

A PRELIMINARY EXAMINATION OF THE IMPACTS OF FAITH AND RELIGION IN
THE USE OF COMMON-POOL RESOURCES: THE CASE OF ARTISANAL FISHERIES IN
KINO BAY AND PUNTA CHUECA, MEXICO

by

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Abstract

Researchers studying common-pool resources have historically not given enough attention to the influence of faith and religion among fisheries resource users. However, the ethics and value systems taught by religious leaders and understood by faithful peoples might play an important role in individual decision-making and community dynamics. To increase our understanding of the relationship between faith, religion and fishing common-pool resource use patterns, I conducted a pilot study to explore this issue in Kino Bay and Punta Chueca, two small-scale fishing communities located in the Gulf of California. These two communities are heavily dependent, both economically and culturally, on the health of nearby fishing grounds. I collected data using participant observation and semi-structured interviews with fishers over the course of 52 days in the field during May, June, July and October of 2011. Interviews explored the effects of faith and religion on fishers' perceptions of fisheries management, fishers' behavior while fishing, and interactions between fishers.

Findings from this pilot study suggest that faith and religion play an important role in the lives of fishers in both Kino Bay and Punta Chueca. Most of the interviewees in both communities believe that human behaviors impact the quantity of fish which God provided. Evangelical interviewees in Kino Bay indicated that their churches teach strict adherence to secular fishing laws, and that their interactions with Catholic and non-religious fishers in this community sometimes result in tension and unequal treatment within the fisheries. Conversely, interviewees in Punta Chueca, which houses only one Evangelical church and no Catholic church, suggest fewer direct impacts and conflicts due to religion in their fisheries. These preliminary findings provide a useful basis for future research to validate, triangulate, and explore the issue in greater depth. They also add to the limited, but growing collection of studies examining the role of faith and religion in common-pool resource management.

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Part 1. Introduction

When we are at peace with God, we are better able to devote ourselves to building up that peace with all creation which is inseparable from peace among all peoples.

Pope John Paul II, excerpt from a 1990 address for the Celebration of the World Day of Peace

Pope John Paul II delivered this statement as part of an address calling both the Catholic Church and the peoples of the world to work together to confront the destructive behaviors causing global climate change (Pope John Paul II, 1990). This statement served partially as a response to a popular notion that Christian values, such as the right of humankind to exercise dominion over nature, have historically led to environmentally detrimental actions (Dudley et. al. 2009; White 1967). His call served as a catalyst for the Catholic Church and other religious organizations to take a more active role within the growing international environmental movement (Dudley et. al. 2009). Evidence of this new activist approach can be seen within the Catholic Church and other religious organizations, and continues to gain traction.

However, what is the link between religion and environmentalism at a more local scale? How do values and ethics taught by religious leaders and understood by faithful peoples play into the management of resources, especially when availability and harvest of those resources define peoples' livelihoods? Fisheries present an intriguing place to begin tackling these questions. Complex systems involving numerous stakeholders representing various, often conflicting, interests, they create a management dilemma which must be addressed at the nexus of natural and social sciences. The incorporation of research describing the impacts of cultural factors like religion on stakeholder values and decisions is vital to understanding how sustainability might be achieved within different places and contexts.

Fisheries represent one example of a number of natural resources which are broadly identified as common-pool resources. Common-pool resources include goods which are both easily accessible to harvesters and difficult to replace if harvested. In 1968, Garrett Hardin submitted a paper outlining the concept of "the tragedy of the commons" in which he highlighted the inevitable decline of common-pool resources in the face of users' desire to maximize their own self-interest rather than contribute to the common good through sustainable practices (Hardin 1968). While researchers have since shown that many concepts presented in Hardin's ground-breaking paper prove overly simplistic (Ostrom 1990), the issue of overexploitation is evidenced in a variety of common-pool resource contexts (Cudney-Bueno and Basurto 2009). In

fisheries, this tragedy plays out when fishers harvest marine organisms to the point that stocks in the area become overfished, or unable to sustain the size of their population through reproduction.

The Gulf of California represents one such area in which growing fishing pressure has had clear negative impacts on both specific stocks of marine organisms as well as on the larger marine ecosystem as a whole (Ezcurra et al. 2009). This paper focuses on two fishing towns, Kino Bay and Punta Chueca, which are located on the continental side of the Gulf of California in an area called La Región de las Grandes Islas, or the Midriff Island Region (Figure 1). These two communities are heavily dependent on the health of nearby fishing grounds for economic survival. Previous research in these communities has focused largely on natural science, which describes the ecological health of the fisheries, as well as on the economic, institutional, and cultural factors which help shape fishers' decisions, behaviors, and social interactions (Basurto 2005, 2008; Cinti et. al. 2010 a and b; COBI 2005; Moreno-Baez et. al. 2010).

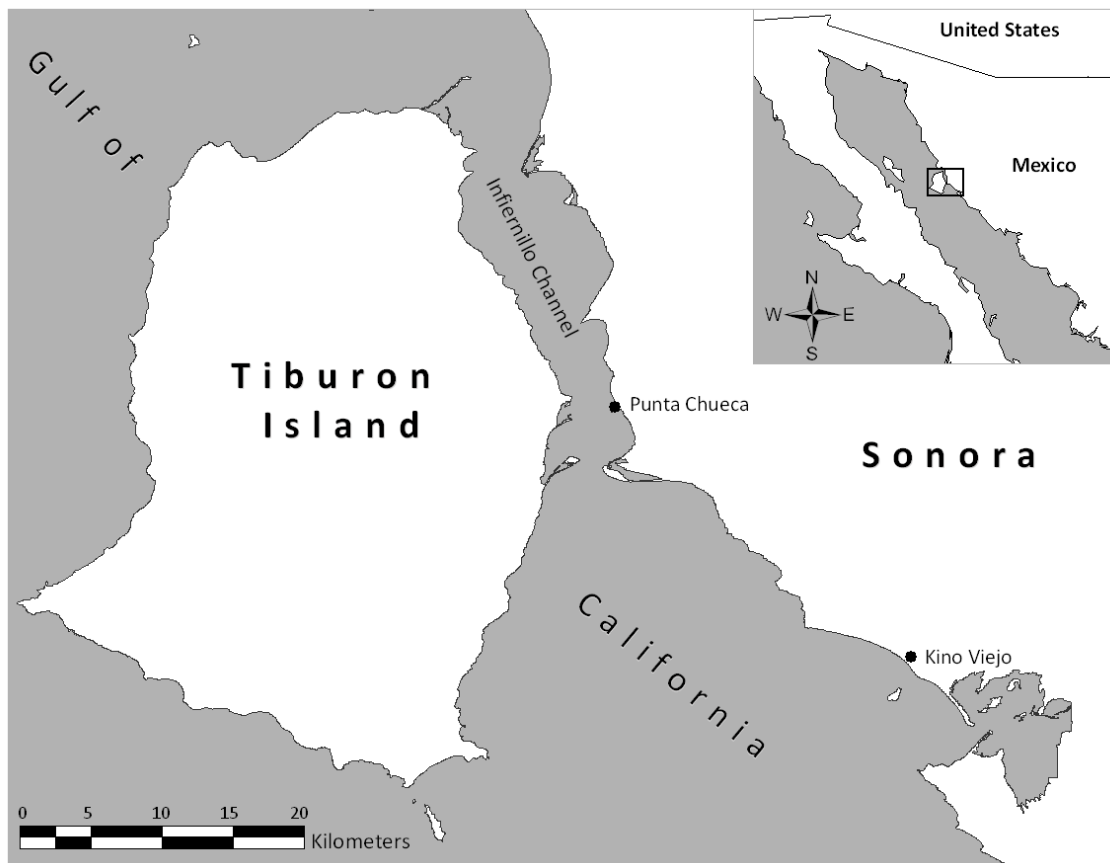


Figure 1. Kino Bay, Punta Chueca and adjacent fishing areas; Cartographic design: Nicholas Mallos.

However, the region lacks sufficient research describing the faith and religions found in these communities, which may play an integral role in determining fishers' behaviors and inter-fisher dynamics. This study explores these topics in order to begin providing a more complete picture of the social realities of fishers in these communities. In addition, this work adds to the limited but growing literature examining how faith and religion impact fisheries management in local contexts.

Before going further, the distinction between the concepts of faith and religion as used in this paper deserves explanation. Bouma-Prediger (2010) asserts that, while Christianity can't be completely separated from Christian peoples, Biblical teachings can be distinguished from the beliefs, values, and behaviors of individual Christians. Similarly, while faithful peoples often base their belief systems largely on religious teachings, faith often varies somewhat between individuals due to personal experiences and ontologies. Thus, I posit that the individual belief systems of fishers can be viewed as related to but distinct from the teachings and traditions of their claimed religious organizations. This distinction is reflected by the separation of faith and religion in this paper.

I have organized the introduction to this work as follows: In the first section I briefly address the need for greater research on broad cultural factors, including both faith and religion. The next section provides a brief history of religion in Mexico, and the third section describes the current state of fisheries in Kino Bay and Punta Chueca. Finally, in the fourth section, I present the rationale behind conducting the project given this background and summarize the objectives which this study strives to achieve.

1. Why study religion?

Until recently, managers focused almost exclusively on ecological studies and the perceived economic incentives of resource users to determine appropriate resource management regimes. This school of thought, based largely on Hardin's "tragedy of the commons" model outlined above, led managers to the conclusion that policy should incorporate privatization of fisheries resources in order to limit fishing effort. While privatization has proven effective for the management of fishing effort in some contexts, its secondary impacts have called the meaning of "success" into question (Cadigan 2001). Privatization often benefits large-scale, industrialized fishing with the primary goal of accumulating capital. Subsistence and small-scale fishers

wishing to keep their jobs often fish illegally, leading to overfishing, stock collapse and ecosystem harm (Brunk and Dunham 2000). Privatization has also proven detrimental to fishing communities, causing the erosion of distinct value systems, social structures and social norms (Cadigan 2000; Brunk and Dunham 2000). Thus, managers are beginning to recognize that, to achieve “successful” management of fisheries, they must take a more holistic view of fisheries and fishing communities. While economic studies provide important insights into why and how resource depletion occurs, individuals’ attitudes and behaviors are influenced by a combination of complex social and cultural factors.

Religion represents one of these key factors influencing the perceptions and behaviors of people toward the natural world. Billions of the world’s people adhere to some form of religion, and many of these people base their value systems largely on religious wisdom and ritual (Dunham and Coward 2000). In turn, these value systems often impact their relationships with and behavior toward nature. The impacts of religion on perceptions and values related to nature have been well-documented and are observed across the globe (Dunham and Coward 2000; Gottlieb 2003; White 1967).

In some cases, the impacts of religion on people’s perceptions of nature and the environment have been viewed by environmental advocates as positive (Bouma-Prediger 2010; Brunk and Dunham 2000). Religious leaders and organizations are becoming increasingly vocal about the global movement toward care for nature and the environment, as demonstrated by their growing inclusion in media outreach concerning the environmental movement (Gottlieb 2003). Roger Gottlieb illustrates this point by citing well-known quotes from the leadership of various religions, such as the statement by Pope John Paul II cited at the beginning of this paper. Others include:

“Now when the whole world is in peril, when the environment is in danger of being poisoned, and various species, both plant and animal, are becoming extinct, it is our Jewish responsibility to put the defense of the whole of nature at the very center of our concern.” (Rabbi Arthur Hertzberg, VP of the World Jewish Congress, 1986)

“The Earth, our Mother, is telling us to behave. All around, signs of nature’s limitations abound. Moreover, the environmental crisis currently underway involves all of humanity, making national boundaries of secondary importance.” (the Dalai Lama, Earth Day, 1990)

“To commit a crime against the natural world is a sin. For humans to cause species to become extinct and to destroy the biological diversity of God’s creation....to degrade the integrity of Earth by causing changes in its climate, by stripping the Earth of its natural forests...to contaminate the Earth’s waters, its land, its air, and its life, with poisonous substances: these are sins.” (His Holiness Ecumenical Patriarch Bartholomew I, patriarch of the Eastern Orthodox Church, 1997)

Gottlieb (2003) also asserts that religion, unlike secular activist movements, offers other, less tangible benefits to the environmental community. These include “compassion, empathy even for the guilty, self-awareness, and some reflective distance from the typical pursuit of status and power within the movement” (Gottlieb 2003). Thus, in some cases, religion has and continues to serve as a growing platform for the pro-environmental movement. In other cases however, such as in the case of Christianity, religion’s impact on people’s perceptions of and behavior toward nature has been viewed by the environmental community as far more destructive.

a. Christianity and Environmentalism

Christian teachings and traditions have historically been framed as systems that promote environmental degradation (Dunham and Coward 2000; Collet 2002). In his now famous article concerning the historical causes of the ecological crisis, Lynn White (1967) asserts that Christian beliefs and Biblical teachings have led to cultural ideals that are based on a perceived human right to domination over nature. This perceived right refers to the idea that God created nature and the environment for human exploitation and pleasure. White posits that this worldview of domination over nature was likely fueled by the sudden improvement of technological processes during the Industrial Revolution, particularly in agriculture. Technological improvements in efficiency through increased use of machinery led to a separation of people from their environment. Coupling this separation from nature with the idea that God actually desires people to exploit nature (people are made in God’s image, and God gave them the power to rule over creation), the largely Christian populations of the Western world became eager to extract as much benefit from nature as possible. White claims that this led to complacency about the impacts of both the industrial revolution as well as continued technological and developmental advances on the environment (White 1967; Dunham and Coward 2000). Thus, according to White, Christianity bears much of the blame for historical environmental degradation.

Since White's thought-provoking article, other scholars have added their own critiques of Christianity's teachings and subsequent ethics towards nature. One of the most widely cited arguments concerning Christianity's role in people's general apathy toward the environment includes Christianity's preoccupation with the salvation of souls and subsequent view of other societal issues, like the ecological crisis, as secondary (Bouma-Prediger 2010). Other scholars point to the Christian belief in the afterlife and Jesus' second coming, which makes efforts toward care for the present world unnecessary. Finally, some scholars indicate that the Christian separation of metaphysical, or spiritual, aspects of life from physical aspects of life contributes to a disassociation of believers from the natural world, and thus, from environmental problems (Bouma-Prediger 2010).

These and similar assertions have ignited heated debate about Christianity's actual role in either complacency about, or promotion of, environmental degradation (Bouma-Prediger 2010; Dunham and Coward 2000). Bouma-Prediger (2010) claims that these and similar arguments oversimplify the context and make Christianity into an easy scapegoat in the face of a very complex issue. For his part, White does mention that Christian teachings and beliefs vary in differing contexts, noting that his thoughts do not represent sweeping truths (White 1967). However, despite this oversimplification, many scholars agree that claims indicating Christianity's role in the ecological crisis do bear some truth. For instance, Christianity does seem to promote complacency with modernity, anthropocentrism and recent systemic economic changes, all of which have played a part in incentivizing degradation (Bouma-Prediger 2010).

Because of the historical nature of White's and others' claims, their assertions prove difficult to test empirically. Thus, most studies have focused on the relationship between contemporary Christianity and the current environmental movement (Truelove and Joireman 2009). Some such studies, which examine the relationship between religious beliefs and environmental concern, have shown a negative correlation between adherence to fundamental Christian beliefs and concern for environmental health (Schultz et. al. 2000; Truelove and Joireman 2009). Other studies have demonstrated that fundamental Christians support care of the environment less than non-fundamental Christians or non-Christians when given the choice between economic interests and environmental protection (Truelove and Joireman 2009).

However, other studies demonstrate the complexity of Christians' relationship to the natural world. For instance, Truelove and Joireman (2009) show that a negative correlation exists

between orthodox Christian beliefs and pro-environmental intentions, valuation of environmental care, and political behavior in the environmental realm. But they also show that both intentions and valuation could be explained by the fact that those holding strong Christian beliefs were less likely to understand the potential ecological consequences of a deteriorating environment. According to the authors, this suggests that many Christians' seeming apathy toward environmental care may be partially due to their more general lack of understanding of natural systems. Another study, which surveyed university students from 14 different countries, found that a more literal belief in the Bible led students to care more about the impacts that environmental degradation had on people than about environmental degradation in and of itself (Schultz et. al. 2000). However, the study also found no correlation between students' Biblical beliefs and their concern about environmental degradation in general. These results have been corroborated in other studies at a smaller scale (Schultz et. al. 2000).

Thus, no consistent conclusions have been reached to definitively illustrate the relationship between Christian teachings and beliefs and environmentalism (Truelove 2009). However, many recent Christian theologians now actively promote pro-environmentalism based on Christian ethics (Dunham and Coward 2000). They have shown how Biblical teachings incorporate the concepts of stewardship, care of the environment, and social justice, and that adhering to scriptural truth necessitates an incorporation of those ideals. Some also claim that the concepts of "liberation of the poor" and "liberation of nature" as spiritual ideals go hand-in-hand (Dunham and Coward 2000; Collet 2002). This provides a link between social justice and environmental concerns, creating an avenue for social activist Christians to engage more prominently in the growing environmental movement.

The relationship between Christianity, the ecological crisis, and local natural resource management is complex. Due to this complexity as well as the strong impacts of faith and religious teachings on people's value systems and behaviors, empirical research at a local level presents an important opportunity to help elucidate the role of faith and religion in communities. Though existing research is sparse, I wish to highlight a few poignant examples exploring the role of religion in fisheries management (Schultz et al 2000).

b. Examples of Religion's Impact in Fisheries Management

*The land mourns, and all who live in it languish;
together with the wild animals and the birds of the air,
even the fish of the sea are perishing.*

Have mercy on us, O God.

(National Council of Churches, excerpt from the Litany of Confession, *Witness to the Resurrection: Caring for God's Creation*, Worship Resources for April 22, 2001)

This excerpt from the Prayer of Confession was used by members of the National Council of Churches on the first Sunday after Easter in 2001. The National Council of Churches includes over 100,000 member congregations from various Christian denominations across the United States. The Council's emphasis on care for creation during this important religious season illustrates the high value placed on environmental stewardship by many Christian leaders. However, though the Church laments that "even the fish of the sea are perishing," are these concerns reflected in the beliefs, value systems, and behaviors of fishers in local contexts? As the following examples illustrate, the answer varies across places, communities and individuals.

Researchers have conducted multiple studies along the US Atlantic coast to determine how faith and religion relate to fishers' hesitance or refusal to comply with fishing regulations. In 2008, Stuart Brown, a Coastal Environmental Management graduate of Duke University's Nicholas School of the Environment, conducted his Master's Project with fishers in eastern North Carolina. His interviewees indicated that attempts by policy-makers to manage fisheries through state-mandated regulations constitute acts of defiance against God (Brown 2008). This understanding of fisheries regulations stems from fishers' belief that God puts fish in the sea and that God has control over the quantity of fish in the sea. Fishers view fishing regulations as an attempt to undermine God's power and control.

A similar, though more extensive study conducted by Michael Paolisso (2002) showed that, while blue crab fishers in the Chesapeake Bay also believe that God places crabs in the sea, they believe that humans do play a role in determining how many of those crabs are available for harvest. According to fishers, while overfishing contributes little to reducing this availability, water contamination from runoff can greatly diminish the number of accessible crabs. At the time of the study, conversations between policy-makers and fishers about conservation focused on how to control the size of the entire crab population. However, because God places crabs in

the sea and controls the population size of those crabs, fishers saw this attitude as heretical. Thus, Paolisso suggested that conversations should instead focus on how fishers can help sustain the number of crabs available to them for harvest.

These examples have illustrated how fishers' belief systems can impact their attitudes toward the management of fisheries. Other studies demonstrate the role that fishers' faith and religious affiliation play in their decisions to participate in fisheries governance. Susan Emmerich conducted another study with Chesapeake Bay fishers, using an interpersonal, action research approach that incorporated the fishers' faith-based value systems into policy creation (Emmerich 2009). Her collaborative work within the community led to changes in attitudes of both fishers and policy-makers that resulted in greater regulation compliance, more collaborative planning and more friendly relationships between these two groups of stakeholders.

Conversely, Ajantha Subramanian (2003) studied fishing villages in southern India, where fisheries management practices have led a number of Catholic fishers to take legal action concerning their religious leaders. The Indian government has given Catholic church leaders civil authority within a number of southern Indian communities. This, along with other factors, has led to extreme marginalization and economic disadvantages for many small-scale Catholic fishers. The fishers have therefore sued the Indian government for combining religious authority with secular authority and have demanded more equal citizenship within India than that provided under the control of local Catholic leaders.

These studies demonstrate how fishers' faith and religion can play a role in fisheries management. They present numerous examples exploring how these cultural factors have influenced fishers, their communities, and their relationships to resources and policy-makers. However, faith and religion have considerably impacted stakeholders in these communities because of the significant role religion plays within the local cultures represented. The next logical question then becomes: Are faith and religion appropriate factors to study in small Mexican fishing communities?

2. Christianity in Mexico

Historically, religion, and specifically Christianity, has played a significant and often complex role in Mexico, both culturally and politically (Misra 2012). Catholicism remains the dominant national religious presence, though Protestantism has taken root and continued to grow

in membership over the past century. This growth and the loyalty of its members stem from the Mass introduction and promotion of “self-propagating, self-supporting, and self-governing” Protestant churches to Latin America during the 20th century (McGinnis 2007). As often occurs when two strong religious organizations coexist, conflicts have arisen between Catholic and Protestant churches and their members. These conflicts have largely materialized in various forms of segregation of Protestant Christians from mainstream society by Catholics (Misra 2012). While I do not attempt to fully encapsulate the rich and complex history of Christianity in Mexico, the following introduction provides some context for discussion of these religions in Kino Bay and Punta Chueca. This brief summary of key points shows the cultural importance of Catholicism and Protestantism and, thus, the relevance of their study in the context of fisheries management in this region.

a. Catholicism

In the 16th century, Spanish missionaries brought Catholicism to Mexico with the hopes of collectively converting indigenous peoples to this new religious understanding (Ramsay 2008). They subtly mixed Catholic thought and doctrine into indigenous culture, which often produced a Catholicism which looked quite distinct from the Catholicism of Europe. It largely reflected local spiritual traditions and culture, traces of which can still be seen today. The church’s influence spread and grew until 1917, when a Constitutional amendment severely limited the secular rights and privileges of the Catholic Church (Misra 2012). This amendment, and the violent conflicts that followed in the 1920s and 30s between church and state, stemmed both from the government’s perception that the Church was attempting to usurp its power and the Church’s refusal to follow the regulations placed on it by the government (Hanratty 1984).

Despite the Church’s lack of legal rights throughout most of the 20th century, Catholicism remained a dominant force in Mexican culture and society (Ramsay 2008). By the 1930s, the radical, violent proponents of both Catholic and secular groups had been stopped, and each side agreed to small compromises in the name of peace (Reich 1997). During the 1960s, Catholic religious officials became largely involved in the social justice movement, building intermediary social structures aimed at connecting Mexican citizens, especially citizens of low socioeconomic status, to government officials (Hanratty 1984). This new initiative geared toward the poor sought to slow the growth of Communism and Protestantism in the country.

Liberation theology emerged shortly thereafter, promoting a Biblical interpretation that reveals God's preference for the poor and highlights the oppressive nature of capitalism (Hanratty 1984). This popular doctrine quickly spread within impoverished communities throughout Latin America, and remains a considerable influence on Christianity in this region today. Finally, in 1992, officials again amended the Constitution, giving religious organizations and their leaders equal legal rights and allowing the observance of religious ceremonies in public once more (Misra 2012).

Today, Catholicism remains the dominant religion in Mexico, and the relationship between the Church and the Mexican government appears stable (Ramsay 2008). Some scholars argue that the Catholic Church's contentious battle for secular rights and its fragile relationship with the Mexican government has actually strengthened its cultural presence in Mexico due to the networks and institutions created as it fought to survive (Reich 1997). However, Catholic congregations have started to experience trends similar to those experienced by congregations in the US and elsewhere. These trends include shrinking membership, lack of interest in entering the priesthood, and a tendency among agnostic members to retain membership only for the sake of tradition and conformity (Ramsay 2008). These issues are creating unease in the Mexican Catholic Church, especially in light of the rapid growth of Protestantism across the country.

b. Protestantism

Protestantism represents a rapidly growing force in Mexico, particularly within small, rural communities (Dow 2005). The percentage of Protestants in the state of Sonora has jumped from 1.8% in 1970 to 6.6% in 2000 (Dow 2005). Protestant churches are known for using modest, informal places for worship, which may explain why they have become more prevalent than the Catholic Church in poverty-stricken communities and populations (Misra 2012). In addition, women constitute a major driving force in the growth of Protestantism, largely because of the religion's reputation for keeping males from participating in common social ills (Navarro and Leatham 2004). These include drinking, adultery, abuse and excessive spending, among others.

Protestant membership has grown in Mexico as a response to more traditional political/religious systems, not based on opposition to the domination of the Catholic Church. In the 19th century, mainstream Protestant denominations grew along with the general political will

pushing for increased independence and democracy (Bastian 1993). Today, due to relatively recent changes in international control and economic dynamics, Dow (2005) sees the acceptance of a new God and moral code as inevitable in allowing converts from all socioeconomic levels to earn money and gain prestige through new market systems (see also Navarro and Leatham 2004). Protestantism, and especially Pentecostalism, provides faithful peoples with this new God and moral code.

While Protestant missionaries began planting churches affiliated with traditional Protestant denominations in the 19th century, Pentecostal Protestantism came to the region from Mexican migrant workers returning from the US (Navarro and Leatham 2004). The growth of the more energetic Pentecostal denominations has now surpassed the growth of other Protestant denominations throughout Latin America (Bastian 1993). Pentecostalism is usually spread through personal contacts and highly emotional conversion (Dow 2005). Pentecostal believers often hold a staunchly apolitical stance, wanting nothing to do with secular authority. This may be due partially to the value of separation of church and state, as well as a Biblically based belief that all authorities were put in place by God and should therefore not be challenged (Navarro and Leatham 2004).

In sum, Section 1 showed that Christianity represents a potentially key factor shaping individual and community beliefs, value systems and behaviors. Section 2 demonstrated how it constitutes a significant cultural component within Mexico and its communities. The study of faith and religion proves therefore critical to one's ability to understand communities holistically. Within Kino Bay and Punta Chueca, it can also help tease out how this more holistic understanding might factor into fisheries management. The next section will examine the state of fisheries in Kino Bay and Punta Chueca, as well as explain the significance of conducting this study within these communities.

3. State of Fisheries

The Gulf of California covers an area of 375,000 km² and supports around 6,000 animal species, 831 of which are endemic to this region (Ezcurra et al. 2009). These organisms sustain a large part of Mexico's fishing industry, supplying 50% of total landings and about 70% of the economic value produced from fisheries in the country (Cinti et al. 2010b). The industry employs about 50,000 residents and uses around 26,000 boats, 90% of which are small-scale fishing

vessels, or 'pangas' (Cinti et al. 2010a). Thus, thousands of fishers, as well as their families and communities, rely on the sustainability of local fisheries, both economically and culturally.

Kino Bay, a small, *mestizo* (racially mixed) town, houses 6050 residents, 800 of whom work directly in the Gulf as fishers and depend on regional fisheries for survival (Basurto and Ostrom 2009; Cinti et al. 2010a). These fishers target 66 different species, focusing on 35 as the main target species. Despite efforts by authorities to enforce restrictive fishing regulations, the Kino Bay community has thus far been unable to create a sustainable fisheries management system. As a result, both local and foreign fishers continue to overexploit marine populations. Fisheries production has steadily dropped below production potential since 1992, and poverty in the community continues to rise as a result (Basurto and Ostrom 2009).

Researchers have extensively examined the Kino Bay community, exploring various options to explain overfishing. First, recent increases in the local fisher population have contributed to increased fishing effort (COBI 2005). In addition, the local permit system indirectly incentivizes illegal fishing by creating a middleman between harvesters and fish buyers (Cinti et. al. 2010a). To address overfishing, Comunidad y Biodiversidad (COBI) works in Kino Bay with fishing cooperatives, or groups of fishers who pool their efforts and resources for the greater good of the group. COBI is Mexican non-profit organization committed to fighting poverty in fishing communities through the promotion of sustainable fisheries. Through these cooperatives, COBI promotes sustainability, education and increased community participation in the governance of Kino Bay's fisheries.

Conversely, Punta Chueca, a small, indigenous community of about 600 people, has succeeded in organizing community-regulated sustainable fisheries (Basurto 2005; 2008). Punta Chueca is one of only two sedentary Seri communities. A fishing concession awarded to the Seri people in the 1970s by the Mexican government has aided the communities by giving them legal exclusion rights to their fishing grounds (Basurto 2008). The Seri people use both formal and informal rules of access to monitor and exclude outsiders from fishing in their waters, and these regulatory measures have thus far proven successful in preventing overfishing (Bourillón-Moreno 2002; Basurto 2005). One of the most significant successes of the Seri community has been to keep out shrimp trawlers, which in turn protects important habitat and nursery grounds for the community's most economically important species, pen shell and swimming crab (Bourillón-Moreno 2002). A general distrust of foreigners by Seri community members has also

aided them in defending their resources because, when threatened by outsiders, the Seri people have historically banded together to fight off the threat (Basurto 2008).

Seri distrust of foreigners stems largely from violent massacres of the Seri people carried out by the Spanish and Mexican governments (Felger and Moser 1985). This violence impacted the establishment of early Jesuit missions in the region, which were destroyed due to conflicts with the Spanish in the mid-18th century (Felger and Moser 1985). Missionaries from the Mexican Apostolic Church began arriving among the Seri people in the mid-20th century, and have gained significant traction there. As Christian converts grow in, Seri traditional beliefs systems are thought to be rapidly eroding (Felger and Moser 1985).

4. Study Rationale

Through this study, I examine the impacts of faith and religion in the use of common-pool fisheries resources by focusing on the cases of small-scale fishing communities in Kino Bay and Punta Chueca, Mexico. I aim to examine if and how faith and religion may impact fishers' perceptions of and behaviors within local fisheries. Kino Bay and Punta Chueca present appropriate study sites for this research for three reasons. First, cultural knowledge of the communities due to contributions from previous studies has provided me with contextual insights into community dynamics that would prove impossible in less studied areas. Second, Mexico's rich religious culture, both currently and historically, provides an interesting context for this research concerning faith and religion. Finally, Kino Bay and Punta Chueca represent communities with access to similar ecological systems, fishing gear and fishing strategies, yet vastly different community and fisheries structures. This makes comparisons between the results from the communities fitting and fascinating. This study will also contribute to the small, but growing, body of work focused on exploring the role of faith and religion in the management of common-pool resources and the communities that use them.

For reference, the religious breakdown of each community according to the Mexican Institute of Statistics and Geography's 2010 Census is as follows (INEGI 2010):

Table 1. Religious Affiliation in Kino Bay (of 6050 community members)

Religious Affiliation	Percent of Population
Catholic	61.5%
Non-Catholic religion	17.1%
Other	0.03%
Non-religious	19.6%

Table 2. Religious Affiliation in Punta Chueca (of 520 community members)

Religious Affiliation	Percent of Population
Catholic	3.5%
Non-Catholic religion	88.8%
Other	0.00%
Non-religious	6.0%

Part 2. Methods

1. Tradition of Inquiry

This project included two case studies, one carried out in Kino Bay, Mexico and another carried out in Punta Chueca, Mexico. The project also includes a comparative component in which I compare religion's cultural role in Kino Bay fisheries with its role in Punta Chueca fisheries. I used qualitative methods to conduct the study, including participant observation and semi-structured interviews with fishers.

2. Data Collection Methods in Kino Bay

I lived in Old Kino for two months during the summer of 2011, collecting data from fishers and community members in both Kino Bay and, to a lesser extent, in Punta Chueca. Throughout my time there, I carried out participatory observation, spending time with fishers and their families in their homes, on the soccer field, in fisheries governance and training meetings and once on their boat as they fished. I was unable to spend more time with them on the boat for cultural reasons. I attended one Catholic Mass and a service at one of the Apostolic churches in town. My results are based in part on the daily field notes that I recorded.

Along with participant observation, I conducted 18 semi-structured interviews with fishers during my time in Kino Bay. I spent my first two weeks building rapport with fishers and other community members, meeting them through COBI staff and visiting them in their homes. During this time, I gained a sense of the religious culture in Kino Bay and used this information to formulate my interview guide (Appendices A and B). I conducted two pilot interviews, one with a Catholic fisher and one with an Evangelical fisher, to test the clarity and cultural appropriateness of the questions in the interview guide. The pilot interviewees also provided their own definitions of the phrase “fisheries management”. These definitions were combined and used to explain the meaning of “fisheries management” during future interviews, which provided fishers with a common vantage point from which to approach questions concerning the role of various actors in fisheries management.¹

During each interview, I took written notes and collected audio recordings. Interviewees were provided with a consent form and asked to give their oral or written consent to participate in the project (Appendices C and D). I followed the interview guide as closely as possible during the interviews, while allowing interviewees to tell stories or bring up other information that they felt was pertinent to the discussion. I asked clarifying questions or asked interviewees to elaborate when appropriate.

Subsequent interviewees were identified through snowball sampling. Using recommendations from initial contacts, whom I met largely through COBI staff, I categorized interviewees into each of three religious classifications: Catholic fishers, Evangelical fishers and non-religious fishers.² Following each interview, I solicited recommendations of key fishers that may be interested in answering my questions. While occasionally the interviewees provided a personal introduction to another potential informant, I usually contacted potential interviewees by visiting their homes. Interviews were conducted in fishers’ homes, at a local hotel restaurant or at the interviewee’s place of work.³

To address any confusion because of the difference between terms used in the introduction and those used throughout the rest of this study, Evangelical fishers are synonymous

¹ For full definition used, see Appendix B, Question #10.

² These first religious classifications were largely based on the classifications indicated by the recommending interviewee; I later changed my classification system, as indicated in the Analysis section of Methods.

³ While some fishers that I interviewed worked exclusively as fishers, some supplemented their incomes with other occupations, such as providing security for a nearby academic institution.

with Protestant fishers. In addition, all of the Evangelical fishers that I interviewed in both Kino Bay and Punta Chueca are also Pentecostal fishers. I use the term Evangelical fisher because interviewees used this term to identify themselves.

Interviewees consisted of 18 males, with ages ranging from 30 – 66 years and an average age of 46.1 years. They had lived in Kino Bay for an average of 36.6 years. While most of the men still fish, two have retired and others supplement their fishing incomes with second jobs. Of 18 interviewees, six partially or fully completed primary school, six partially or fully completed secondary school, three partially or fully completed preparatory school, two completed their Associates degree and one has received his bachelor's degree from the University in Hermosillo.⁴ While ten of the 18 interviewees fish with both family and friends, six fish only with friends, one fishes only with family, and one usually fishes alone.

3. Data Collection Methods in Punta Chueca

In October of 2011, I returned to Mexico for eight days as part of Dr. Xavier Basurto's research team. We collected data in Punta Chueca, and I spent a day and a half of that time conducting six semi-structured interviews for this project. Dr. Basurto introduced me to the fisher I interviewed on the first afternoon. On the second day, Dr. Basurto hired a local fisher to act as my language and cultural translator. He accompanied me to fishers' homes to both introduce me and to translate our interviews from Spanish to cmiique iitom, the local indigenous language, if needed. Interviewees were selected through snowball sampling, stemming from recommendations made by Dr. Basurto and the translator. I used the same interview guide and interview methods in Punta Chueca as I used during interviews Kino Bay.

Interviewees from Punta Chueca consisted of six men, aged 26 – 65 years with an average age of 38.7 years. They had lived in Punta Chueca for an average of 28.5 years, though one fisher had only lived there for two years. One fisher completed primary school, three fishers partially or fully completed secondary school, one fisher received his bachelor's degree from the University in Hermosillo, and one fisher never attended school. Four of the six interviewees fish with both friends and family members, one interviewee fishes only with friends and one interviewee fishes only with family members.

⁴ In Mexico, primary school constitutes grades 1-6, secondary school constitutes grades 7-9, and preparatory school constitutes grades 10-12.

4. Analysis Methods

I analyzed data from field notes and written interview notes using NVivo 9.0. Because of time constraints, I was unable to fully transcribe audio recordings from my interviews; however, quotations used throughout the paper were transcribed from audio recordings and subsequently translated into English. Speakers are identified using my coding system in this paper in order to protect interviewees' anonymity. I examined data from Kino Bay and Punta Chueca separately, comparing aspects of results in each community after individual analysis was completed.

After uploading the data into NVivo, I identified common themes within the data and created nodes for use in coding (Appendix E). I took most of these themes directly from the interview guide, such as "Fishers' role in fisheries management" and "Religious teachings concerning fishing". Others emerged regularly throughout the data, such as "Prayer" and "General beliefs about God". I then coded each full interview into three nodes representing categories across three variables: religious activity level, affiliation with COBI and location.

I classified interviewees from Kino Bay into five religious categories: Evangelical fishers, inactive Catholic fishers, moderately active Catholic fishers, active Catholic fishers, and fishers affiliated with a different religious organization. I created these classifications to reflect interviewees' current level of participation with their religious organization. This classification did not address individual faith and belief systems. In Kino Bay, I first observed then confirmed with community members that, though most fishers claim to be Catholic, their level of involvement with the church is highly variable. Thus, religious activity level seemed a more accurate variable with which to compare responses than professed religious affiliation.

Classification was based on interviewees' responses to three categorical questions in the interview guide. These questions address religious service attendance, participation in church activities and the relative importance of participation in church activities compared with other activities. I attributed a numerical value to each response, and then added the values accumulated over the three questions to achieve the final classification (Appendix F). Five of 18 interviewees are classified as Evangelical fishers, five are classified as inactive Catholic fishers, three are classified as moderately active Catholic fishers, four are classified as active Catholic fishers, and one is classified as a fisher affiliated with a different religious organization. I left Evangelical interviewees in a separate category for the purposes of comparison. In addition, I created a

category for fishers affiliated with a different religious organization which includes only one interviewee. While he is not affiliated with a formally recognized religious organization, he attends Alcoholics Anonymous (AA), which he claims as his religion. It is important to note that all five evangelical interviewees and the interviewee affiliated with AA fell in the “active” religious category.

Interviewees from Punta Chueca were also categorized by religious activity level. Because the only organized religious organization in Punta Chueca is the Apostolic Church, which is an Evangelical church, I categorized its members by religious activity level in the same way that I categorized Catholic fishers in Kino Bay. Using this categorical system, one fisher out of six interviewees is an inactive Evangelical fisher, one is a moderately active Evangelical fisher, and two are active Evangelical fishers. While one other interviewee could be classified as an inactive Evangelical fisher, he has only lived in Punta Chueca for two years and is therefore less representative of the general population in Punta Chueca than other interviewees. While I included his responses in the general analysis, I did not include them in analysis of responses based on religious activity level. The final interviewee adheres to traditional spiritual beliefs of the Seri people. While I included his responses in the general analysis as well, I did not include them in analysis of responses based on religious activity level.

In addition to participation in religious activities, I classified interviewees based on affiliation with COBI and location. I classified fishers as “affiliated with COBI” if they are members of a COBI-supported fishing cooperative or if they work with and/or have close personal ties to COBI staff. I designated seven interviewees in Kino Bay as “affiliated with COBI” and eleven interviewees as “not affiliated with COBI”. I did not include interviewees from Punta Chueca in this classification because COBI has little presence there. I also placed interviewees in a location category, either Kino Bay or Punta Chueca.

After coding the data based on themes as well as the three categories described above, I ran compound queries to link text coded under the themes to text coded in the religious categories. Because of the small number of possible categories within the “affiliation with COBI” and “location” variables, I examined responses over these variables without the use of queries. I examined differences in responses based on interviewee affiliation with COBI only for questions in which COBI’s influence may have impacted fishers’ answers. In addition, I only examined differences in responses based on location when comparing the gradient in religious

participation within the Apostolic Church in Punta Chueca to the gradient in religious participation within the Catholic Church and Apostolic Church in Kino Bay.

5. Potential Biases

While I have attempted to minimize the impact of bias in this project, several potential sources of bias should be addressed. First, my own religious background and beliefs may influence my understanding of the faith and religions of interviewees. I grew up attending and am still a member of the Presbyterian Church (USA), a Protestant denomination of the Christian Church. Multiple interviewees and community members asked about my religious background and beliefs. As I indicated to them, I believe in a higher power, and my beliefs are partially based on teachings and traditions found in the Christian faith and Church.

Another potential source of bias stems from the language and cultural differences that I encountered while conducting this study. In Kino Bay, I conducted interviews in Spanish, my second language. In Punta Chueca, interviews were conducted in both Spanish and cmiiqee iitom through a translator. When discussing religion and one's livelihood, two highly personal and potentially emotional subjects, small nuances in wording can prove highly important. Some of these nuances may have been lost in translation.

In addition, the use of snowball sampling methods in both communities may have led to the exclusion of important social groups and networks in data collection. For instance, many community members in Kino Bay alluded to a large fisher network of drug and alcohol users in the town, a network with which I did not engage. As indicated above, some fishers that I interviewed in Kino Bay are closely affiliated with COBI, which likely impacts their understanding of fisheries and sustainability. As I met most of the interviewees in Kino Bay either through COBI staff or through recommendations by fishers affiliated with COBI or their friends, their understanding of fisheries and sustainability may have been impacted by COBI as well. I also knew some fishers better than others at the time of the interview, which may have affected fishers' comfort level with me and therefore impacted their responses.

Finally, I am a Caucasian woman from the United States working in a small fishing village in Mexico. While fishers are accustomed to researchers visiting these communities to conduct studies, I am no doubt a foreigner in many ways. Thus, this obvious demographic

information likely influenced community perceptions of me, impacting both my observations and interviews.

Part 3. Results

Results are presented in two parts: results from Kino Bay and results from Punta Chueca. Results stem from semi-structured interviews and participant observation conducted in each community.

1. Kino Bay

As a group, Evangelical fishers in Kino Bay proved more reluctant to engage with the interview process than Catholic fishers. I found it difficult to obtain recommendations for Evangelical fishers with whom to conduct subsequent interviews. In addition, some of these potential interviewees proved too busy to participate in the interview or simply ignored my attempts at communication. Similar situations occurred with Catholic interviewees, but with less frequency.

a. Religious Culture

Kino Bay houses about 11 distinct religious organizations, most of which include denominations of the Christian Church. I was unable to derive the exact number of organizations due to uncertainty among community members. The Catholic Church is the largest church in Kino Bay, both in terms of membership and building size. The other Christian denominations are smaller Evangelical denominations, some of which have multiple churches set up in various neighborhoods throughout the community.⁵ The Apostolic church represents the largest Evangelical denomination in terms of membership. Other denominations include, but are not limited to, the Baptist Church, the Calvary Temple Church, the Church of God, Jehovah's Witness and La Luz del Mundo (the Light of the World church). Various community members also listed AA in their list of religious organizations.

⁵ The term Evangelical will be used in this paper to refer to non-Catholic Christian denominations. The term "Protestant" is often used in the US, but I chose here to use the literal translation from Spanish to convey the slightly different meaning of the word in Mexico.

A few community members divided Kino Bay's population into three religious categories: Evangelical Christians, Catholics and those who do not attend church. As explained in the Methods section of this project, however, the lines between these categories tend to blur. Thus, though the National Institute for Statistics and Geography (INEGI) provides the official census including a breakdown of the population's religious affiliation, I asked four community members to provide their perceptions of community religious affiliation in Kino Bay. Proportions given for the Catholic Church ranged from 40% to 70% of the population. Responses for Evangelical denominations combined ranged from 30% to 50% of the population, and three of the four respondents referred to this category as the Apostolic church rather than the Evangelical churches. Finally, respondents stated that between 0% and 20% of the population is not affiliated with religion at all.

Catholic Church

The Catholic church is a large building located in the center of town, near the soccer fields and the town civic center. Community members often use it as a point of reference when giving directions because of its unusually large size. The spacious inside contains wooden pews in radiating rows facing a raised area at the front where the pulpit and altar reside. 14 images depicting the Passion of Christ line the walls of the church, and advertisements for children's first communions cover the bulletin board. The front of the church opens to a yard containing benches, and a meeting hall sits to one side.

Father Francisco Rivera, commonly known in the community as Father Pipo, presides over services and runs the general business of the church. A Spanish priest, he was appointed by Archbishop José Ulises Macías Salcedo, who presides over the Metropolitan Archdiocese of Hermosillo. While Father Pipo plays a prominent role in the community, I heard very little about him from community members. Along with his church duties, he participates in activities outside of the church, such as the national Day of the Marina festivities. Community members also alluded to two well-liked and respected Catholic nuns in Kino Bay, one of which had recently passed away. They were active players in the church and community, often visiting church-members and caring for the suffering.

I attended multiple events at and through the Catholic Church during my stay in Kino Bay, including Mass (the typical Catholic religious service) and two women's 15th birthday

parties. About 60 community members attended Mass, and the service included Biblical readings, singing, common rituals and a homily (sermon). The service remained solemn, evoking a sense reverence and awe. The priest made no mention of fishers or fisheries management. In contrast, about 300 people were present at each of the 15th birthday parties, or *quinceañeras*. Community members enthusiastically discussed the events both before and after they occurred. Dinner and a band were provided by the honoree's family, and most attendees dressed up and brought alcohol for the event. Attendees without small children continued to dance, drink and enjoy themselves late into the night.

Through interactions with community members as well as my observations of the contrasting community participation at these events, I found that religious participation of Catholic community members ranges from those who regularly attend Mass and participate in church activities to those who usually attend only large events. In addition to 15th birthday parties, these events include weddings, baptisms and other significant milestones. When asked, some Catholic community members stated that they only attend these large religious events as an excuse to party, drink, and generally enjoy themselves. More regular participants in religious activities would discuss those who attended Mass less often in a flippant or joking, but not negative, manner.

Evangelical Churches

While the Catholic Church uses one physical church in Kino Bay, Evangelical churches lie scattered in neighborhoods throughout the community. I attended a service at only one of these churches, the Strength of Jesus Christ Apostolic Church. This church, a plant from the central Apostolic church, is situated within a neighborhood in the outskirts of the town. The building itself is constructed of cement and consists of one large room with a raised platform at one end. Colorful ribbons and flowers adorned the altar, and the pastor and pulpit shared the raised platform with the band and their equipment. The congregation sat in folding chairs and comprised of about 10 women, 8 men and 12 children. Musicians played electric guitars, and the music was broadcast through microphones attached to large speakers. The singing, led by the pastor of a neighboring church, was lively and filled with clapping and story-telling. A visiting pastor from outside of Kino Bay gave the sermon, and the usual pastor led other portions of the

service. Each pastor spoke with emotion, conveying stories and teachings both from the New Testament and their own lives as the congregation continuously added “Amen!”

For the most part, Evangelical community members participate in religious activities on a more consistently regular basis than Catholic community members. This attendance is facilitated by the convenience of having churches close to people’s homes. Pastors and other church leaders usually emerge from the Kino Bay community itself, volunteering their time and energy while still fishing or working in other capacities to support themselves and their families. While Evangelical denominations do have distinct practices, belief systems and traditions, they align far more closely with one another than any of them do with the Catholic Church. Thus, combining these distinct Evangelical denominations into one group is a logical necessity for the purposes of this study.

Alcoholic Anonymous

Multiple community members alluded to Alcoholics Anonymous (AA) while discussing the various religions found in Kino Bay. Participants view it as an avenue to connect with a higher power. One interviewee told me that many people who refuse to go to church will attend AA and commune with a higher power there (G3E2). However, the proportion of the population participating in AA is extremely small compared with the proportion of those affiliated with the Catholic or Evangelical churches. I identified three AA meeting houses in Old Kino Bay, though I am unsure how many of them are still in use.

The Non-Religious Community

Finally, a significant proportion of community members remain unaffiliated with any religious organization in Kino Bay. While the line between a non-religious community member and an inactive Catholic community member remains blurry, a distinct population of non-religious community members exists in Kino Bay with whom I did not connect during my time there. All interviewees in this study had either grown up in or had at some point become affiliated with a religion. COBI staff as well as interviewees seemed wary to introduce or send me to meet non-religious fishers, often noting that many of them have alcohol and drug problems. Thus, while non-religious fishers were not included in this study, it is important to note that they constitute a large proportion of Kino Bay community members and fishers.

b. Religious Background of Interviewees

When asked directly, nine interviewees indicated that they are Catholic, and eight of these have been affiliated with the Catholic Church since childhood. Of these nine, I categorized three as inactive Catholic fishers, two as moderately active Catholic fishers, and four as active Catholic fishers.

Three interviewees indicated that they are not affiliated with a religion, though all of these indicated affiliation with the Catholic Church in the past. Of these three, I categorized two as inactive Catholic fishers and one as a moderately active Catholic fisher due to his participation in church-related activities outside of Mass and the relative importance he places on participating in religious activities.

Five interviewees indicated that they are affiliated with an Evangelical denomination. One of these five joined the church as a teenager, three joined the church in their 20s and one joined the church in his late 30s. I categorized all five of these interviewees as Evangelical fishers.

The final interviewee indicated that his religious organization is Alcoholics Anonymous, which he joined in his mid-30s. I categorized this interviewee as a fisher affiliated with a different religious organization.

Thus, interviewees who indicated affiliation with the Catholic Church tended to join as children, while those who indicated affiliation with the Evangelical Church and Alcoholics Anonymous usually joined their organizations as adults.

Family Participation in Religious Activity

Four out of the five inactive Catholic fishers indicated that their immediate family members are also Catholic. One of these four stated that his family attends services and participates in church-related activities more often than he does. The other three inactive Catholic fishers participate with the same frequency as their families. The wife and one son of the fifth inactive Catholic fisher attend one of the Evangelical churches and participate in services and church-related activities with greater frequency than him.

All three moderately active Catholic fishers indicated that their immediate family members are also Catholic, and two indicated that they participate in services and church-related

activities with the same frequency as their families. The third indicated that his mother participates more often than he does.

All four active Catholic fishers indicated that their immediate family members are also Catholic, and two indicated that they participate in services and church-related activities with the same frequency as their families. One active Catholic fisher indicated that his family participates less frequently than he does, while another active Catholic fisher indicated that his wife participates more frequently.

The families of all five Evangelical fishers attend the same church as the interviewee. Three Evangelical fishers indicated that they attend services and participate in church-related activities with the same frequency as their families, and two Evangelical fishers indicated that their families participate more frequently. When asked about the frequency of his wife's participation in religious activities, one interviewee stated:

“Puedo decir que las mujeres son más activas que los hombres. El hombre trabaja y aquí en la casa, y casi por lo normal la mujer es muy activa aquí y por allá. Nos ganan en pocas palabras. Son campeonas.” (G2E5)

“I can say that women are more active than men. Men work and are in the house, and normally, women are very active, [going] here and there. They beat us, in a few words. They're champions.” (G2E5, translation)

The fisher affiliated with a different religious organization indicated that his wife attends an Evangelical church and his children do not attend church. I have no data concerning the comparative frequency of his and his wife's participation in religious activities.

c. General Beliefs about God

Seventeen of the eighteen fishers that I interviewed in Kino Bay believe in a higher power or God and believe that God made all things.⁶ Many fishers indicated that, while not all fishers claim to adhere to a particular religion, most fishers in the community have faith in a higher power. One Evangelical fisher commented that:

⁶ I used the phrase “higher power” in my interview guide and at the beginning of each interview to allow fishers to define their own understanding of a higher power. However, because all fishers referred to their understanding of a higher power as *Dios* or “God”, I use the term “God” throughout most of the paper. Thus, for the purposes of this paper, the terms are interchangeable.

“[Dios] es el dueño de todo, pues. Él está en todo, en cualquier parte, en lo justo o injusto. Él está conmigo, contigo, con los compradores. Él pone compradores, pone exploradores, cuidadores del ambiente. Él tiene un papel importante en todo.” (G2E5)

“[God] is the owner of everything. He is in all things, in every part, in justice and injustice. He is with me, with you, with fish buyers. He provides the fish buyers, He provides explorers, environmental caretakers. He has an important role [to play] in all things.” (G2E5, translation)

A moderately active Catholic fisher, when asked what role God plays in fisheries management, responded:

“Es un asunto de fe, ¿no?...De hecho, en las mañanas yo me levanto, me persigno y me encomiendo, ‘Dios mío, pues, ayúdame, ¿no? que este día sea de buena pesca. Y aparte de que sea una buena pesca, de que me lleve con bien, por si hay un mal tiempo que no vaya a pasar algo.’...Independientemente de la religión que lleve, puede ser Apostólico, Testigos de Jehová. Para mí, yo tengo entendido que hay un Dios. Y un Dios es fe, es esperanza, es algo bueno, es algo positivo.” (G3E6)

“It’s a matter of faith, right?...In the mornings I get up, I cross myself, and I entrust myself [to God], saying ‘My God, help me. Let this day bring good fishing. Apart from bringing good fishing, let goodness be with me, so that if a bad time comes, nothing [bad] happens.’...This is independent of one’s religion; one could be Apostolic, Jehovah’s Witness. For me, my understanding is that there is one God. And that God is faith, is hope, is something good, is something positive.” (G3E6, translation)

One inactive Catholic fisher, who grew up in the Catholic Church and continues to attend for special events such as weddings and 15th birthday parties, is unsure about God’s existence. When asked if he believes in a higher power and, if so, what role the higher power plays in fisheries management, he stated:

“Si existe, no sé, está difícil. Pues, a lo mejor llevar información al pescador, ¿no? de que cuide lo que tenemos. Porque también podría decir que es Él que nos debería de dar más, por ejemplo de decir ahí que crie más o algo. Pero también está en uno, ¿no?, no nada mas en Él.” (G3E3)

“If [God] exists, I’m not sure, it’s difficult. It would be best if He brought information to the fishers, to care for what we have. Because you could also say that it’s God who ought to give us more, for example, to breed more [fish]

or something. But, it's also up to [each of us], not just up to Him.” (G3E3, translation)

Belief System Origins

When asked about how they came to understand God's role in fisheries management, most interviewees responded by explaining how they came to faith in general. Most Evangelical fishers that I interviewed indicated that God led them to the church, often when they were living a negative lifestyle. They believe that God saved them from this lifestyle. One responded:

“Él solo llega. Es nada más que abra el corazón. No más. Él solito llega y dice ‘Ábreme el corazón.’ Dice ‘Yo estoy todos los días allí tocando.’...Si no le abre la puerta del corazón, ¿verdad que no va a entrar? Porque cuando Él entra...lo limpia. Y mira todo diferente. [Antes] yo tuve un problema en el mar. Entonces, yo empecé a pedir al Señor...‘Señor, si verdaderamente existes, sácame de esto.’ Fue de algo muy peligroso...el Señor me limpió y el Señor allí me mostró...a una iglesia.” (G2E4)

“God comes [to you]. It takes nothing more than opening one's heart. Nothing more. God comes and says, ‘Open your heart.’ He says, ‘I am there every day knocking.’...If you don't open the door of your heart, He won't enter, right? Because when God enters...He cleans it. And you see things completely differently. [Before], I had a problem [while working] in the sea. So, I began asking God...‘God, if you actually exist, get me through this.’ It was something very dangerous...God purified me, and God showed me...to a church.” (G2E4, translation)

Catholic interviewees, on the other hand, indicated that their faith stemmed from attending church since they were young. They mentioned their parents' role in teaching them and bringing them to church, growing up within the church community, and the fact that it is customary for people to attend the Catholic Church. One active Catholic fisher commented that he also went to the Evangelical churches when he was younger, not because of his parents, but because of a girl, stating:

“Toda mi vida fui [a la iglesia]. Soy Católico. Yo creo en Él y en los santos... Mis padres eran Católicos...Vienen otras iglesias [a Bahía Kino] también...Yo he ido de oyente...Más antes, así íbamos [con más frecuencia] cuando éramos más joven es, íbamos para ver a las muchachas, a las hermanitas. Era una hermanita muy guapa, y por eso íbamos.” (G1E3)

“All my life, I have gone to church. I’m Catholic. I believe in God and the saints...My parents were Catholic...Other churches also come [to Kino Bay]...I have gone [to these churches] as a listener...Before, we went more frequently when we were younger, we went to see the girls, the Evangelical girls. There was one really beautiful Evangelical girl, and that’s why we went.” (G1E3, translation)

d. Responsibility for Fisheries Management

Responses used in this section stem from the “*Creencias sobre Dios y el Manejo Pesquero*” or “Beliefs about God and Fisheries Management” part of the interview guide (Appendices A and B). In this section, we discussed fishers’ individual belief systems, which do not necessarily equate to the belief systems of their respective churches. Therefore, I will not compare responses based on religious affiliation or activity level in this section, but I will continue to use the categorization system for interviewee identification purposes. It is interesting to note, however, that in some cases, the responses do align with the religious affiliation and activity level categories.

God’s Role

When asked to define God’s role in fisheries management, little difference existed between the responses of fishers in different religions and religious activity categories. Most of the fishers indicated that God’s role is to provide. One fisher, the fisher affiliated with a different religious organization, stated:

“Para mí, todo. Todo lo que pasa, todas las cosas pasan por Él. No pasan por coincidencia. Todo lo que voy a hacer, le pido a Él que me ayude.” (G3E2)

“For me, everything. Everything that happens, all things happen through Him [God]. They don’t happen by coincidence. Everything that I plan to do, I ask Him to help me.” (G3E2, translation)

Catholic fishers, however, spoke more about actively soliciting help from God and the saints to find fish than the Evangelical fishers. According to them, God helps them find a good catch, which constitutes another part of God’s role in fisheries management. Others alluded to God’s role in testing fishers’ faith. One moderately active Catholic fisher commented on a common saying about God in his response:

“Mira, cuando uno le va mal en el mar, que anda pescando y que no agarra peces, pues, uno no dice, ‘Dios mío, ¿que está pasando?’ Porque sí, hay días en que no agarras...Aquí en México, hay un dicho muy bien dicho que dice ‘Dios aprieta pero no ahorca.’ Lo que dice es que, te puede estar asfixiando, pero jamás te va a dejar morir...Entonces, eso es, lo que está haciendo Dios para poner en prueba la fe que le tenemos.” (G3E6)

“Look, when it’s going poorly for someone when they’re fishing and they aren’t catching any fish, one doesn’t say, “My God, what’s happening?” Because, yes, there are days that you don’t catch anything...Here in Mexico, there’s a great saying that says ‘God tightens, but He won’t choke you.’ It means that God can be suffocating you, but He won’t let you die...This is what God does to test the faith that we have in Him.” (G3E6, translation)

The Origin of Fish

Fishers also discussed whether God placed the fish in the sea and, if so, why God did so. Seventeen of the eighteen interviewees responded that God did put the fish in the sea. Some fishers, including all of the Evangelical fishers, seemed confident in this response, while others stated that they “suppose so” and alluded to the biblical teaching about God’s creation of the world. One interviewee, who is also unsure whether God exists, stated that he does not know if God put the fish in the sea.

When responding to why God put the fish in the sea, most fishers began with two reasons: mankind’s consumption and income. I further asked if God placed fish in the sea for other reasons. Some fishers maintained that they only serve these two purposes. However, many Catholic and Evangelical interviewees mentioned other purposes that serve mankind, such as tourist attractions, to procure exotic fish, and to provide medicine. Some interviewees also discussed functions that serve the natural world in general. Fish provide a food source for other marine organisms, clean the ocean, reproduce, provide a life form in the sea to compliment the life found on land, and provide God with some variety. Fish bones even feed dogs and chickens. When asked why God put the fish in the sea, one Evangelical fisher stated:

“Para que se multiplicaran. Para poder tener alimento nosotros para llegar en este tiempo, por supuesto. Y también porque Él piensa en todas las cosas antes del futuro. Él siempre piensa en todo, en los detalles. Para que fuéramos felices con peces.” (G2E5)

“So that they will multiply. So that we can have nourishment, [enough] to arrive at this moment, of course. Also because [God] thinks of all things before the future [occurs]. He always thinks of all things, in the details. So that we would be happy with the fish.” (G2E5, translation)

Thus, fishers across various religious affiliations and activity levels gave similar answers concerning God’s reason for placing fish in the sea and the purposes served by those fish. In addition, fishers’ responses did not vary largely when compared based on their affiliation with COBI. One fisher out of the seven fishers affiliated with COBI and three fishers out of the eleven fishers who are not affiliated with COBI indicated that fish serve only for mankind’s consumption and income. Three fishers from each group responded with additional purposes that serve mankind, as described above. Finally, three fishers affiliated with COBI and four fishers who are not affiliated with COBI responded with additional purposes that serve the natural world in general, as described above. Thus, while proportionally more interviewees affiliated with COBI believe that fish exist for purposes other than to serve fishers and mankind, the response variance between the groups was too small to discern a definitive difference given the sample size.

Resource Quantity Control

Fourteen out of the eighteen fishers interviewed believe that God created the fish, but that man has the obligation to care for them. One Evangelical fisher stated:

“Pienso que Él controla todo...Pero ahora explotamos, sólo explotamos [los recursos]. El problema somos nosotros...Pescamos como no debemos y no respetamos tallas, no respetamos vedas. Pero nosotros tenemos que hacer un buen plan de manejo de recursos.” (G2E3)

“I think that He controls everything...but now we harvest, we only harvest [the fish]. We are the problem...We fish as we shouldn’t, and we don’t respect size limits, we don’t respect fishing closures. But we have to make a good management plan for the resources [in the fishery].” (G2E3, translation)

One recurring theme in many fishers’ responses indicated that the declining resources represent a test of faith. Some alluded to the fact that God doesn’t want to hurt mankind, but that mankind is hurting itself by not changing and caring for the fish, as indicated by one active Catholic fisher’s comment:

“No la controla [la cantidad de los peces en el mar], Él. Porque nosotros tenemos que tener cuidado con los peces. Porque [se] van acabando, antes había mucho camarón, había muchas especies, como dije que todo se va acabando, lo hemos acabado. Dios no puede cuidar si uno no quiere cambiar.” (G1E5)

“He [God] doesn’t control [the quantity of fish in the sea]. Because we have to be careful with the fish. Because they are running out, before there were lots of shrimp, there were many species; as I said, all of them are running out, we have used them up. God can’t take care [of the fish] if one doesn’t want to change.” (G1E5, translation)

Four fishers out of the eighteen believe that God controls the number of fish in the sea. All four of these fishers are unaffiliated with COBI. They are evenly spread across religious affiliations, including one Evangelical fisher, one inactive Catholic fisher, one moderately active Catholic fisher, and one active Catholic fisher. When asked why God would decide to take the fish from the sea, responses varied. One fisher indicated that God is testing our faith. Others stated that God will help if one has faith and that God would never take the fish away because God cares for everyone. One fisher, comparing the falling fish populations to the Bible’s description of the Apocalypse, stated:

“Yo creo que sí [que Dios controla la cantidad de peces que están en el mar], porque sé que todo se va a acabar. Dice la Biblia que va a ver hambres, terremotos, y el mar dice que se convertirá en sangre. Y ya no va a ver peces...No quedará piedra [sobre] piedra dice. Cuántas hambres hay, cuántos terremotos, se está cumpliendo la palabra de Dios.” (G2E4)

“I believe so [that God controls the quantity of fish in the sea], because everything is ending. The Bible says that there will be famines, earthquakes, and it says that the sea will turn to blood. And there will be no more fish...It says that no stone will be left on stone. [Look at] how many famines there are, how many earthquakes there are, the word of God is being fulfilled.” (G2E4, translation)

Thus, while most interviewees believe that God creates the fish and mankind controls the number of fish remaining the sea, some interviewees believe that God controls the health of fisheries. Beliefs concerning reasons for this control or lack of control vary.

Perceived Effects of Religious Affiliation

Following these questions, interviewees were asked if their answers to these questions, and thus their perceptions of God's role in fisheries management, would have been different if they were not affiliated with their religious organization. Four of the Evangelical fishers claimed that their answers would have been different without the church. Some mentioned that, before joining the church, they drank alcohol and had different values and points of view. One Evangelical fisher however said that his answers would not have changed.

Most of the inactive Catholic fishers and moderately active Catholic fishers indicated that their beliefs would not have been the same. One fisher stated that he knew non-religious people, and that their values were different than those of religious people. One moderately active Catholic fisher referred to how the priorities of members of the Apostolic church differed from his own, saying:

“Sí, [mis respuestas] serían diferentes. Aquí, en esta comunidad, hay religiones, hay religiones que te exigen más que la Católica... Si tú piensas de venir mucho, mucho, mucho a la iglesia, te puede causar un fanatismo... Aquí, el Apostólico, no es que lo critique, pero se mira de que dejan de trabajar por estar en la iglesia. Dejan de convivir con la familia porque hay que estar en la iglesia.” (G3E6, interview, 2011)

“Yes, [my answers] would have been different. Here in this community, there are religions that require more of you than Catholicism... If you think that coming to church all the time [is a good thing], you can become a fanatic... Here, the Apostolic church, not that I'm criticizing it, but you can see that [the members of the Apostolic church] leave their work to be in church. They miss spending time with their family because they have to be in church.” (G3E6, translation)

However, most of the active Catholic fishers indicated that their beliefs would be the same even if they were not affiliated with the Catholic Church.

“No, es lo mismo. La iglesia es aquí [señaló a su corazón].” (G1E4)

“No, it's the same. The church is here [pointed to his heart].” (G1E4, translation)

Man's Role

As indicated above, most fishers, including both Evangelical and Catholic fishers, indicated that God created the fish in the sea, but that mankind controls their quantity and must care for them. One Evangelical fisher stated:

“Dios nos puso las cosas para que uno las trabajara. Pero todo eso era con conciencia. Dios no nos va a dar o va a quitar lo que uno no puede guardar o cuidar. Entonces, Dios nos puso las cosas, pero debemos hacer conciencia, no abusando de las cosas de Dios que Dios nos dio para poder trabajar.” (G2E2)

“God provides things for us so that we have work. But [He] did this with awareness. God will not give us or will take from us that which we can't save or take care of. So, God provides things, but we ought to be aware and not abuse God's things that He gave us so that we could work.” (G2E2, translation)

Some fishers also alluded to an understanding that, if man continues to exploit the resource, the resource will not exist in the future, as indicated by an active Catholic fisher:

“Hay que cuidar todo eso porque vienen las otras generaciones. Los hijos, los nietos, y no alcanzarían a ver eso, pues, por la sobreexplotación que hacemos, todos.” (G1E3)

“We must care for everything because other generations will come. Children, grandchildren, they won't be able to see this because all of us are overfishing.” (G1E3, translation)

Only two of the interviewees alluded to other impacts man has on fisheries, besides overexploitation. An Evangelical fisher described his understanding of man's impacts on water quality:

“A veces es más la sobrepesca que lo que pueden crecer [los peces], o aumentar...La otra cosa ambiental son las granjas camarónicas, el uso químico...El uso de esas cosas que el mar no acepta, pues, los aguas de afuera...También los pescaditos, el pescado o pulpo o langosta o callo quieren estar en su naturaleza, en lo que es realmente. No con otros habitantes, otros invasores o infecciones...Es el ser humano, el que acaba con los peces. La contaminación.” (G2E5)

“Sometimes overfishing is more than the fish can [overcome when they] grow and reproduce...The other environmental factors are the shrimp farms, their

use of chemicals...the use of things that the sea doesn't accept, the [contaminated] outside waters...Also, all of the marine life, the little fish, the fish or octopus or lobster or shellfish, want to be in their real natural environment. Not with other species, invasive species or infections...It's humankind that is using up the fish. It's pollution." (G2E5, translation)

Three of the four fishers that believe that God controls the quantity of fish in the sea did not mention mankind's role controlling the amount of available fish. The fourth fisher, while he stated that, if one has faith, God will provide, also stated that man does play a role in caring for marine species.

Fishers' Role

Interviewees had more practical responses when asked about the role of fishers in fisheries management in particular. Again, Evangelical fishers and Catholic fishers gave similar responses. Interviewees indicated that the role of fishers is to catch fish for sale and to care for each marine species. One moderately active Catholic fisher discussed the difference between those that conserve species and those that do not:

"Hay que conservar. Cuidar a cada especie. Pero muchos no entienden, muchos respetan y muchos no...No están bien de la cabeza [los que no respetan]. Es que muchos piensan así porque quieren ganar más, o porque no tienen para comer." (G3E5)

"We need to conserve. To care for each species. But there are many who don't understand; many respect [the species] and many don't...[Those that don't respect species] are not well in the head. Many think this way because they want to earn more [money], or because they have nothing to eat." (G3E5, translation)

Some fishers discussed the importance of following laws and norms for fishers in order to effectively care for species. When asked to explain the role of fishers in the fishery, an inactive Catholic fisher discussed closures for particular species:

"Nosotros nos regimos por las vedas del producto. Por ejemplo veda de la langosta, y entramos al pulpo, y después veda del pulpo y entramos al callo." (G3E4)

“We manage ourselves through closures of the product. For example, in the lobster closure, we start harvesting octopus. Then, in the octopus closure, we start harvesting shellfish.” (G3E4, translation)

Finally, while some interviewees indicated that fishers understand how to effectively care for the health of the fisheries, others were less confident. One Evangelical fisher stated:

“Somos el punto intermedio, somos la pieza clave. Tenemos en nuestra mano la manera de manejar los recursos.” (G2E1)

“We are the halfway point, we are the key piece. We have in our hand the [right] way to manage the resources.” (G2E1, translation)

while another Evangelical fisher said:

“Es que uno no tiene el conocimiento del daño que está haciendo...No tenemos una cultura para trabajar como debe hacerse para proteger las especies...[Necesitamos] una ayuda de parte de no se quién para que nos diga cómo debemos de hacer las cosas mejor.” (G2E2)

“One doesn’t understand the harm that one’s causing... We don’t have a culture in which we work as we ought to in order to protect species...[We need] help from, I’m not sure who, who will tell us how we should do things better.” (G2E2, translation)

e. Ritual and Religious Practice in Fisheries

I asked interviewees to discuss any teachings that they learned in their religious organization that applied to management of the fisheries. This section includes responses to this question as well as information on fisher’s use of prayer and images, which emerged as common themes throughout the interviews. As responses applied to fishers’ specific religious organizations, results in this section will describe and compare interviewee responses from different religious organizations and activity levels.

Teachings

A clear distinction exists between Evangelical and Catholic fishers’ responses related to religious teachings that apply to fisheries management. Three of the five Evangelical fishers spoke about the need to respect government laws related to fishing, which the church teaches. One Evangelical fisher noted:

“Respetar las vedas, respetarlas porque son leyes que Dios informa, dice la Biblia...Sabemos que, si no respetamos las vedas, nos estamos fallando...Y una de las enseñanzas más importante es orar a Dios.” (G2E3)

“Respect the laws. Respect them because they are laws that God gave us, says the Bible...We know that, if we don't respect the laws, we're hurting ourselves...And one of the most important teachings is praying to God.” (G2E3, translation)

Another Evangelical fisher indicated the difficulty of following the laws all the time, noting that diligence in compliance is important. Others alluded to the need to protect species and care for that which God has given, such as family and work. When asked which religious teachings specifically apply to fisheries management, one Evangelical fisher spoke of the need to practice conservation and respect the law, saying:

“La conservación, la fe. Hay bastante, pero quiero enumerar las más relevantes. La responsabilidad...Respetar las leyes terrenales. La Biblia dice que no hay ley que no ha sido puesta por Dios. Y tenemos que someternos a ellas. Si hay veda, hay veda, hay que respetarla.” (G2E1)

“Conservation, faith. There are plenty, but I want to list the most relevant ones. Responsibility...To respect secular laws. The Bible says that there is no law that has not been put here by God. And we have to submit to them. If there's a closure, there's a closure, you have to respect it.” (G2E1, translation)

Keeping one's faith and diligent prayer emerged as other common teachings discussed by Evangelical fishers.

Catholic interviewees, on the other hand, spoke about faith as the primary teaching derived from the church which related to fisheries management. No Catholic fisher alluded to respecting laws while discussing teachings from the church, though some did discuss the importance of complying with laws in other parts of the interview. For most of the inactive Catholic fishers, teachings from the church do not often pertain to fisheries management at all. One inactive Catholic fisher mentioned that one's experience counts more than religious teachings in this case, stating:

“Cada quien va con la fe de cada quien, pues. O con confianza o con experiencia. Uno tiene que ver. La fe de la iglesia [uno dice] - ay, si, el Padre me dijo, 'Te va a ir bien, ¡vete para allá y te va a ir bien!' ¿no? Puedo decir así.

O una bruja, ‘Oh, sí vete allí, y por una parte vas a agarrar de eso.’ [Risas] A veces, cuenta más tu experiencia que esto.” (G3E3)

“Each person goes with their own faith. Or their trust or their experience. You have to see. Faith from the church, one says – oh, yes, the Priest told me, ‘All will go well with you, go over there and all will go well with you!’ I could say that. Or a witch, ‘Oh, yes, go over there, and at one place you will catch this.’ [Laughter] Sometimes, your experience counts more than this.” (G3E3, translation)

One inactive Catholic fisher, however, discussed a Biblical story to illustrate the need to maintain one’s faith while fishing. He stated:

“Hablando de la Biblia, en una situación en que no había pescados, Dios les hizo tirar la red donde no había, y luego hubo.” (G3E1)

“Speaking about the Bible, in a situation in which there were no fish, God made them throw the net where there were no [fish], and then they were there.” (G3E1, translation)

Moderately active Catholic fishers and active Catholic fishers, on the other hand, found more value in applying the church’s teaching of faith to fisheries management. They also discussed how broad religious teachings could relate to one’s behavior in the fishery, such as treating others well and trying to do the right thing. One active Catholic fisher listed some important teachings that pertain to fisheries management, including “honestidad, trata hacer las cosas mejores, tiene que mejorar” (G1E5) or “honesty, trying to do the right thing, bettering oneself” (G1E5, translation).

Prayer

Most of the interviewees, both Evangelical and Catholic fishers, noted the importance of prayer while fishing. Many of them pray each time they leave to fish. A difference in the significance of this prayer, however, existed between the more religiously active fishers and the less religiously active fishers. The Evangelical fishers and the active Catholic fishers indicated that, without speaking to God and having faith, one has nothing. One Evangelical fisher stated:

“Cuando es uno Cristiano, ya uno ya piensa diferente. Yo, antes no le daba gracias a Dios. Me subía a la panga, y ‘¡Vámonos!’ Y ahora ya no, ahora te subes a la panga, y yo digo a mis hijos, antes de ir, nos sentamos, y oramos.

Nos ponemos en las manos de Dios. Y nos vamos a trabajar...Y ya a la noche, ya que estamos acostados, ‘Señor, gracias por la bendición que hiciste este día.’ Porque con nuestro propio esfuerzo, no podemos hacer nada...Es nueva su misericordia cada mañana.” (G2E4)

“When one is a Christian, one thinks differently. Before, I didn’t give thanks to God. I got in the boat, and [said] ‘Let’s go!’ And now, you get in the boat, and I say to my sons, before we go, we sit and we pray. We put ourselves in the hands of God. And then we go to work...And at night, when we are lying down, ‘God, thank you for the blessing that you made this day.’ Because with our own strength, we can’t do anything...His mercy is new each morning.” (G2E4, translation)

An active Catholic fisher discussed the help provided by the saints, saying:

“Aquí en Sonora, [pensamos] en la Virgen de Guadalupe y en San Judas Tadeo y San Francisco de Asís...Nos ayudan...Yo le pido de corazón, principalmente a Dios y aparte a los santos.” (G1E7)

“Here in Sonora, [we think about] the Virgin of Guadalupe and Saint Judas Tadeo and Saint Francis of Assisi...They help us...I ask [for help] from my heart, first to God and also to the saints.” (G1E7, translation)

Moderately active Catholic fishers also indicated the importance of speaking to God always, especially when bad times come. However, their descriptions seemed less urgent than those provided by active Catholic fishers and Evangelical fishers. Most inactive Catholic fishers described the importance of giving thanks and crossing oneself before a fishing trip, noting that, while these practices are small, faith remains an important part of a fisher’s life. One inactive Catholic fisher explained:

“Cuando amanece uno, le dice ‘Gracias a Dios,’ nada más. Y cuando buceaba yo antes de echarme en el agua, me persignaba, y va para abajo...Pero la mayoría de pescadores va con fe.” (G1E2)

“When one wakes up, you say “Thanks be to God”, nothing more. And when I used to dive, before going in the water, I crossed myself, then went down...But the majority of fishers go with faith.” (G1E2, translation)

Images

Some Catholic fishers discussed the importance of having images, or icons, on the islands that the fishers can visit while they fish. These images provide protection during fishing trips and

dives. The fishers can also pray to these images, asking for a large catch. One moderately active Catholic fisher described one of the images found on the :

“Sí. A veces en las islas, cuando vamos de viaje por cuatro, cinco días, sí hablamos, hasta tenemos una Virgen en El Estero...Siempre que estamos en el mar, hablamos...Hay veces, muchas veces en que mal tiempo y te quedas allí afuera y es lo primero que haces, ponerte a rezar.” (G3E5)

“Yes. Sometimes on the islands, when we go for a trip for four or five days, we talk, we even have a Virgin in El Estero...Always when we’re at sea, we talk...There are times, many times in which bad weather comes and we must stay away, and that’s the first thing you do, is begin to pray.” (G3E5, translation)

f. Religion’s Impact on Fisher Interactions

One section of the interview that I conducted with fishers examines how fishers incorporate their faith and religious beliefs and activities into their interactions with one another. Each of the five Evangelical fishers that I interviewed indicated that they discuss faith and the church often with other fishers. Some of them stated that fishers from Evangelical churches discuss faith and religion more often than do Catholic fishers. One Evangelical fisher stated:

“No todos hablan por lo regular. Yo soy el que aprovecha el momento para platicar con ellos [los Católicos y pescadores sin religión].” (G2E1)

“Usually, not everyone speaks [about faith]. I’m the one that takes advantage of the moment to speak with [Catholic and non-religious fishers].” (G2E1, translation)

Other Evangelical fishers noted that, while Evangelical fishers discuss faith and religion more often than Catholic fishers, all fishers worship together from time to time.

“Llevo a mis dos hijos y otros dos, somos cinco, los que alabamos a Dios, al Señor. De hecho, ponemos cantos...ponemos alabanzas...así donde estamos. Nos juntamos a veces todos con las personas que no son Cristianos.” (G2E4)

“[I] take my sons and two others, there are five of us that praise God. We sing songs [of praise]...we worship...where we are. We join together sometimes with those that are not Evangelical Christians.” (G2E4, translation)

The majority of Catholic fishers that I interviewed, however, indicated that they speak little about God and their religion while fishing. Some alluded to crossing themselves and giving thanks to God during trips. One inactive Catholic fisher said:

“No surge el tema...Siempre está Dios allí por medio, porque siempre dice uno, ‘Con favor de Dios, y que vaya bien’ o ‘Gracias a Dios’...siempre está Dios por medio, dando gracias o pidiendo ayuda.” (G1E6)

“The topic doesn’t come up...God is always there in the middle, because people always say, ‘With God’s favor, may things go well with you’ or ‘Thanks to God’...God is always in the middle, [you’re] giving thanks or asking for help.” (G1E6, translation)

Some of the Catholic fishers also mentioned that, while they do not speak often about faith and religion themselves, Evangelical fishers discuss these topics on a regular basis. Another inactive Catholic fisher stated:

“Nada más nos persignamos, nos encomendamos a Dios, nada más...Los que más hablan así son los hermanos...[Hablan] de la palabra del Señor porque son protestantes.” (G3E4)

“We just cross ourselves, we entrust ourselves to God, that’s it...The ones who talk the most are the Evangelicals...[They talk] about the Word of God because they’re Protestants.” (G3E4, translation)

One moderately active Catholic fisher indicated that fishers do discuss their faith when fishing becomes difficult or dangerous. Two active Catholic fishers out of five said that they often discuss the teachings that they learn in their church and how this applies to their everyday lives. One active Catholic fisher said:

“Sí, hablamos de esas cosas, pues. Se le viene en mente a uno a veces platicar. Hay unos que platican de su iglesia, de la Biblia.” (G1E3)

“Yes, we talk about [religious] things. It enters one’s head sometimes to talk [about it]. There are some [of us] that talk about church, about the Bible.” (G1E3, translation)

The fisher affiliated with a different religious organization (AA) described his own interactions with other fishers as well as summarized the thoughts of other interviewees well, saying:

“Allí [en AA] es anónimo...Pero si alguien lo necesita, pues sí. Algunos son cristianos, y ellos sí hablan, hablan de Dios. Nosotros no porque somos anónimos...Los Católicos y los otros piensan diferente...sí hablan, pero muy poco casi nada.” (G3E2)

“[In AA] it’s anonymous...But if someone needs it [AA], of course. Some people are Christians [Evangelical], and they talk, they talk about God. Not us because we are [an] anonymous [group]...The Catholics and the others think differently...[Catholics] speak [about religion], but very little, almost not at all.” (G3E2, translation)

Conflict

When asked directly, most of the interviewees told me that conflicts concerning fishing that are based on religion rarely occur between fishers. This sentiment was shared by both Evangelical fishers and Catholic fishers of all three activity levels. One Evangelical fisher describes why he believes that conflicts between religions are rare.

“No, porque si tu no estás de acuerdo, nada más...Cada quien va a creer. Ni yo voy a imponerles algo ni alguien va a imponer algo a mí. Cada quien tiene diferente manera de pensar.” (G2E3)

“No because if you don’t agree with me, it’s nothing...Each person is going to believe [on their own]. I won’t impose something on them, and no one will impose something on me. Each person has a different way of thinking.” (G2E3, translation)

However, while most fishers indicated that conflicts about fishing occurred infrequently, some Catholic fishers alluded to arguments between Catholic and Evangelical fishers concerning differences in beliefs. According to these interviewees, conflicts stem largely from Evangelical fishers who try to convince Catholic fishers to convert to an Evangelical denomination. One inactive Catholic fisher said:

“Los hermanos...le dedican más a estudiar la Biblia. Y siempre ocurre que nada más estas hablando ya otro tema y los hermanos están hablando de su iglesia, siempre, siempre de su iglesia...como criticar a la Virgen.” (G1E6)

“The [Evangelical] brothers...they dedicate themselves more to studying the Bible. And it always happens that you’re just talking [about] a different topic and the [Evangelical] brothers are talking about their church, always, always about their church...like [they] criticize the Virgin.” (G1E6, translation)

Finally, two fishers, an Evangelical fisher and the fisher affiliated with a different religious organization, alluded to the prevalence of crab trap robberies in Kino Bay and religion's impact on this practice. Many community members, in both personal communications and in public meetings, described how fishers often take other fishers' crab traps from the water in order to gain a higher profit without the cost of building and placing the traps. The Evangelical fisher indicated that crabbers tend to rob from Evangelical crabbers more often than from other crabbers, stating:

“Muchas veces en la jaiba, hemos visto con las trampas, hemos evitado un problema mayor como de pelear...por Dios pues. Sabemos que venimos y nos quejamos aquí pero no hacemos nada...nos calmamos sin violencia por la fe...O sea, aquí saben quiénes son cristianos. Se les hace muy fácil robarnos a nosotros porque nosotros no vamos a estar contra de ellos...Ellos nos conocen como es un pueblo chico y sabemos quién es quién.” (G2E2)

“Often in the swimming crab [sector], we have seen with the [crab] traps, we have evaded a bigger problem like a fight...for God. We do come here and complain, but we don't do anything...we calm ourselves down without violence because of our faith...Here, they know who the [Evangelical] Christians are. It's easy for them to rob [crab traps] from us because we won't do anything against them...They know who we are because it's a small town and everyone knows who is who.” (G2E2, translation)

The fisher affiliated with a different religious organization referred to his inability to continue working in the swimming crab sector due to frequent trap stealing and its conflict with his value system.

“Lo que pasa es que, nosotros, los que estamos allí [en AA] no podemos robar. Entonces no podemos trabajar en la jaiba porque empiezas con cien trampas, y regresas otro día y ya no tienes diez porque te robaron. Y otros, ‘Ah, diez, me robó diez, o yo también [decir], voy a robar diez.’ No puedo hacer eso. No puedo hacerlo, entonces mejor no trabajo [en jaiba].” (G3E2)

“What happens is that, we, those of us that are [in AA] aren't able to steal. So we can't work in the swimming crab sector because, if you start with one hundred traps, and you come back the next day and you don't have ten of your traps because they stole them from you. Others say, ‘Oh, they robbed ten from me, I'll do the same thing and rob ten traps from someone.’ I can't do that. I can't do it, so it's best not to work [in the swimming crab sector].” (G3E4, translation)

Only two fishers, however, alluded to this situation in the swimming crab industry.

Cooperatives

Fifteen of the eighteen interviewees belong to a formal fishing cooperative in Kino Bay. Ten of these fifteen fishers belong to cooperatives containing fishers from various religions. The other five belong to cooperatives whose fishers represent a single religion, usually Catholicism. Eleven of the fifteen fishers said that religion played no role in the formation of the cooperative. One moderately active Catholic fisher replied that they formed the cooperative to achieve better work conditions rather than for religious purposes, stating:

“No, nosotros mismos la formamos para trabajar agusto. Para no tener problemas con las leyes, ya tiene permisos.” (G3E5)

“No, we formed [the cooperative] to work like we wanted to work. So that we didn’t have problems with the law, so it [the cooperative] has permits already.” (G3E5, translation)

Four fishers, however, indicated that religion played a role in the formation of their cooperative. One fisher said that his cooperative was formed on a Catholic religious holiday. Another, the fisher affiliated with a different religious organization, replied that colleagues that he met through AA helped him form the cooperative. The others, an Evangelical fisher and an active Catholic fisher, described how religious teachings, such as faith, cooperation and perseverance, helped guide the formation of their cooperative.

“Creo que sí. En la paciencia, en la perseverancia y la fe. Cuando empezamos no estábamos seguros si iba a funcionar porque en el principio había mucho conflicto. Pero fuimos pacientes y seguimos perseverando y logramos obtener los permisos de pesca y eso consolidó mucho a la cooperativa.” (G2E1)

“I think so. [Religion influenced our cooperative’s formation] through patience, perseverance and faith. When we began, we weren’t sure if it would work because, at the beginning, there was a lot of conflict. But we were patient and we kept persevering and we succeeded in obtaining fishing permits, and this consolidated the cooperative a lot.” (G2E1, translation)

In addition, one free fisher, or interviewee that does not belong to a cooperative, alluded to his plans to form a cooperative including only Evangelical fishers. When asked whether his decision to remain a free fisher was based on his religion, he said:

“No. De hecho, estamos creando una cooperativa, pero puros cristianos. Queremos hacerla y hacer algo que no se ha hecho aquí en Kino. Queremos hacer algo diferente...Para decir que se le ayuda al pescador. Que se le ponga seguro. Todo eso ya queremos hacer con toda la ayuda de Dios.” (G2E4)

“No. Actually, we’re creating a cooperative, of all [Evangelical] Christians. We want to form it and do something that hasn’t been done here in Kino. We want to do something different...It’s to help fishers. To give them health insurance. We want to do all of this with all of God’s help.” (G2E4, translation)

None of the interviewees alluded to conflicts between cooperative members based on religion. This lack of religious conflict existed within cooperatives containing multiple religions as well as cooperatives with only one represented religion. One active Catholic fisher stated:

“No. Nosotros la tenemos muy aparte. Allí en la cooperativa, no nos metemos en la religión.” (G1E7)

“No. We keep it [religion] very separate. In the cooperative, we don’t deal with religion.” (G1E7)

Another free fisher, however, indicated that substantial conflicts within cooperatives led him to remain a free fisher rather than join a cooperative. He based this decision on his beliefs regarding conflict, which he traced back to teachings from the Evangelical church.

2. Punta Chueca

Due to time constraints, I performed little participant observation and no pilot interviews while collecting data in Punta Chueca. Thus, during my time there, I realized that the interview guide that I created for fishers in Kino Bay does not reflect the religious culture and beliefs of fishers in Punta Chueca as well as it reflected those of the fishers of Kino Bay. For instance, one community member in Punta Chueca mentioned that, in his perception, Christianity’s teaching of non-violence is changing the attitudes of community members in Punta Chueca toward foreigners. While, in the past, the community often used violence to protect their territory and

resources, Christianity now teaches them to practice non-violence and forgiveness. In addition, interviewees from Punta Chueca seemed more confused by some of the questions than did most of the interviewees in Kino Bay. For these reasons, while I have organized information in this section in the same way that I organized information in the section concerning Kino Bay, some sub-topics are missing due to lack of adequate data.

a. Religious Culture

The Apostolic Church constitutes the only formal religious organization in Punta Chueca. Only one church exists, as opposed to the multiple Apostolic churches observed in Kino Bay, and it stands adjacent to the central plaza in the middle of town. The church has one pastor, a native to Punta Chueca who has played this role for about 14 years. Though attendance and observation of a service proved impossible due to logistics, interviewees commented that the church holds services each day.

While most community members attend the Apostolic church, some elder community members worship according to the traditional belief systems of their ancestors. A designated area near the water is used for annual celebrations, including the first turtle nesting and New Year's Eve. One community member alluded to tension between the Apostolic church and those who hold the traditional beliefs. Another fisher mentioned that the frequency of these celebrations has declined in recent years, stating:

“Aquí, el 1 de julio, empiezan todas las actividades de la Comcaác. Hacer todo en cacería, en pesca, la colección de frutas del monte...Y eso es de mucho tiempo atrás...Y de allí, empieza con los espíritus, con todo eso...Ahora, las actividades siguen lo mismo, la pesca y de todo. Pero, ya no se practican cosas que antes se hacían...Antes, eran festividades para cada actividad...Ahora, con tanto trabajo, quita un poco de ese espacio [para festivales].” (G4E2)

“Here, on July 1st, all of the Comcaác [Seri] activities start. There's hunting, fishing, the collection of fruit from the mountains...And this [practice] is from a long time ago...From there, it [the festival] starts dealing with the spirits, and all of that...Now, the activities are the same, fishing and everything. But now they don't practice the same things that they did before...Before, there were festivals for each activity...Now, with so much work, it's taken a bit of the space [or time] away [from performing festivals].” (G4E2, translation)

Despite Catholicism's wide presence throughout Mexico, no Catholic churches exist in Punta Chueca. Multiple interviewees attributed this to an apparently widely known story concerning a past incident with a visiting priest. While I was unable to corroborate this account with historical documentation, I will include it, as it presents an interesting example of oral history in Punta Chueca. In the past, a priest moved to Punta Chueca for a time to establish a church. One day, a local child killed a dove residing in the priest's yard. The priest poured salt into the child's mouth as a punishment, and the child suffocated. The town subsequently ran the priest out of Punta Chueca, and the Catholic Church has not attempted to establish itself in the community since that time.

b. Religious Background of Interviewees

When asked directly, four interviewees indicated that they are affiliated with the Apostolic church, and all of them joined the church in their twenties. Of these four, I categorized one interviewee as an inactive Evangelical fisher, one interviewee as a moderately active Evangelical fisher and two interviewees as active Evangelical fishers. One interviewee adheres to traditional indigenous spiritual beliefs. The final interviewee, who was baptized in the Apostolic church but no longer claims affiliation with it or any religion, has lived outside of Punta Chueca for most of his life.

Family Participation in Religious Activity

All four interviewees that claimed an affiliation with the Apostolic church indicated that their immediate family members are also Apostolic. Three of them stated that they attend services and participate in church-related activities with the same frequency as their family members, and the other indicated that his family participates more frequently than he does. The interviewee that adheres to traditional beliefs stated that, while his children do not currently agree with his belief system, they will as they grow older. The interviewee who has lived mostly outside of Punta Chueca indicated that his family members include Catholics, Apostolic Evangelicals, and those that do not follow a religion.

c. General Beliefs about God

Each of the six interviewees stated that he believes in some sort of higher power. Four of the six are members of the Apostolic church, though three of these four indicated that their answers would remain the same without the influence of their religion. One of the four Apostolic fishers, one of the active Evangelical fishers, alluded to his weekly devotion to God, stating:

“Para mí, el domingo es de Dios. Es el dueño de todo, el que formó.” (G4E4)

“For me, Sunday is for God. He is the owner of everything, the one that formed [everything].” (G4E4, translation)

The fisher who bases his beliefs on the traditional spiritual beliefs of the community described his understanding of humankind’s relationship with nature and the spirit:

“Esto [el poder supremo] es lo más importante. Eso es lo que nos da para el alimento diario. El alimento es de aquí del mar. Hay canciones por parte de los ancianos. Hay canciones de ballenas, de delfines - por medio del espíritu. Ese espíritu llega a la persona para hacer el esfuerzo para hacer esta canción... Ya está disminuido el espíritu, pero lo que hay todavía, ¡lo guardamos! Es el espíritu del mar que pasa la canción a la gente. El mar comparte con la gente. El poder en el mar transmite su poder a la gente para que ellos se conviertan a ser pescadores. El mar está llamando a la gente a ser pescadores. La familia mía vive del mar, para tener comida y la luz. El mar siempre está, nunca me deja. Es el regalo que me da el mar, como alguien que está llamando para dar un regalo para sostener la familia. Cuando tengo un buen catch, le doy gracias al espíritu y canto a las ballenas y delfines.” (G4E1)

“This [the higher power] is the most important thing. This is what gives us nourishment each day. The nourishment is from here, the sea. There are songs from the elders. There are songs about whales, about dolphins – [which are sung] through the spirit. The spirit comes to the person to give them the strength to make this song. The spirit is diminishing, but what is left, we save! It’s the spirit of the sea that gives the song to the people. The sea shares with the people. The power of the sea transmits its power to the people so that they will become fishers. The sea is calling the people to be fishers. My family lives from the sea, to get food and light. The sea is always there, it never leaves me. It’s the gift that the sea gives me, as someone calling to give a gift to sustain the family. When I have a good catch, I give thanks to the spirit, and I sing to the whales and the dolphins.” (“G4E1, translation)

d. Responsibility for Fisheries Management

Responses used in this section stem from the “*Creencias sobre Dios y el Manejo Pesquero*” or “Beliefs about God and Fisheries Management” part of the interview guide (Appendices C and D). In this section, we discussed fishers’ individual belief systems, which do not necessarily equate to the belief systems of that fisher’s church.

God’s Role

Three of the six interviewees indicated that God or the Spirit plays the most important role in fisheries management. Fishers, scientists and the government constituted the other actors included in this ranking. These three fishers included the two active Evangelical fishers and the fisher who holds traditional community beliefs. The remaining three interviewees, on the other hand, placed God’s role as least or second to least important compared with the roles of these other actors.

Each of the six interviewees believes that a higher power placed the fish in the sea. In addition, five of the fishers stated that the higher power placed the fish so that mankind could eat and work. The sixth fisher did not answer this question. One active Evangelical fisher said:

“[Dios puso los peces en el mar] para sobrevivencia [del hombre]. Para que no se vaya a morir de hambre.” (G4E3)

“[God put the fish in the sea] for [human’s] survival. So that we don’t die of hunger.” (G4E3, translation)

When asked if the fish serve any purpose other than to feed and provide work for mankind, only two fishers cited other purposes. One fisher discussed the possibilities for tourism provided by the fish. The other, the moderately active Evangelical fisher, spoke about their contribution to the ecosystem.

“Toda esta en una balanza, el medio ambiente, en toda la región marina, hay una convivencia de las cosas. El pez necesita de un lobo marino, el lobo marino de la tierra, y la tierra necesita de, no sé, algún otro alimento, como el agua, el oxígeno de alguna manera. Entonces, todo va en un [sistema], que son necesarios todos los ingredientes para que sea tan maravilloso esto. Si falta uno, uno solo de estos, cambia drásticamente. Entonces, sirven más que alimento y más que un ingreso económico.” (G4E2)

“All is in a balance, the environment, in the entire marine region, there is a harmony of things. The fish needs the sea lion, the sea lion needs the earth, the earth need, I don’t know, something to nourish it, like water, oxygen in some way. Then, it all goes in one [system], all the ingredients are necessary to be so amazing. If one is missing, just one of these, it changes drastically. So, they provide more than food or economic income.” (G4E2, translation)

Finally, two fishers indicated that the higher power controls the number of fish in the sea once they are created. The first, an inactive Evangelical fisher, stated that God controls the number of fish in the sea and would never allow them to disappear. The other fisher, who follows the traditional belief system of the community, described how the spirit of the sea leads fishers away from fish if the fish need protection. He said:

“El espíritu da la fuerza al hombre y me da el conocimiento de donde voy para el catch. Hay veces que te deja. El pescado esta protegido por el espíritu. El espíritu mueve los pescados al otro lugar para que no sean dañados por de la gente.” (G4E1)

“The spirit gives strength to humankind and gives me the knowledge of where to go to harvest [fish]. There are times when it leaves you. The fish are protected by the spirit. The spirit moves the fish to another place so that they are not hurt by the people.” (G4E1, translation)

Man’s Role

Three of the six interviewees stated that humankind controls the quantity of fish in the sea. The moderately active Evangelical fisher described the situation as one of free will. God places the fish in the sea, and humans decide whether to fish them sustainably. Another fisher, an active Evangelical fisher, stated:

“Él los crió y es la obligación de la gente cuidarlos. Él los formó y necesitamos cuidar a ellos.” (G4E4)

“He [God] created them, and it’s humans’ obligation to care for them. He made them and we need to take care of them.” (G4E4, translation)

When describing the more specific role of fishers in fisheries management, five of the six interviewees mentioned caring for the environment and using sustainable practices, in addition to fishing and selling. The two active Evangelical fishers discussed abiding by seasonal closures. One said:

“[Hacen] las vedas temporales, es como con la jaiba. Pescas en marzo, y en abril, ya cierra la pesca y no se pesca jaiba.” (G4E3)

“[They follow] seasonal closures, like the swimming crab. You can harvest it in March, and in April, its fishery closes and you can’t harvest swimming crab.” (G4E3, translation)

Two other interviewees, the moderately active Evangelical fisher and the fisher who follows the traditional belief system in Punta Chueca, discussed the behavior of fishers outside of Punta Chueca. The moderately active Evangelical fisher compared the fishing behaviors of residents in Punta Chueca with that of other fishers, stating that resources remain in Punta Chueca because its fishers behave more sustainably. The other fisher indicated the perceived injustice of outsiders taking resources from Punta Chueca, stating:

“La gente entra por medio de un permiso. Yo nunca dejaría entrar la gente de afuera con permiso porque vienen aquí en vez de allá.” (G4E1)

“The people enter with a permit. I would never let outsiders enter with a permit because they come here instead of [fishing] over there [in their own waters].” (G4E1, translation)

e. Ritual and Religious Practice in Fisheries

Apart from church services and the traditional festivals described above, interviewees did not describe any particular religious rituals that apply to their work in fisheries. When asked specifically whether teachings that they learn in their church apply to fishing, most of the fishers indicated that the church and fisheries are distinct. One active Evangelical fisher stated:

“[La religión y la pesca] son diferentes. No aplican.” (G4E4)

“[Religion and fishing] are different. They don’t apply [to each other].” (G4E4, translation)

The moderately active Evangelical fisher, however, described how teachings from the Apostolic church could apply to how fishers treat one another and the environment, saying:

“En la iglesia te dicen de ser un poco sociable con todo lo que se refiere, a personas, al medio ambiente, y a todo lo que eres como individuo. Son buenas pláticas. De alguna manera, te hace respetar un poco la vida. Porque fue creado

por Dios, porque tengo que ser buena persona. Muchas cosas. De alguna manera, influye poquito.” (G4E2)

“In the church they tell you to be a bit sociable to everything that refers to people, the environment, and everything that you are as an individual. They are good talks. In some way, you start to respect life. Because it was created by God, because I have to be a good person. Many things. In some ways, [the church] influences [you] a bit.” (G4E2, translation)

For the most part, however, interviewees saw fishing as completely separate from teachings in the church.

f. Religion’s Impact on Fisher Interactions

The four Apostolic interviewees indicated that fishers do discuss religion with one another while they work. One active Evangelical fisher indicated that they usually talk about events related to the church if they discuss religion at all. The other three fishers, on the other hand, indicated that most interactions between fishers concerning religion relate to sharing the gospel with non-Christian or inactive Christian fishers. The other active Evangelical fisher described these interactions, saying:

“Les explicamos cómo pueden participar ellos. Los de afuera, el evangelismo.” (G4E4)

“We explain how they can participate [in the church]. [We speak to] outsiders, we tell them the Gospel.” (G4E4, translation)

The inactive Evangelical fisher discussed how the more active Evangelical fishers often ask him to consider attending church again.

Conflict

Three of the four Apostolic fishers stated that no conflicts based on religion occur among fishers while they work. One fisher, the inactive Evangelical fisher, however, indicated that non-Christian fishers sometimes fight with him about his religion. He stated:

“Hablan mal de la religión mía o del Dios que tenemos, Jehovah. Hablan a veces otros pescadores que no quieren en eso. Por eso me enoja yo con ellos. Peleamos. Son de ambos lados [de aquí en Punta Chueca y afuera]...Me enoja yo.” (G4E5)

“They speak badly about my religion or about the God that we have, Jehovah. Other fishers that don’t like this [religion] speak [about it] sometimes. So, I get mad at them. We fight. It’s from both sides [from here in Punta Chueca and from outside]...I get mad.” (G4E5, translation)

The fisher who follows the traditional belief system mentioned a conflict between the Apostolic Church and the non-Apostolic community due to the foreign origin of the Apostolic faith.

“Hay un pequeño problema entre la iglesia aquí porque viene de fuera. Ya viene de allí, y ellos tienen sus creencias.” (G4E1)

“There is a small problem with the church here because it comes from outside [of the community]. They come here, and they have their beliefs.” (G4E1, translation)

He did, however, clarify that this conflict has little effect on fishers specifically.

Cooperatives

Five of the six interviewees are members of a cooperative. Three claimed membership to the Seri cooperative, which used to be a community-wide cooperative of fishers. The cooperative includes both Apostolic and non-religious fishers. The other two fishers claimed membership to smaller cooperatives. One of the cooperatives includes only Apostolic fishers, while the other cooperative includes both Apostolic and non-religious fishers. All five interviewees stated that religion did not play a role in the formation of the cooperative. One interviewee, the moderately active Evangelical fisher, summed up their general sentiment, saying:

“Es que la cooperativa es una cosa y la religión es otra cosa. Son aparte. Son diferentes.” (G4E3)

“The cooperative is one thing and religion is another. They’re separated. They are different.” (G4E3, translation)

Part 4. Discussion

1. Kino Bay

Results from this study indicate that religion plays an important role in the lives of Kino Bay fishers, sometimes individually, but always at a community level. While fishers claiming

affiliation with the Catholic church far outnumber those affiliated with Evangelical churches, Evangelical organizations represent a unique and growing part of community life. Beyond these broad findings, however, results from this study provide only hints of possible trends concerning the impacts of faith and religion on fishers' values, behaviors and interactions within Kino Bay fisheries. Because of my small sample of interviewees whom I encountered through limited social networks, as well as the short amount of time spent within the community, I cannot make conclusive claims about the Kino Bay fishing community. However, I will outline here some of the possible trends suggested in these results which provide intriguing directions for future research.

To begin, as mentioned above, religion plays an important role in the lives of fishers in Kino Bay. The families of most of my interviewees often participate in religious organizations as well, with as much or more frequency than the fishers themselves. In addition, the Catholic church, Evangelical churches and non-religious organizations such as AA play distinct roles in the lives of their members. While Catholic interviewees often joined their church at a young age, Evangelical interviewees and the interviewee affiliated with AA usually joined their churches after reaching adulthood. The teachings and traditions practiced within religious organizations, as well as the manner interviewees were introduced or converted to them, help determine the roles that the different organizations play in the interviewees' lives.

While interviewees participate in religious activities to varying degrees, most of them believe in a higher power and believe that that higher power plays a role in managing the fisheries on which they depend. Recall from the introduction that many of the fishers who participated in the studies in the Chesapeake Bay and in coastal North Carolina believe that God, not humans, controls the population size of fish and other marine organisms (Paolisso 2002; Brown 2008). In contrast, most interviewees from Kino Bay believe that God provides fish while humans contribute by caring for the health of fisheries. Interestingly, interviewees' affiliation with COBI showed no obvious influence on their beliefs concerning God's role vs. humankind's role in fisheries management. However, as most of the interviewees were at least socially connected with a fisher who is affiliated with COBI, this sample was both too small and too unrepresentative to confidently make the claim that a relationship with an NGO has no influence on fishers' belief systems.

Multiple Evangelical interviewees indicated that teachings from their religious organization require adherence to secular fishing laws and regulations. This finding aligns with the common Evangelical belief that secular authority and laws were ordained by God and should not be contested (see Introduction). While some Catholic interviewees mentioned the importance of respecting fishing laws at some point during the interview, no Catholic fisher indicated that religious teachings included this instruction. Both Evangelical and Catholic interviewees discussed maintaining strong faith as an applicable component of religious teaching. Most of them felt that their religious organization had a large impact on their beliefs about God and God's role in fisheries management, though fewer active Catholic interviewees agreed with this assertion.

Diligent prayer constitutes an important aspect of fishing for most interviewees, especially for those most active in their religious organizations. While many interviewees indicated that religion represents a valuable part of their lives, some said that they discussed religion while fishing more than others. Many of the interviewees agree that Evangelical fishers discuss their religious beliefs far more often than Catholic fishers, sometimes asking Catholic fishers to convert to their religious denomination. These interactions and attempts at conversion sometimes result in tension or more serious conflicts. The formation of interviewees' cooperatives generally had little to do with religion.

Two interviewees indicated that Evangelical fishers may be at a disadvantage in the swimming crab industry due to their ethics regarding stealing and disobeying the law. The interviewees stated that, in order to harvest a profitable amount of swimming crabs, fishers must steal one another's traps. Evangelical fishers do not steal traps; they therefore not only miss out on this source of additional traps, but may also lose their own traps to theft. In addition, one interviewee indicated that Catholic and non-religious fishers actually target Evangelical fishers' traps because they know that Evangelical fishers will not steal from them in return. While only two interviewees mentioned this phenomenon, this finding fits well with the allusion in the introduction to increasing segregation of Evangelical Christians by Catholic Christians. It also suggests that fishers' behaviors within this fishery could stem from cultural motivations that are related to but distinct from basic economic incentives.

2. Punta Chueca

In Punta Chueca, while religion plays a role in fishers' lives, it seemingly plays a less important role in community life than observed in Kino Bay. Again, results from this section should be taken as hints toward possible trends, even more so because I did not conduct participant observation in Punta Chueca and only collected data there for a day and half. However, some potentially interesting trends emerged, despite this short timeframe.

While interviewees participate in religious activities to varying degrees, all of them believe in some form of higher power. All interviewees believe that the higher power created fish, and two believe that this higher power controls the quantity of fish in the sea. In addition, only half of the interviewees believe that mankind controls the number of fish in sea, though most of them did indicate that sustainable fishing practices constitute an important role for fishers in fisheries management.

Interviewees do not believe that religious teachings apply to fisheries. Similar to those in Kino Bay, Evangelical interviewees, all of whom attend the Apostolic church, often discuss their faith in an attempt to convince others to convert. However, interviewees in Punta Chueca indicated no other interactions concerning religion, and most interviewees described little to no conflict with other fishers concerning religion. However, they did allude to general tensions between the Apostolic church and those that adhere to traditional belief systems.

3. Comparison between Kino Bay and Punta Chueca

The examination of the role of faith and religion in two fishing communities with similar fisheries characteristics lends itself easily to a comparison between the two study sites. However, due to the fact that specific results presented here can provide only hints of what may be occurring within these two communities, I will not compare specific results more than I already have. However, broadly speaking, the religious groups in Kino Bay and Punta Chueca present an interesting comparison.

First, the religious activity levels of interviewees from the Catholic church in Kino Bay were easily separated into different categories due to the variance in religious participation among these fishers. However, among Evangelical interviewees in Kino Bay, little variance in religious participation existed. In Punta Chueca, on the other hand, though only four of the six interviewees were Evangelical, their religious activity levels varied greatly. This variance among

Evangelical interviewees in Punta Chueca thus resembled the variance in activity level observed among Catholic interviewees in Kino Bay.

However, the Evangelical fishers' interactions with other fishers in Punta Chueca more closely resembled the Evangelical fishers' interactions with other fishers in Kino Bay. While Evangelical fishers in both communities seem to discuss their beliefs more regularly than other fishers, this discussion does not appear to cause conflict in Punta Chueca, as it does in Kino Bay. In addition, no Evangelical fishers from Punta Chueca indicated that religious teachings apply at all to fisheries management, in contrast to Kino Bay. These findings, as well as the fact that some Evangelical fishers are less active than others in Punta Chueca, suggest that the Evangelical churches in Kino Bay may have more active members who follow more strict guidelines than the Evangelical church in Punta Chueca. If true, this observation could have interesting causes and implications, both generally and specifically for fisheries management.

4. Conclusions and Further Research

This paper serves as an exploratory study, examining the presence and role of faith and religion within the Kino Bay and Punta Chueca communities. While little can be said definitively concerning actual patterns and dynamics among the fishers in these communities, this study has provided the groundwork for future, more extensive work in these localities. Future studies should include long-term field stays in which researchers have the time and resources to conduct many interviews within a variety of social networks. Follow-up studies should focus on triangulating claims made by fishers concerning fisher interactions and how values play out in actual behaviors. For instance, if Evangelical teachings in Kino Bay do promote compliance with fishing regulations, does this value translate into fisher compliance with those regulations? Conversely, do Catholic fishers actually engage in illegal activities more often than Evangelical fishers, as could be happening in the swimming crab industry? Finally, as I look toward beginning work on my dissertation, I am also interested in examining how religious organizations may play a role in fostering or hindering participation by stakeholders in fisheries governance.

This work adds to the growing collection of studies examining the role of faith and religion in fisheries common-pool resource management. Ultimately, studies such as this can provide a more holistic understanding of the possible cultural realities present in resource-

dependent communities. This project helps elucidate the importance of faith and religion in Mexico and the impacts that these cultural factors can have at both the individual and community scale.

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Appendix A. Interview Guide

Entrevistador:

Fecha:

Lugar/Hora de la entrevista:

Datos Personales:

1. Edad:
2. Lugar de nacimiento:
3. ¿Por cuanto tiempo ha vivido aquí?
4. ¿Es la pesca o el buceo su ocupación principal?
5. ¿Por cuales especies pesca Ud.?
6. ¿Con quienes viaja para trabajar? Familiares/amigos/conocimientos
7. ¿Cómo empezó Ud. ser pescador/buzo?
8. ¿Cuál fue el último año de la escuela que completó?
9. ¿Cuántas personas tiene en su familia? ¿De cuáles edades?

Creencias sobre Dios y el manejo pequero:

10. Algunos pescadores de aquí han definido el manejo pequero así: “Es una manera de cuidado para los especies y el ecosistema marino, porque si no cuida a las especies, no habría que cuidar.” ¿Es Ud. de acuerdo con esa definición?
*Si si, sigue con la siguiente pregunta.
*Si no, ¿cuál es su definición del manejo pequero?
11. ¿Cuál es el papel de cada uno de los siguientes en el manejo pequero? Ordénelos por la importancia que tenga:
 - a. Los pescadores
 - b. Un poder supremo
 - c. Los científicos
 - d. El gobierno
12. ¿Cómo llegó a esta conclusión sobre el papel de un poder supremo?
13. Si cree en un poder supremo, ¿Cree Ud. que el poder supremo puso los peces en el mar?
*Si si, ¿Para qué los puso allí?
*Si no, sigue al número 15.
14. ¿Sirven los peces para algo más que una fuente de comida o una manera de ingreso?
15. Si cree en un poder supremo, ¿piensa que el poder controla la cantidad de los peces en la pesquería?
*Si si, ¿Por qué decidiría el Dios que los peces ya no estarán?
*Si no, sigue al número 16.

Datos Religiosos

16. ¿Actualmente Ud. es miembro de alguna iglesia o religión? ¿Si sí, cuál? ¿A Alcohólicos Anónimos?
*Si no, sigue al numero 18.
17. ¿Cuánto tiempo lleva como miembro de esa religión?
18. ¿Pertenció Ud. a alguna religión en el pasado? ¿A cuál? ¿Todavía tiene creencias de esa

religión?

*Si no, sigue al 20.

19. ¿Cuál de las siguientes opciones describe (o describió) su participación en su religión?
(responde para cada una)
- a. Asisto a servicios religiosos o misas:
 - 1. una vez por día
 - 2. una vez por semana
 - 3. una vez por mes
 - 4. solo para eventos especiales como bodas o quinceañeras
 - 5. otro
 - b. Participo en actividades de mi religión aparte de los servicios religiosos o misas:
 - 1. una vez por día
 - 2. una vez por semana
 - 3. una vez por mes
 - 4. otro
20. ¿Son los otros miembros de su familia que viven juntos con Ud. miembros de la misma iglesia o religión?
21. ¿Asisten ellos a los servicios religiosos o misas con la misma frecuencia que Ud.? ¿Mas? ¿Menos?
¿Participen en actividades de su religión aparte de los servicios religiosos o misas con la misma frecuencia que Ud.? ¿Mas? ¿Menos?
22. ¿Afectan Ud. y sus creencias religiosas las creencias y participación religiosa de su familia?
23. Le voy a dar unas frases, ordénelas por importancia:
- a. Tener tiempo con la familia.
 - b. Participar en actividades religiosas – ie: rezar, asistir a la iglesia, etc.
 - c. Tener tiempo para divertirse.
 - d. Mantener el equipo de pesca en buenas condiciones- limpiar la panga, reparar el motor, etc.
 - e. Participar en actividades que mejoren la comunidad.
 - f. Hacer deporte.

Actitudes Religiosas

24. Si actualmente es miembro de alguna religión o fue miembro antes, ¿Piensa Ud. que sus respuestas a las preguntas 10-15 fueran diferentes si no fuera miembro de su religión?
¿Cuáles? ¿Por qué?
25. Si actualmente es miembro de alguna religión o fue miembro antes, ¿Cuáles son las enseñanzas de su religión que aplican al manejo de los recursos pesqueros? ¿Cómo aplican?
26. ¿Habla Ud. de estas enseñanzas o de su religión con otros pescadores durante el día? ¿Otros pescadores lo hacen?
27. Si sí, ¿Sobre que hablan? Haga una tacha por cada uno. Explícalo por favor.
- a. Si van a asistir a algún evento religioso
 - b. Las enseñanzas de la iglesia
 - c. Su trabajo en la iglesia (si tiene Ud. una posición, si van a construir una nueva iglesia, el evangelismo, etc.)
 - d. Sus creencias y fe

- e. Como aplican las enseñanzas de la iglesia en su trabajo
 - f. Como aplican sus creencias en su trabajo
 - g. Otro
28. ¿Ha ocasionado la religión algún conflicto entre Ud. y otros pescadores? ¿Entre otros pescadores?

Religión y la Conformación de las Cooperativas

29. ¿Pertenece Ud. a alguna cooperativa u otro grupo de pescadores organizados?
30. Si sí, ¿Qué religiones están representadas en la cooperativa u otro grupo? ¿Sabe? Pregúntele por denominaciones.
*Si sea un miembro de una cooperativa pesquería u otro grupo:
31. ¿La religión de los miembros de la cooperativa influyó en su conformación? Explícalo por favor.
32. ¿Ha ocasionado la religión de los miembros de la cooperativa algún conflicto entre ustedes? Explícalo por favor.
*Si sea un pescador libre que pertenece a alguna religión:
33. ¿Su religión influye en su decisión de ser como pescador libre y no participar en alguna cooperativa? Explícalo por favor.

Appendix B. Interview Guide (translation)

Interviewer:

Date:

Place/time of interview:

Personal Information:

1. Edad:
2. Place of birth:
3. How long have you lived here?
4. Is fishing or diving your primary occupation?
5. For which species do you fish?
6. Who do you travel with to work? Family/friends/acquaintances
7. How did you get started as a fisher/diver?
8. What was the last year of school that you completed?
9. How many people are in your family? How old are they?

Beliefs about God and Fisheries Management:

10. Some local fishers have defined fisheries management like this: “Is a way to take care of the species and the marine ecosystem, because if you don’t take care of the species, there won’t be anything to take care of.” Are you in agreement with this definition?
 - *If so, go to the next question.
 - *If not, what is your definition of fisheries management?
11. What is the role of each of the following in fisheries management? Rank them by importance:
 - a. Fishers
 - b. A higher power
 - c. Scientists
 - d. The government
12. How did you reach this conclusion about a higher power?
13. If you believe in a higher power, do you think that this power put the fish in the sea?
 - *If so, why did He put them there?
 - *If not, go to number 15.
14. Do the fish serve a purpose other than providing food and a source of income?
15. If you believe in a higher power, do you think that this power controls the amount of fish in the fishery?
 - *If so, why would He decide to take the fish from the sea?
 - *If not, go to number 16.

Religious Information

16. Are you currently a member of a church or religion? If so, which one? Are you a member of

Alcoholics Anonymous (AA)?

*If not, go to number 18.

17. How long have you belonged to this religion?

18. Have you belonged to a particular religion in the past? To which one? Do you still hold the beliefs of this religion?

*If not, go to number 20.

19. Which of the following options describes (or described) your participation in your religion? (respond for each)

a. I attend religious services or Mass:

1. Once per day
2. Once per week
3. Once per month
4. Only for special events like weddings and 15th birthday parties
5. Other

b. I participate in religious activities other than religious services or Mass:

1. Once per day
2. Once per week
3. Once per month
4. Other

20. Are the other members of your family that live with you members of the same church or religion?

21. Do they attend religious services or Mass with the same frequency as you? More? Less?

Do they participate in religious activities other than religious services or Mass with the same frequency as you? More? Less?

22. Do the beliefs and religious participation of your family affect your beliefs?

23. I will give you some sentences. Rank them by importance:

- a. To spend time with the family.
- b. To participate in religious activities – ie: to pray, to attend church, etc.
- c. To have time to have fun.
- d. To keep the fishing gear in good condition – to clean the boat, to repair the motor, etc.
- e. To participate in activities that improve the community.
- f. To play sports.

Religious Attitudes

24. If you are currently a member of a religion or you have been in the past, do you think that your responses to questions 10-15 would have been different had you not been a member of your religion? Which ones? Why?

25. If you are currently a member of a religion or you have been in the past, What religious teachings apply to the management of fishing resources? How do they apply?

26. Do you talk about these teachings or about your religion with other fishers during the day?

Do other fishers do this?

27. If so, what do you/they talk about? Put a check by each one. Please explain.
- a. If they're going to attend a religious event
 - b. Teachings from the church
 - c. Their work in the church (if they hold a position, if they're going to construct a new church, the gospel, etc.)
 - d. Their beliefs and faith
 - e. How the teachings from the church apply to their work
 - f. How their beliefs apply to their work
 - g. Other
28. Has religion caused any conflicts between you and other fishers? Between other fishers?

Religion and the Formation of Cooperatives

29. Are you part of a cooperative or other organized group of fishers?
30. If so, what religions are represented in the cooperative or other group? Do you know? Ask for Christian denominations.
- *If you are a member of a fishing cooperative or other group:
31. Did the religion of the cooperative's members influence the cooperative's formation? Please explain.
32. Has the cooperative members' religions caused any conflicts between you/them? Please explain.
- *If you are an independent fisher that adheres to a religion:
33. Did your religion influence your decision to be an independent fisher and not join a cooperative? Please explain.

Appendix C. Consent Form

Investigación sobre cómo la religión impacta el manejo de recursos naturales y la formación de las Cooperativas en Bahía de Kino y Punta Chueca, México

Universidad de Duke, La Escuela de Nicolás del Ambiente y Ciencias de la Tierra

Soy Leslie Acton y estoy estudiando para mi maestría en la Universidad de Duke, Escuela de Nicolás. Le quiero invitar a participar en la investigación de mi programa de maestría. El proyecto se refiere al manejo de las pesquerías en Kino y lo realizo en colaboración con la asociación civil llamada Comunidad y Biodiversidad o COBI. Como parte de esta investigación, quiero entrevistar a varios pescadores de Bahía de Kino. La meta de esta investigación es explorar cómo la fe y las creencias de los pescadores influyen en sus pensamientos sobre el manejo de las pesquerías y sobre la formación de las cooperativas.

Cada entrevista será una conversación entre nosotros y nos tomará alrededor de dos horas de su tiempo. No hay una respuesta correcta o incorrecta, ni estoy esperando alguna respuesta en específico. Los resultados de esta entrevista (junta con otras entrevistas y observaciones) serán utilizados para cumplir con los requisitos de mi programa de maestría.

Le contacté a Ud. porque pienso que sus respuestas son importantes y de ayuda para esta investigación. Para su comodidad, le informo que su identidad será confidencial. Cada entrevistado será llamado con un título, por ejemplo “Grupo 1, Pescador 1”, para que sus respuestas sean anónimas en el reporte final. Sus datos personales estarán en una base de datos a la que solo yo tengo acceso y que está protegida con un clave. Los utilizaré solamente para contactarle si necesitamos hacerle otra entrevista. Después de cumplir con nuestras entrevistas, borraré sus datos y solo usaré el título para el análisis y reporte.

Con su autorización, voy a grabar la entrevista. Esto me ayudará a escribir un reporte sobre la discusión. Solamente yo y mi supervisor tendremos acceso a esta información. También, recuerde siempre que, si no quiere responder a alguna pregunta, no lo tiene que hacer. Si quiere terminar la entrevista, me puede decir en cualquier momento.

Si tiene alguna duda ahora o en cualquier momento durante la entrevista, dígame y le responderé con la mejor información que tengo. Si está de acuerdo con lo anterior, indíqueme si puedo empezar a usar la grabadora y de preferencia firme abajo. Si desea contactarme en el futuro, mi correo electrónico lda5@duke.edu. Así mismo puede contactar a alguien de COBI y ellos me contactarán.

Leslie Acton

____ Estoy de acuerdo hacer esta entrevista.

____ No estoy de acuerdo hacer esa entrevista

Fecha: _____

Appendix D. Consent Form (translation)

Study concerning how religion impacts the management of natural resources and the formation of cooperatives in Kino Bay and Punta Chueca, Mexico

Duke University, The Nicholas School of the Environment and Earth Sciences

I am Leslie Acton, and I am completing my Masters at Duke University, the Nicholas School. I would like to invite you to participate in a study which I am carrying out for my Masters program. The project focuses on fisheries management in Kino, and I am conducting it in collaboration with a non-government organization called Comunidad y Biodiversidad or COBI. As part of this study, I would like to interview fishers in Kino Bay. The goal of the study is to explore how fishers' faith and beliefs influence their thoughts about fisheries management and about the formation of cooperatives.

Each interview will consist of a conversation between us, and it will take about two hours of your time. There are no correct or incorrect answers, and I am not hoping for any specific answers. The results of this interview (along with other interviews and observations) will be used to complete the requirements of my Masters program.

I contacted you because I think that your responses are important and helpful for this study. For your comfort, I want to inform you that your identity will remain confidential. Each interviewee will be identified using a title, such as "Group 1, Fisher 1," so that your answers remain anonymous in the final report. Your personal information will be in a database to which only I have access and which is protected with a password. I will use this data only to contact you only if we need to carry out another interview. After completing our interviews, I will erase your personal data and will only use the title described above for the analysis and final report.

With your authorization, I will audio record this interview. This will help me to write a report about the discussion. Only my supervisor and I have access to this data. Also, remember that, if you do not want to respond to any question, you do not have to. If you want to stop the interview, you can tell me so at any time.

If you have any doubts now or any time during the interview, let me know, and I will respond to the best of my knowledge. If you agree with the above, let me know if I can start to use the recorder, and sign below. If you would like to contact me in the future, my email is lda5@duke.edu. You can also contact someone at COBI, and they will contact me.

Leslie Acton

_____ I agree to do this interview.

_____ I do not agree to do this interview.

Date: _____

Appendix E. Nodes Used for Analysis in NVivo 9.0

- Teachings
- Question Analysis Types
 - Quantitative Analysis Questions
 - Qualitative Analysis Questions
- Prayer
- Percents
 - Punta Chueca
 - Kino Bay
- PC Religious Description
- PC Religious Affiliation
 - Very Active
 - Spiritual
 - Moderately Active
 - Inactive
- Man's role in fisheries management
 - Scientists
 - Government
 - General
 - Fishers
 - Control of fish quantities
- Location
 - Punta Chueca
 - Kino Bay
- KB Religious Affiliation
 - Very Active
 - Moderately Active
 - Inactive
 - Evangelical
- KB Religion Descriptions
 - Overall description of religious culture
 - Evangelical Church
 - Catholic Church
- God's role in fisheries management
 - Reasons for placing fish
- Placing fish
 - God's role - general
 - Control of fish
- Fisher interactions
 - Faith and fishing
 - Faith - general
 - Conflicts
- Family Religious Participation
- Faith and cooperatives
 - Religions in Cooperative

- Creation of the Cooperative
- Conflicts
- Beliefs about God - general
- Affiliation with COBI
 - Non COBI Affiliation
 - COBI Affiliation

Appendix F. Categorization of Religious Activity Level

I categorized the Catholic interviewees in Kino Bay and the Evangelical interviewees in Punta Chueca into distinct religious activity levels based on their responses to three interview questions (Appendices A and B). I associated a *religious activity value* to each response, as outlined below. The sum of these religious activity values determined each interviewee’s religious activity level. The following list shows how I separated interviewees into religious activity levels by ranking.

Total of Religious Activity Values	Religious Activity Level
4-7	Active
2-3	Moderately Active
0-1	Inactive

I derived the above totals by adding the religious activity values from each of the following three questions. I’ve provided the religious activity values associated with the answers to each question in bold.

Question #19a. (Appendices A and B)

Which of the following options describes (or described) your participation in your religion?

- a. I attend religious services or Mass:
 - 3:** Once per day – once per week (inclusive)
 - 2:** Once per week – once per month (inclusive)
 - 1:** Once per month or any religious services
 - 0:** Only for special events like weddings and 15th birthday parties

Question #19b. (Appendices A and B)

Which of the following options describes (or described) your participation in your religion?

- b. I participate in religious activities other than religious services or Mass:
 - 1:** Agree
 - 0:** Disagree

Question #23. (Appendices A and B)

23. I will give you some sentences. Rank them by importance:

- a. To spend time with the family.
- b. To participate in religious activities – ie: to pray, to attend church, etc.
- c. To have time to have fun.
- d. To keep the fishing gear in good condition – to clean the boat, to repair the motor, etc.
- e. To participate in activities that improve the community.
- f. To play sports.

In Question #23, interviewees ranked these choices using the numbers 1-6. I based the religious activity value received for this question on the ranking that the interviewee gave to option b. In the following list, the ranking given for option b is on the left, and the associated religious activity value is on the right in bold:

- 1: **3**
- 2: **2**
- 3 or 4: **1**
- 5 or 6: **0**