 1883), shamans are no longer resident in all communities of the Rupununi (Table 2), though they continue to play an important role in the region, occasionally traveling to or accepting patients from neighboring villages where no shaman is present. Other cultural practices related to healing and natural resource use are more widespread than shamanism, which is currently limited to a small number of specialists. For instance, the act of “blowing” (*talen* in Makushi and *poori* in Wapishana), or use of “traditional” prayers for various ends, such as healing and protection from harm (see Butt 1961; Butt Colson 1989), is widespread in many communities, especially among elders. Older people also maintain extensive pharmacopias, which may be used both for preventing and healing sickness and for calling game animals. Furthermore, many landscape features, such as rocks, springs and mountains are associated with specific supernatural and quasi-supernatural beings, entailing prescriptions (e.g., use of traditional prayers) or proscriptions (e.g., hunting bans) when entering or approaching these areas (see Read *et al.* 2010).

#### Indigenous Beliefs and Practices in the Context of Christianity—Prayers

Two general forms of prayers are commonly practiced among the Wapishana and Makushi—in common parlance “traditional Amerindian prayers” (or, less commonly, “hunters’ prayers”) and “church” prayers. The former are generally addressed to hero figures from Makushi or Wapishana stories or to various nature spirits (e.g., the spirit guardians of white-lipped peccaries (*Tayassu pecari*), anacondas

(*Eunectes murinus*), etc.) and are used by shamans and by other community members, especially elders. In the case of the Makushi, traditional prayers are commonly directed to one or both of two brothers who, in primordial times, felled a massive tree, the trunk of which became Mt. Roraima (a prominent feature of the landscape) and who were responsible for many superhuman acts and the introduction of various important plants and animals.

Among both the Makushi and Wapishana the use of traditional prayers is a practice shared with many other Amazonian indigenous groups (Beyer 2009; Butt 1961; Butt Colson 1989; Henfrey 2002) in which the exhalation of air or tobacco smoke in the process of saying a prayer or chant (“blowing”) is believed to give the practitioner powers to achieve specific ends. Blowing can be used for prophylactic purposes, such as the protection of physically and spiritually vulnerable individuals (e.g., infants or young women at first menstruation). It can also be used to treat illnesses or improve the ability of hunting dogs and the effectiveness of weapons, and in some cases can inflict illness or injury on others (see Whitehead 2002).

Church prayers can include the Lord’s Prayer or Hail Mary (particularly among Catholics and Anglicans) and more free-form prayers oriented toward the Christian deity and/or Jesus. Among families that have contact with Brazilian Pentecostals, relatively free-form “*orações*,” which are generally expressed with greater volume and emotion than either traditional prayers or prayers used in established churches, involve multiple individuals praying simultaneously (though not in unison as is the norm in most other churches) and can include speaking in tongues and the laying-on of hands as part of healing ceremonies (see Bacchiddu 2009).

Both traditional and church prayers can be used, often interchangeably, to secure good health, safe journeys, successful hunts, and protection from malevolent forces, among other purposes. Individuals knowledgeable in one or both types of prayers can feel more secure when navigating the various hazards, physical and spiritual, encountered through day-to-day activities. Both traditional and church prayers also form an integral part of hunting, helping secure the hunter’s safety and/or success. At least 47 % of recorded hunts ( $n=3,150$  of 6,746 total hunts) were preceded by one or both types of prayers.

Significant overlap exists, particularly among Anglicans and Catholics, in terms of the usage of traditional and church prayers and the understanding of the spiritual entities that they address. For example, a Roman Catholic Makushi man stated, “The brothers *Ishkirang* and *Inega* were similar in many ways to Jesus. Like him, they walked the earth performing miracles, and had the power to do many great things.” The Wapishana have a somewhat different core



belief system<sup>5</sup> in which a legendary twin figure *Tominkaru*, who today is associated by members of all church types with the Christian deity, features prominently (Ogilvie 1940), introducing an element of ambiguity when distinguishing traditional versus church prayers among the Wapishana.

Traditional prayers are also often used for healing and for protection and can be used interchangeably with church prayers among Catholics and Anglicans and as a last-resort remedy for incurable health maladies among Evangelicals and some Sabbatarians. Admitted knowledge and use of traditional prayers by Evangelicals, and especially Sabbatarians, is rare (see also Grotti 2009). The main exceptions are older individuals who may continue to use traditional prayers they had learned before converting.

### Indigenous Beliefs and Practices in the Context of Christianity—Shamanism

Among the Makushi and Wapishana, illnesses are often seen to be partially or completely spiritual in origin (e.g., the victim is sickened by witchcraft or by the guardian spirit of an animal that was consumed) and shamanism plays a central role in treating many such maladies. As part of the treatment of illnesses, in addition to the use of prayers and spirit flight to communicate with the relevant spiritual entities, once the nature of an illness is ascertained, shamans will often provide advice to the patient and/or to the patient's family about foods to be consumed or avoided to prevent a relapse. An individual who ignores such advice by consuming the offending meat can expect a physical reaction, ranging from rashes and fever to nightmares and, on occasion, death (see Luzar et al. *In Press*).

While shamans are currently present in only six study communities, “prayer men” and “prayer ladies” are present in most communities. Whereas becoming a shaman requires extensive training involving extreme austerities, the Makushi and Wapishana generally believe that any individual (including non-indigenous people) willing to correctly learn and administer traditional prayers can become a prayer person. Prayer people tend to specialize in specific types of traditional prayers, such as “hunters” prayers used for success while pursuing game, blessings for newborn children, prayers for curing specific maladies, etc. While lacking the power to diagnose the sources of illnesses and see into the future, prayer people do maintain extensive corpuses of traditional prayers that can be used for the healing and prevention of illness, among other objectives. Key informant and shaman visit

interviews revealed that it is not uncommon for prayer people to refer a patient to a shaman when the ailment is beyond his or her ability to treat.

In addition to curing illnesses, shamans and prayer people also have some power to prevent them. For instance, it is common for Anglican and Catholic parents to take their young children to a shaman or prayer person for a “blessing” that will safeguard the child (at least to some degree) not only against spiritual attack and illness, but also against the possibility of reacting adversely to spiritually dangerous foods. Additionally, most shamans with whom we spoke asserted that they retained the power to call peccaries to the village, but for various reasons either were no longer requested to do so or no longer volunteered this service.

Across all communities, the proportion of households reporting that at least one household member had visited a shaman in the past year ranged from 0 % to 38 % ( $\bar{x}=14$  %;  $sd=11.78$ ). In all but three villages, a member of at least one household had visited a shaman in the past year. The range of acceptance of shamans' legitimacy between villages was even wider—ranging from 0 % to 100 % ( $\bar{x}=67$  %;  $sd=29.96$ ) of surveyed households (Table 2).

Chi-Square tests showed that the percentage of Catholic and Anglican households reporting that they had visited a shaman within the prior year (20 %) was significantly greater ( $\chi^2=30.8778$ ;  $df=1$ ;  $p<0.01$ ) than Evangelical households (7.5 %) and were also significantly greater ( $\chi^2=5.3635$ ;  $df=1$ ;  $p=0.02$ ) than Sabbatarian households (5.9 %). Visit rates were not significantly different between Evangelical and Sabbatarian households ( $\chi^2=0.0172$ ;  $df=1$ ;  $p=0.9$ ). Similarly, regardless of whether they had visited a shaman in the past year, households belonging to Anglican and Catholic churches were significantly more likely ( $\chi^2=298.1929$ ;  $df=1$ ;  $p<0.01$ ) to express acceptance of shamans (88.2 %) than were members of Evangelical churches (45.9 %) and were also significantly more likely ( $\chi^2=70.3129$ ;  $df=1$ ;  $p<0.01$ ) to express acceptance of shamans than members of Sabbatarian (46 %) churches. Again, the difference between Evangelical and Sabbatarian churches was not statistically significant ( $\chi^2=1$ ;  $df=1$ ;  $p=1$ ).

### Discussion and Conclusions

We have considered the relationships between indigenous religion and three dominant forms of Christianity among Makushi and Wapishana communities of Guyanese Amazonia. Regarding belief and practice, indigenous Christians of the Rupununi have re-interpreted and emphasized elements of Christianity such as the use of prayer for healing, the celebration of church holidays and attitudes toward alcohol

<sup>5</sup> However, the Wapishana, like the Makushi, share various cultural practices such as blowing, as well as motifs in their creation stories, including two brothers as culture heroes and the felling of a tree, the stump of which became Mt. Roraima.

that have special salience within the broader context of Makushi and Wapishana culture and society.

While virtually all of the region's indigenous population self-identifies as Christian, a complex dynamic of conversion between types of Christianity is on-going. This process continues to be driven to a significant degree by outside agents, such as the Evangelical and Sabbatarian missionaries involved in efforts to draw converts from Anglicanism and Catholicism as well as Catholic priests attempting to shore up the Church's membership while addressing the concerns of parishioners. However, local indigenous people, rather than being passive recipients of these activities, are often active agents themselves. For example, in some cases, Anglican and Catholic individuals and villages have embraced their churches as representative and protective of indigenous culture, drawing upon Anglican or Catholic identities to counter what are perceived as threatening incursions by Evangelicalism or Sabbatarianism into their communities. In other cases, due to local concerns, notably alcoholism, Makushi and Wapishana individuals have been centrally involved in establishing and expanding Evangelical and Sabbatarian churches in their own communities, inviting missionaries to their villages and continuing the missionaries' work in their absence. In some cases, such as the Christian Brethren and Jehovah's Witnesses Churches, local indigenous congregants have themselves begun to assume the role of missionaries, creating a dynamic in which foreign missionaries are increasingly superfluous.

### Prayers and Shamanism

The data from this study supported our expectation that households belonging to Evangelical or Sabbatarian churches, which tend to discourage shamanism, were less likely to have visited a shaman in the past year or to accept the shaman's legitimacy than were households belonging to the Anglican and Catholic churches. In contemporary Anglican and Catholic teaching, there is little if any contradiction in being a Christian and consulting shamans; and the decision whether to first seek a shaman or western medicine in cases of illness often hinges on the relative availability of both options in the community. Indeed, one Makushi shaman in the study site recalled an amicable discussion with a visiting Roman Catholic priest who told him that he had been blessed with supernatural powers by God and encouraged him to continue to use these powers to promote the wellbeing of his fellow community members.

To the degree that Evangelical and Sabbatarian Makushi and Wapishana view shamanic healing rituals as authentic, they are generally seen as inappropriate means of dealing with illness except as a last resort option. In addition to discouraging adherents from visiting shamans, when Evangelical and/or Sabbatarian churches become dominant in a

community, as evidenced in at least one village in the study, shamans may become unwelcome in the community, leading to lower visitation by all village residents. Consulting shamans is, as one Wapishana member of the Evangelical Church of Christ stated, "seeking power from creation rather than from the Creator." Other Evangelical and Sabbatarian interpretations range from seeing shamans as misguided and obsolete at best to fraudulent or even diabolic at worst (see also Belaunde 2000; Grotti 2009). Nonetheless, several Evangelicals indicated that, in the case of grave illness, they would consult a shaman if western medicines and church prayers proved unsuccessful. This last resort approach to visiting shamans helps explain why some of Evangelicals and Sabbatarians reported visiting shamans in the past year and nearly half the members of both churches expressed some degree of acceptance of shamanism, despite church teachings to the contrary. Evangelical key informants indicated that, should such emergency visits be done discretely and infrequently, an Evangelical would likely suffer few if any consequences from the church aside from possible counseling by the church pastor should he become aware.

The partial contradiction between church teachings and the practice and opinions of church members with regard to shamanism appears to have a further explanation. Despite condemnations of shamanism, Evangelical discourse generally remains silent about indigenous food taboos and spiritual entities. Hence, while virtually all Makushi or Wapishana adhere to similar beliefs about the spiritual dimensions of the natural world, health and sickness, Evangelicals and Sabbatarians are taught to regard shamanism as unacceptable means of engaging with them, limiting their recourse options should illness or other misfortune strike. Thus, while the conversion process to Evangelicalism and Sabbatarianism clearly signifies a reduced role for shamans and prayer people, some role for these individuals remains, though in a more clandestine form. Given the continued belief among many church members in the underlying spiritual realm with which the shaman traditionally has interacted, as long as health afflictions are present in the community that western medicine and/or church prayers cannot effectively address, some compromise with shamanism on the part of Evangelical and Sabbatarian church leaders will continue to be necessary. While the generally expanding access to basic western health care characterizing the region may reduce the role for shamans in treating easily preventable diseases such as dysentery and malaria, shamans will likely maintain their societal role given the limited ability of western medicine to prevent and treat other diseases such as cancer and heart disease.

### Religious Conversion

The on-going conversion process in most Makushi and Wapishana communities from established to Evangelical

and Sabbatarian churches, should it continue, alters the retention and transmission of indigenous culture and perhaps consequently natural resource use. The positive elements of reduced alcohol consumption are self-evident—including improved health, and reduced levels of domestic violence and accidents. However, the reduced role of alcohol among Evangelical and Sabbatarian households can also bring a wide range of other implications, ranging from a break-down in pan-village social and work efforts to increased participation in the market economy by individuals who no longer invest time in producing and consuming homemade cassava beer. Increased market participation may in turn shift natural resource exploitation from subsistence-oriented activities such as hunting and swidden farming to market-oriented activities such as wage labor and commercial timber extraction (Godoy 2001). And the presence of multiple churches within previously single-church communities can lead to changing norms among segments of the population and ruptures in chains of information sharing within the community complicating collective action and decision making on issues such as natural resource management (see Bacchiddu 2009; Ostrom 2009). While other factors, such as politics and inter-family feuds often divide communities; the introduction of multiple churches presents an additional potential fault line.

Across Amazonia, and throughout the Americas, Evangelical and Sabbatarian churches are growing in many exclusively Catholic indigenous communities (Belaunde 2000; Bacchiddu 2009; Vilaça and Wright 2009). Due to the extensive yet uneven adoption of Evangelical and Sabbatarian forms of Christianity in the region, the Rupununi provides insight into the potential implications of a process of religious conversion that is currently at a more advanced state than in many other areas of Amazonia and the world.

While the history of Christianity in the region demonstrates an initial process of acculturation in which indigenous culture has changed and continues to change as a response to teachings and pressures from outside agents, the nature of Christianity in the region and differences in the conversion process among the various churches today is much more dynamic, involving the agency of individual and collective Makushi and Wapishana. In addition to the initial acculturation process resulting from contact with missionaries, we also recognize the role of the individual and collective agency of indigenous peoples as they consider, interpret and engage in new forms of religious practice and identity. As a form of cultural change, religious conversion among Amazonia's indigenous peoples involves the re-interpretation of indigenous cultural motifs, the creation of cultural hybrids, and the reorganization of allegiances and social networks both within individual indigenous societies and in their interactions with outside groups. Furthermore, the extent and interpretation of conversion varies among churches, ethnic groups and historical contexts

and Christianity itself is transformed and redefined by the indigenous peoples practicing it (see Vilaça 1997, 2002; Vilaça and Wright 2009).

#### Areas for Further Study: Culture Change and Natural Resource Use on Indigenous Lands

We conclude by positing possible implications of cultural change in the form of conversion to Evangelical and Sabbatarian forms of Christianity for natural resource use on indigenous lands and, by extension, biological conservation on indigenous and neighboring lands. Indigenous peoples occupy extensive tracts of the world, many of them areas of high importance for biodiversity, endemism and environmental services, including carbon sequestration and watershed protection (Colding and Folke 2001; Posey and Dutchfield 1997; Ricketts *et al.* 2010). The ecological value of indigenous lands is especially significant in the Amazon Basin, where more than 25 % of the land area, including some of the biome's most intact ecosystems, are titled to indigenous communities or peoples (Hill *et al.* 1997; RAISG 2012).

Indigenous belief systems are among the important factors affecting land use on indigenous lands (see Luzar *et al.* In Press for a discussion of the ways in which indigenous belief systems and technological change interact to affect game meat preference). These systems can include cultural norms affecting where people do and do not hunt (Read *et al.* 2010; Redford and Robinson 1987; Silvius 2004; Ulloa *et al.* 2004), and taboo systems affecting specific foods and activities (Balée 1985; Ross 1978; Pezzuti *et al.* 2010). They also influence community governance, including leadership structures, alignment around common goals, and decision-making regarding land and resource use. The changes we have documented to cultural norms arising from interactions with different sects of Christianity may have negative impacts on biodiversity patterns and species abundances as intra-community fissions along church lines weaken community and regional-level governance systems needed for effective management of resources and interaction with government authorities and other outside interests. Alternatively, despite the implications for cultural change, new forms of Christianity may in some instances bring benefits for indigenous peoples and biodiversity on indigenous lands. For instance, Sabbatarianism brings new cultural norms about resource use including dietary restrictions on lowland tapir, an important seed disperser that is especially susceptible to over-hunting (Fragoso 1997).<sup>6</sup> And, in some instances, (see Vilaça 1997; Wright 2009) Evangelical and

<sup>6</sup> Although our study did not find any evidence of tapir population declines due to hunting in the Rupununi, overhunting has been documented to have impacts in other regions.

Sabbatarian churches have helped connect indigenous communities to well-resourced international networks, providing indigenous groups with potentially powerful advocates as they negotiate for land rights and other issues of concern to their communities. Given the multitude and complexity of such scenarios, the relationship between culture change and natural resource use on indigenous lands is a topic that merits further study.

**Acknowledgments** We thank the Guyana Environmental Protection Agency and the Ministry of Amerindian Affairs for authorizing the study and for their attentiveness to permit extensions. The National Science Foundation (BE/CNH 05 08094) provided funding for this project. We thank the program officers and division leaders at the NSF who provided excellent guidance and support throughout the project. The Iwokrama International Centre for Rainforest Conservation and Development and the North Rupununi District Development Board acted as in-country partners and provided important logistic support. We thank the Makushi and Wapishana technicians whose hard work and dedication made the research possible, as well as the leaders and members of all our partner communities for their innumerable contributions to the project. We thank the graduate students, post docs, data transcribers, and volunteers who are not authors on this paper but who contributed essential work and ideas to the project, as well as Lisa Curran, for her logistical support at Stanford University. Dominique (Nickie) Irvine, Taal Levi, Kirsten Silvius and Oskar Burger provided insightful comments and context. Finally, we would like to thank two anonymous reviewers for their valuable comments on a draft of this paper.

## References

- Bacchiddu, G. (2009). 'Before we were all Catholics': changing religion in Apiapo, southern Chile. In Aparecida, V., and Wright, R. M. (eds.), *Native Christians: Modes and Effects of Christianity among Indigenous Peoples of the Americas*. Ashgate, Burlington, VT, pp. 53–70.
- Balée, W. (1985). Ka'apor Ritual Hunting. *Human Ecology* 13(4): 485–510.
- Belaunde, L. E. (2000). Epidemics, Psycho-actives and Evangelical Conversion among the Airo-Pai of Amazonian Peru. *Journal of Contemporary Religion* 15(3): 349–359.
- Beyer, S. (2009). *Singing to the Plants: A Guide to Mestizo Shamanism in the Upper Amazon*. University of New Mexico Press, Albuquerque.
- Bonilla, O. (2009). The skin of history: Paumari perspectives on conversion and transformation. In Aparecida, V., and Wright, R. M. (eds.), *Native Christians: Modes and Effects of Christianity among Indigenous Peoples of the Americas*. Ashgate, Burlington, VT, pp. 127–146.
- Butt, A. J. (1960). The Birth of a Religion: The Origins of a Semi-Christian Religion among the Akawaio. *Journal of the Royal Anthropological Institute* 90(1): 66–106.
- Butt, A. J. (1961). Symbolism and Ritual among the Akawaio of British Guyana. *Nieuwe West-Indische Gids* 2: 141–161.
- Butt Colson, A. J. (1989). Guyana: Akawaio. In Walker Jr., D. E. (ed.), *Witchcraft and Sorcery of the American Native Peoples*. University of Idaho Press, Moscow, pp. 245–255.
- Colding, J., and Folke, C. (2001). Social Taboos: "Invisible" Systems of Local Resource Management and Biological Conservation. *Ecological Applications* 11(2): 584–600.
- Dowdy, H. (1963). *Christ's Witchdoctor: From Savage Sorcerer to Jungle Missionary*. Harper & Row, New York.
- Farage, N. (1986). *As Muralhas dos Sertões: Os Povos Indígenas do Rio Branco e a Colonização* (Ph.D. dissertation). Universidade Estadual de Campinas, São Paulo, Brazil.
- Forte, J. (ed.) (1996). *Makusipe komanto iseru: a Makushi way of life*. North Rupununi District Development Board, Annai, Guyana.
- Fragoso, J. M. V. (1997). Tapir-generated Seed Shadows: Scale-dependent Patchiness in the Amazon Rain Forest. *Journal of Ecology* 85: 519–529.
- Fragoso, J. M. V., Silvius, K. M., Read, J. M., Gibbs, J. P., Martins, L. L., and Chave, J. (2005). Biodiversity Dynamics and Land-use Changes in the Amazon: Multi-scale Interactions between Ecological Systems and Resource-use Decisions by Indigenous Peoples (Unpublished proposal). National Science Foundation, Arlington, VA.
- Godoy, R. A. (2001). *Indians, Markets, and Rainforests: Theory, Methods, Analysis*. Columbia University Press, New York.
- Grotti, V. E. (2009). Protestant evangelism and the transformability of Amerindian Bodies in Northeastern Amazonia. In Aparecida, V., and Wright, R. M. (eds.), *Native Christians: Modes and Effects of Christianity among Indigenous Peoples of the Americas*. Ashgate, Burlington, VT, pp. 109–126.
- Hemming, J. (1978). *Red Gold: The Conquest of the Brazilian Indians, 1500–1760*. Harvard University Press, Cambridge, MA.
- Henfrey, T. (2002). *Ethnoecology, Resource Use, Conservation and Development in a Wapishana Community in the South Rupununi, Guyana* (PhD dissertation). University of Kent, Canterbury, UK.
- Hill, K., Padwe, J., Bejyvagi, C., Bepurangi, A., Jakugi, F., Tykuarangi, R., and Tykuarangi, T. (1997). Impact of Hunting on Large Vertebrates in the Mbaracayu Reserve, Paraguay. *Conservation Biology* 11(6): 1339–1353.
- Hugh-Jones, S. (1994). Shamans, prophets, priests and pastors. In Thomas, N., and Humphrey, C. (eds.), *Shamanism, History and the State*. University of Michigan Press, Ann Arbor, pp. 32–75.
- Im Thurn, E. F. (1883). *Among the Indians of Guiana*. Kegan Paul, Trench and Co, London.
- Instituto Socio-Ambiental. (2012). <http://pib.socioambiental.org/en/povo/waiwai/print>
- Lu, F. E. (2007). Integration into the Market among Indigenous Peoples: A Cross-Cultural Perspective from the Ecuadorian Amazon. *Current Anthropology* 48(4): 593–602.
- Luzar, J. B., Silvius, K. M., Overman, H., Giery, S. T., Read, J. M., and Fragoso, J. M. V. (2011). Large-scale Environmental Monitoring by Indigenous Peoples. *BioScience* 61(10): 771–781.
- Luzar, J. B., Silvius, K. M., and Fragoso, J. M. V. (In press). Church Affiliation and Meat Taboos in Indigenous Communities of Guyanese Amazonia. *Human Ecology*.
- Ogilvie, J. (1940). Creation Myths of the Wapishana and Taruma. *Folklore* 51(4): 64–72.
- Ostrom, E. (2009). A General Framework for Analyzing Sustainability of Social-Ecological Systems. *Science* 325: 419–422.
- Pezzuti, J. C. B., Lima, J. P., Da Silva, D. F., and Begossi, A. (2010). Uses and Taboos of Turtles and Tortoises along Rio Negro, Amazon Basin. *Journal of Ethnobiology* 30(1): 153–168.
- Posey, D. A., and Dutchfield, G. (1997). *Indigenous Peoples and Sustainability: Cases and Actions*. IUCN Inter-Commission Task Force on Indigenous Peoples, International Books, Netherlands.
- RAISG. (2012). [http://raisg.socioambiental.org/system/files/AMAZON2012\\_english.pdf](http://raisg.socioambiental.org/system/files/AMAZON2012_english.pdf)
- Read, J. M., Fragoso, J. M. V., Silvius, K. M., Luzar, J. B., Cummings, A. R., Giery, S. T., and de Oliveira, D. F. (2010). Space, Place, and Hunting Patterns among Amerindians of the Guyanese Amazon. *Journal of Latin American Geography* 9(3): 213–245.
- Read, J. M., Fragoso, J. M. V., Luzar, J. B., and Overman, H. (2011). *Wowetta Village, Rupununi, Guyana, Project Fauna Community Atlas* (Unpublished report). Geography Dept., Syracuse University, Syracuse, NY.

- Redford, K. H., and Robinson, J. G. (1987). The Game of Choice: Patterns of Indian and Colonist Hunting in the Neotropics. *American Anthropologist* 89(3): 650–667.
- Ricketts, T. H., Soares-Filho, B., da Fonseca, G. A. B., Nepstad, D., Pfaff, A., Peterson, A., Anderson, A., Boucher, D., Cattaneo, A., Conte, M., Creighton, K., Linden, L., Maretti, C., Moutinho, P., Ullman, R., and Victurine, R. (2010). Indigenous Lands, Protected Areas, and Slowing Climate Change. *PLoS Biology* 8(3): e1000331.
- Ross, E. B. (1978). Food Taboos, Diet, and Hunting Strategy: The Adaptation to Animals in Amazon Cultural Ecology. *Current Anthropology* 19: 1–36.
- Santos-Granero, F. (2009). Hybrid Bodyscapes: A Visual History of Yaneshá Patterns of Cultural Change. *Current Anthropology* 40(4): 477–512.
- Silvius, K. M. (2004). Bridging the gap between western scientific and traditional indigenous wildlife management: the Xavante of Rio Das Mortes Indigenous Reserve, Mato Grosso, Brazil. In Silvius, K. M., Bodmer, R. E., and Fragoso, J. M. V. (eds.), *People in Nature: Wildlife Conservation in South and Central America*. Columbia University Press, New York, pp. 37–49.
- Smilde, D. (2005). A Qualitative Comparative Analysis of Conversion to Venezuelan Evangelicalism: How Networks Matter. *American Journal of Sociology* 111(3): 757–796.
- Soares Diniz, E. (1971). O Xamanismo dos Índios Makuxi. *Journal de la Société des Americanistes* 60: 65–73.
- Staats, S. K. (1996). Fighting in a different way: Indigenous resistance through the Alleluia religion of Guyana. In Hill, J. D. (ed.), *History, Power and Identity: Ethnogenesis in the Americas, 1492–1992*. University of Iowa Press, Iowa City, pp. 161–179.
- Ulloa, A., Rubio-Torgler, H., and Campos-Rozo, C. (2004). Conceptual basis for the selection of wildlife management strategies by the Embera people in Utría National Park, Chocó, Colombia. In Silvius, K. M., Bodmer, R. E., and Fragoso, J. M. V. (eds.), *People in Nature: Wildlife Conservation in South and Central America*. Columbia University Press, New York, pp. 11–36.
- Vilaça, A. (1997). Christians Without Faith: Some Aspects of the Conversion of the Wari' (Pakaa Nova). *Ethnos* 62(1): 91–115.
- Vilaça, A. (2002). Missions et Conversions chez les Wari': Entre Protestantisme et Catholicisme. *L'Homme* 164: 57–79.
- Vilaça, A., and Wright, R. M. (2009). Introduction. In Aparecida, V., and Wright, R. M. (eds.), *Native Christians: Modes and Effects of Christianity among Indigenous Peoples of the Americas*. Ashgate, Burlington, VT, pp. 1–19.
- Whitehead, N. (2002). *Dark Shamans: Kanaima and the Poetics of Violent Death*. Duke University Press, Durham, N.C.
- Wirsing, R. F., Logan, M. H., Micozzi, M. S., Nyamwaya, D. O., Pearce, T. O., Renshaw, D. C., and Schaefer, O. (1985). The Health of Traditional Societies and the Effects of Acculturation. *Current Anthropology* 26(3): 303–322.
- Wright, R. M. (2009). The Art of Being Crente: The Baniwa Protestant Ethic and the Spirit of Sustainable Development. *Identities* 16(2): 202–226.