Religious Interpretations for the Causes of the 2004 Indian Ocean Tsunami

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Introduction

A key element of culture, religion helps us understand how people across the globe interact with their environment on a daily basis, as well as during extreme events (e.g., Mitchell 2000 and 2003; Schmuck 2000; Schmidlin et al., 2009). Irrespective of faith, geographic location, and cultural and social backgrounds, many people, since the beginning of recorded history, have believed that a divine or external spiritual force creates disasters. In other words, disasters are sent by Almighty God to punish people for their sins. For example, famines, which were common in Palestine and Egypt during the pre-Christian era, were interpreted by many as weapons of God’s armory or as punishments (Middleton and O’Keefe, 1998).

After Hurricane Katrina damaged the Gulf Coast on August 28, 2005, many religious groups within the U.S. seemed predisposed to see the hand of God in the disaster (Salkowe, Tobin, and Bird, 2006). Some fundamentalist Christian groups claimed that the hurricane was sent to punish New Orleans, a city known for raucous festivals. Other groups believed that this disaster was God’s punishment of the U.S. for supporting the removal of Jewish settlers in the Gaza Strip (Reuters, 2005). In the aftermath of the 2005 Kashmir earthquake, many Islamic leaders interpreted the disaster as punishment from God (Reale, 2010). A similar interpretation was also advanced after Pakistan experienced the worst floods in its history in 2010 (Shamsie, 2010).
Each religion has its own ways of linking natural disasters to one or more of their precepts. These precepts vary in regards to details, but, for the most part, the basic principle remains the same, even in this globalized world; any particular disaster is due to the sins of the population (e.g., Kapur 2010; Mitchell 2003 and 2000; Turner and Hacker, 2011). These sins can be attributed to immorality, avarice, greed, and/or impurity. For those that consider a natural disaster to be an act of God, some believe it to be a punishment for their sins, whereas others consider it to be just a warning sign to change their lives (Reale, 2010).

This analysis of the literature focuses on religious interpretations of the 2004 Indian Ocean Tsunami (hereafter "the Tsunami"). Specifically, it is based on religious interpretations of Tsunami survivors in six South and Southeast Asian countries published in print media, including refereed journals and newspapers. Relevant information of Tsunami-affected countries in Africa is not widely available; African countries, in general, were not as severely affected as several countries of South and Southeast Asia. For these reasons, this paper will focus on affected countries in South and Southeast Asia, specifically, Indonesia, Thailand, Malaysia, India, Sri Lanka, and the Maldives.

The Tsunami deserves close scrutiny because the event affected significant numbers of adherents of four of the world’s major religions (Buddhism, Christianity, Hinduism, and Islam). Prior to this event, no single disaster event had affected so many followers of so many different religious groups. Because religious beliefs may hinder external efforts to mitigate a disaster’s impact, this study has direct relevance for emergency management personnel and others involved in reducing the suffering of disaster survivors, as well as in assisting their recovery from such extreme events.

It is worth noting that the beliefs and practices of followers of a particular religion are hardly uniform among all its followers. Variations result from many factors, not least of which is the intermixing of cultural elements from followers’ geographic location. Additionally, the religious interpretations of individuals often reflect their personal views, which are not necessarily representative of their religions, and for this reason their views may cross religious boundaries.

The 2004 Indian Ocean Tsunami

On the morning of December 26, 2004, a 9.0 magnitude earthquake shook the western coast of North Sumatra, Indonesia. The epicenter was 18.6 miles (31 km) below sea level (Rofi, Doocy, and Robinson, 2006). 1 It occurred at the fault line where the Indian tectonic plate slips underneath the Burma plate. This shift – and resulting earthquake – pushed the Burma plate up as much as 15 feet (4.57 meters) over 600 miles (965 km) of its length. This sudden movement caused several major tsunamis, which radiated outward from the epicenter in all directions (Townsend, 2006).

Waves produced by the earthquake hit the Sumatran coast only 15 minutes after the quake and were as high as 100 feet (30.48 meters). These same waves struck Thailand 75 minutes after the earthquake and Sri Lanka and India some 4 hours later. Tsunami waves reached as far as Somalia and Kenya, approximately 3,100 miles (5,000 km) away from the epicenter. As a tsunami approaches, beaches actually get longer as water recedes before the waves arrive. In places such as Thailand, people went exploring on the newly exposed sand, only to be struck by huge waves that can move as fast as 30 miles (45 km) per hour when they hit land (Paul, 2007). 2 As many as 14 countries (Bangladesh, India, Indonesia, Kenya, Madagascar, Malaysia, the Maldives, Myanmar, the Seychelles, Somalia, South Africa, Sri Lanka, Tanzania, and Thailand) were impacted by the Tsunami (Paul, 2007). Figure 1 shows the major religions of the tsunami-affected countries.

1. The magnitude of this earthquake was later upgraded to between 9.1 and 9.3.
2. Tsunamis often arrive in several waves up to 90 minutes apart; however, the first wave is always the largest.
With the exceptions of the Maldives, not all coastal areas of the affected countries were affected by the Tsunami. For example, in India this disaster affected only the coastal areas of Tamil Nadu, Kerala and Andhra Pradesh, and the Union Territory of Pondicherry, all in south India, as well as the Andaman and Nicobar Islands in the Bay of Bengal (Nirupama, 2009). Likewise, only the western coast of Thailand was affected by the Tsunami (Charnkol and Tanaboriboon, 2006).

According to a UN report published by the Office of the Secretary General’s Special Envoy for Tsunami Recovery, the Tsunami resulted in the deaths of 186,019 people (UN, 2006). Nearly all of the fatalities (99.75 percent) occurred in only four countries: India, Indonesia, Sri Lanka, and Thailand. Almost all the deaths caused by the Tsunami in Indonesia occurred in the northern-most province of Aceh, which was closest to the epicenter of the earthquake. In addition to fatalities, the Tsunami inflicted thousands of injuries and destroyed approximately 400,000 homes, leaving about 2 million people homeless. In addition, an estimated 1.4 million people lost their means of livelihood. In monetary terms, the Tsunami caused US $10 billion in damages (Kurita, et al., 2007; UN, 2006).

One notable feature of the Tsunami is that it hit two areas of Indonesia and Sri Lanka that were already experiencing complex emergencies. Aceh has been under martial law since the early 1990s, imposed by the Indonesian government in order to deal with a separatist movement organized by the military wing of the Free Aceh Movement (Gerakan Aceh Merdeka [GAM]) of the self-declared Acehnese government-in-exile in Sweden (Brown, 2005). A peace agreement between GAM and the Indonesian government was signed in Aceh in 2005 and hostilities between these two parties ended (Billon and Waizenegger, 2007).
Another separatist conflict had been continuing for more than two decades between Sri Lankan government forces and Tamil Tiger rebels (Liberation Tigers of Tamil Eelam [LTTE]), who run a parallel administration in the northeastern part of Sri Lanka (which was severely ravaged by the Tsunami) (Price, 2005). The root cause of this conflict between ethnic Tamils and Sinhalese was associated with the numerically dominant Sinhala community's attempt to secure their political dominance through the suppression of the Tamil language and Tamil enfranchisement. The conflict caused the deaths of more than 70,000 people and the displacement of between 500,000 and 1 million (Blaikie and Lund, 2010). The conflict officially ended in 2009 with the death of rebel leader Pravakaran.

Six provinces (Phang-Nga, Ranong, Satun, Trang, Krabi, and Phuket) of western Thailand, all situated along the Andaman Sea were severely affected by the Tsunami (Charnkol and Tanaboriboon, 2006). The economies of these provinces are largely dependent on the tourism, which was immediately affected by the images of death and destruction shown around the world (Buranakul, 2005). In terms of religion, four of the six southern provinces of Thailand are different from the rest of the country because the Muslims of Malay ethnic group comprises the majority population (Merli, 2010). This part of Thailand has been historically characterized by tension between ethnic Thais and ethnic Malays, who are mostly Buddhists and Muslims, respectively. A low level insurgency exists in some of these southern provinces between Muslim secessionists and Thai government forces.

Methods

The method for this study is an in-depth analysis of the relevant literature. For the past six years, literature searches were conducted every four months to identify scholarly and popular literature published in English on the religious interpretations of the Tsunami. Pubmed, CINAHL, EMBASE, Web of Science and Knowledge, PsychInfo, and Google scholar were searched with the following keywords: “religious interpretations of the 2004 tsunami,” “the 2004 tsunami and religion,” “tsunami and religion,” and “the 2004 tsunami.” These searches were augmented with the references from relevant articles. This approach allowed us to evaluate the effectiveness of the search strategy and identified articles overlooked due to unusual titling (Uscher-Pines, 2009).

Findings

Many survivors of the Tsunami regarded this disaster as an act of God. They strongly believed that through this event God showed His will, against which they were powerless. Others interpreted the event as God's efforts to test their belief in God's almighty power while at the same time demonstrating this power. They do not look upon the Tsunami as a divine curse and this view provides an in-built psychological cushion that allows them to absorb a tragedy of this scale. The way the Tsunami survivors provided religious interpretations of this event, however, was far from homogeneous. The interpretations differed from one religious group to another as well as from one affected country to another. For this reason, the views of the Tsunami survivors are presented by religious group. Because of their respective similarities, interpretations of followers of the two monotheistic religions (Christianity and Islam) are presented first followed by the views of Hindus and Buddhists. Some overlapping, however, is unavoidable.

3. Some Thais are Muslim and there are small minorities of Muslims that are neither Malay nor Thai.
Christianity and Islam

Many Acehnese Muslims believe that the Tsunami was divine punishment for lay Muslims shirking their daily prayer and/or following a materialistic lifestyle. This is particularly true for younger Muslims who had drifted from Islam, consuming alcohol and drugs, becoming involved in illegitimate sex, and not meeting their obligation to pray five times a day. An Islamic leader (imam) in Thailand maintains that Muslims in Aceh were Muslims in name only because they did not really follow Allah. He further claims that the Tsunami arrived in places where people commit sins, which can be attributed to immorality, indecency, avarice, greed, and impurity (Merli, 2010).

Muslim religious leaders in Aceh also claim that Allah was angry because Muslims were killing Muslims in the ongoing civil strife in the province (Broadway, 2005; Wieringa, 2010). Because of this strife, according to an allim (Muslim scholar) in Thailand, “there are no ulama (interpreters of Islam) in Aceh anymore, they have either left or been killed” (Merli, 2010, 109). This allim believes that the presence of religious leaders, scholars, and preachers contributes to the maintenance of morality and, therefore, in a sense, deters Allah’s wrath (Merli, 2010). A similar explanation was provided by followers of other religious groups in South and Southeast Asia. For example, some Christians claim that God caused the Tsunami as a response to sins such as abortion, fornication, adultery, covetousness, homosexuality, disobedience, and lies (Merli, 2010).

Based on information published in the newspapers, Wieringa (2010) reported that the conviction that the Tsunami was an act of God is widespread among Muslims in Aceh and the rest of Indonesia. A poll conducted in January 2005 also reported that half of Malaysian respondents attributed the disaster to God, who is offended and displeased with Muslims for not more closely observing the tenets of Islam (Wieringa, 2010). Pointing to the fact that more women than men were killed by the Tsunami, some Islamic scholars in Indonesia claim that God is more displeased with women and, therefore, women were responsible for the disaster (Felten-Biermann, 2006; McDonald, 2005). They therefore insisted that Acehnese women should strictly conform to Islamic law to avoid another tsunami (Wieringa, 2010).

Consequently, young women in Aceh were targets of persecution from several fundamentalist Muslim groups if their mode of dress did not seem sufficiently modest, if they were seen walking on the streets unescorted, or if they socialized too freely with male friends. Female immorality is widely considered by these groups as one of the sources of the “divine wrath” that brought about the Tsunami (Campbell-Nelson, 2008). Other Islamic radical groups were still patrolling city streets in Aceh months after the Tsunami, in order to find people who were drinking, or people not praying when they should be.

In contrast to their Muslim counterparts, the Tsunami is seen by many Indonesian Christians as God’s revenge against the Muslims of Aceh because they had mistreated Christians in the province. As noted, Aceh is located in the western part of Indonesia and a small number of Christians live there. Many Christian in Indonesian perceive themselves as the focus of God’s love and attention and believe that the Tsunami was divine punishment aimed at the Muslims of Aceh because some of them have burned Christian churches and murdered pastors (Campbell-Nelson, 2008). As further substantiation of this claim, a Salvation Army officer in Sri Lanka points to the fact that officers of this Christian organization were stationed all along the coast, but none died. The officer insists that

4. It is worth noting that as many as four times as many women as men were killed in some Tsunami-affected areas of Sri Lanka, Thailand, Indonesia, and India (Gautham, 2006). This is not an unusual finding given that the disaster literature suggests that mortality rates from natural disasters are higher for women than men (Paul, 2011). For example, Ikeda (1995) reported that the female age-cohort of 20-49 years had a mortality rate averaging four to five times higher than that of males. For the explanations for greater numbers of female deaths than male deaths caused by the 2004 Tsunami see Paul (2011).
God carefully directed the Tsunami to prevent Christian deaths (Robinson, 2005). As the following story suggests, this perception is even acknowledged, to some extent, by some Muslims.

On December 25, 2004, Christians in the Muslim-dominated town of Meulaboh in Aceh province wanted to celebrate Christmas, but the local Muslim leaders objected to such a celebration. They suggested to the Christians that they celebrate Christmas outside the town perimeter. Thus, the 400 Christians in this town celebrated Christmas on a hill outside the town boundary. The following morning the Tsunami destroyed Meulaboh and almost everyone who remained in town died. The 400 Christians who celebrated Christmas on the hill were saved. The few Muslim survivors of Meulaboh acknowledged that God had punished them. Some asked: “Why are there so many of us who died in this disaster, and none of the Christians are destroyed” (Sugimoto et al., 2011, 233). Christians in Meulaboh consider this the direct intervention of God to save his children. Although the authenticity of the story has been questioned, the persistence of the story as an explanatory legend indicates the extent to which religion is tied to the interpretation of natural disasters.

Similar “miracle” stories are shared by followers of the other three religions affected by the Tsunami in South India. Members of these groups not only believe these miracle stories, they are responsible for perpetuating them. Such stories attempt to prove that God favors one religious group over others. For example, Christians claim that most of the residential houses and other structures around the Velanganni Shrine, located in the coastal town of Nagapattinam in Tamil Nadu, India, were washed away by the Tsunami, but the Tsunami waters did not enter the shrine, even though it is at the same elevation as the town (Sugimoto et al., 2011). Several other Christian facilities located along the coast of Tamil Nadu also remained unaffected by the Tsunami, even though buildings near these facilities were battered by the Tsunami waters (Sugimoto et al., 2011).

Likewise, Muslims of Tamil Nadu state presented published photographs (via the Internet) of a mosque located on the shore that stood solid without any damage. Although thousands of homes near the coast were annihilated by the Tsunami, coastal mosques remained relatively intact. Local Muslims believed that God protected his houses. Few, however, claim that coastal mosques in Aceh survived because they were more sturdily built than most of other structures (Relaxjack, 2005).

Hindus of coastal Tamil Nadu also endeavored to show that their gods are no less powerful than those of Muslims and Christians by circulating stories about statues of gods at coastline shrines also left intact (Sugimoto et al., 2011). A statue of Buddha also survived the Tsunami at the Thailand resort of Phi Phi. These “miracle stories” are an interesting cultural byproduct of the Tsunami. Instead of creating religious conflicts, these stories helped survivors cope with the severe impact of the Tsunami (Price, 2005). Referring to the Tsunami, Sugimoto and his colleagues (2011, 233-34) claim that “one important ‘miracle’ was the disappearance of religious differences and conflicts.” An unprecedented solidarity and acts of kindness were evident in many communities devastated by the Tsunami. (Clark, 2005; Price, 2005; Trainor and Kendra, 2005). For example, in Maruthamunai, a Muslim town on the war-torn southeast coast of Sri Lanka, Hindus and Muslims assisted each other with emergency aid, rescue, and clearing activities. They received donations from all over Sri Lanka – from Sinhalese, Tamils, and Muslims (Korf et al., 2010).

In presenting Islamic theodicies associated with the Tsunami, Merli (2010) reports that belief in the supernatural origin of the Tsunami was widespread among Muslims in southern Thailand. One Thai Muslim woman told of palm tree branches bent as if in prayer right before the Tsunami hit (Merli, 2010). Another claim came from a Muslim religious leader in Sri Lanka who insisted that a satellite image taken as the Tsunami hit the country’s southwest coast showed that the shape of the waves spelled out “Allah” in Arabic (Figure 2). He tried to convey the message that Islam is God’s favored religion, yet he interpreted the cause of the Tsunami in a broader context, maintaining that Allah sent the Tsunami as punishment because people are ignoring his laws (Stern, 2007). Similarly, several Muslim communities in Southeast Asia treated the Tsunami as a specific warning from Allah telling them to change their lives (Merli, 2010).
Hinduism and Buddhism

Available literature suggests that some Hindu survivors in India and Buddhist survivors in Thailand and Sri Lanka had a different interpretation of the cause of the Tsunami, one that was consistent with the basic tenets of both religions. They believe in karma (deed), which is understood by both Hindus and Buddhists as a universal, unavoidable system that oversees cause and effect, action and reaction (Levy et al., 2009; Falk, 2010). The principle of karma is that one’s actions in past lives will affect one’s life today and that one’s actions today will touch one’s future lives (Stern, 2007). Thus, karma, which draws on the concept of reincarnation, is related to past, present, and future lives. According to the doctrine of karma, there are no innocent victims. It buffers anger against authority of God, and its framework allows the plentitude and perfection of God to remain intact (Kapur, 2010).

Based on the precepts of karma, Buddhists and Hindus hold the view that the Tsunami was the outcome of “bad karma” in their past lives. According to this line of thinking, many coastal residents of India blame themselves instead of looking for someone or something else to blame. A considerable proportion of Sri Lankan Buddhist survivors consider the Tsunami a local tragedy and stress that there is no place in Buddhism for blaming others, and they too blame themselves. Consistent with the doctrine of karma, some of these survivors maintain that tragic events similar to the Tsunami are not unexpected in one’s life (Stern, 2007; Levy et al., 2009). Surprisingly, one Buddhist priest in southern Thailand claimed that the Tsunami was exclusively caused by natural forces and not by bad karma (Merli, 2010).

As followers of polytheistic religion, Hindus believe in lesser deities or local gods and goddesses. Some Hindus, therefore, do not consider disasters “acts of God,” but rather acts of multiple gods and/or goddesses. This interpretation was provided by fishermen from 161 coastal villages in the Indian states of Tamil Nadu, Kerala, and Andhra Pradesh, and the Union Territory
of Pondicherry. Immediately after the Tsunami, a questionnaire survey, containing 16 questions, was administered in these villages. According to this survey, several fishermen mentioned that the sea goddess was displeased and angry due to their past sins, and for this reason she punished them through this event (Nirupama, 2009). To calm the anger of this goddess and protect them from future tsunamis, many survivors along the coast of southern India performed rituals to the goddess Gangamma (goddess of the sea and water) only one week after the disaster (Nirupama, 2009). Besides blaming _karma_ and local gods and goddesses, many in India maintain that the Tsunami hit the east coast because of moral degeneration, political corruption and immorality among its citizens (Kapur, 2010).

A considerable number of Hindus in India rejected religious interpretations for the causes of the 2004 Tsunami. One software engineer in Kolkata claimed that: “This is a natural disaster and we should accept it that way.” He further added: “All this talk of god punishing us is nothing but crap” (Dhar and Roy, 2004). In fact, scientists, in general, eschew religious explanations for the tsunami pointing instead to human actions that have caused the deterioration of many natural coastal features that have been defending coastal residents from tsunamis for centuries (e.g., outlying sand bars, corals, mangrove, sand dunes, and mangrove forests). These features – particularly mangrove forests – have increasingly become the price of shipping port construction, which replaces natural “no-cost” defense against natural disasters with flat ground (Dhar and Roy, 2004).

**Discussion and Conclusion**

Based on an analysis of the religious causes for the 2004 Tsunami, it appears that many adherents of four major religious groups (Buddhists, Christians, Hindus, and Muslims) affected in South and Southeast Asia by the Tsunami interpreted the event as “divine punishment.” They stress that the Tsunami was divine punishment for modern ills and claim that people of different faiths are to blame for not obeying divine commands or laws (Dhar and Roy, 2004; Stern, 2007). This explanation emphasizes survivors’ guilt and sinfulness, which is to be punished by nature’s extremes. Such a conception of disasters is often associated with fatalistic and submissive attitudes, which generally lead to inappropriate behaviors and/or the unwillingness of those at risk to mitigate or even react rationally when hazards are imminent.

However, some differences in interpretations of the cause of the Tsunami are evident between followers of monotheistic versus polytheistic religions. A strong focus on the “will of God” is evident among both Muslims and Christians of Tsunami-impacted countries. By contrast, some Hindu victims interpreted the Tsunami using the doctrine of _karma_ and/or the wrath of the local sea goddess. Buddhists also interpreted the disaster according to the doctrine of _karma_. This does not mean that they do not believe in a supreme deity, but they do not necessarily attribute all disasters to God. Followers of a polytheistic religion generally do not seek to understand what they interpret as divine intent.

Despite some differences and a wide range of causal interpretations for the Tsunami, the notion that there is “divine punishment” for the wicked is part of many religious traditions. Some rationalize the Tsunami in terms of the science of earthquakes, whereas others incorporate science with religious beliefs. These interpretations are often neither contradictory nor mutually exclusive, but represent part of a continuum of explanation between science and culture or between tradition and modernity (Rigg et al., 2005). Some people struggle, however, to explain why the Tsunami caused the deaths of many innocent people. In an extensive review of the existing literature, this issue was raised and explained by an _allium_ in southern Thailand. He claimed that “God wanted to strike some sinners and many died because they just found themselves in the same places” (Merli, 2010, 107). Both Muslims and Christians believe that innocents who died would go to heaven as “martyrs” (Wieringa, 2010).
As noted, some Tsunami survivors of all religious faiths strongly believe that God is the ultimate cause of everything, including the Tsunami. By believing in divine intervention, survivors of the Tsunami not only maintain their faith in a supernatural power in the aftermath of this disaster, but their faith also helps them cope with the extensive destruction of extreme natural events and overcome the effects as quickly as possible. This is a convenient and rational way of dealing with someone or something that is out of people’s reach in a context of daily hardship. It must be stressed that the religious interpretations of the 2004 Tsunami presented in this paper reflect individual perceptions and are not necessarily representative of all, or even most Tsunami survivors. There are many survivors who do not subscribe to the view that the Tsunami, or any other natural hazard, represents an inevitable part of a divine plan.

Another important fact is that we often quote and refer to the views of religious leaders like the **imam**, who not necessarily represent the majority view. In a single event, when a “sinner” died, the religious leaders called that a punishment, and when an “innocent” died, the leaders wished a place in haven for that person (Wieringa, 2010). If we put these statements together, we feel that they may be derived from a state of helplessness and having no control over a situation.

The present study found that religious interpretations of the Tsunami were not radically different among survivors and members of the four major religious groups studied shared similar perceptions. Survivors widely regarded the disaster as divine punishment, with the exception of some Buddhist and Hindu survivors, who also explained the Tsunami in the context of *karma* and/or the displeasure of local deities.

Several shortcomings of this study warrant mention. For Buddhists and Hindus, religious interpretations of 2004 Tsunami are based on a limited number of cases. This is primarily due to the few published articles or reports concerning the views of followers of these two religious groups. This problem could be avoided by conducting face-to-face interviews with tsunami survivors belonging to these two religious groups. Unavailability of required funding led us to select an alternative approach to proceed with this study. However, despite limited availability of relevant information from secondary sources, religious interpretations of Hindu and Buddhist survivors have been incorporated for comparison purposes as well as to provide additional insights on the selected topic.

For the reason mentioned above, no attempt has been made to examine whether causal interpretation differs by branches within Buddhism, Christianity, or Islam, or by caste in the case of Hinduism. Among Christian survivors of the Tsunami, Catholics in South and Southeast Asian countries, and among Islam, followers of the Sunni branch suffered the most. In contrast, it appears almost all castes of Hindus in South India and Sri Lanka were nearly equally affected by this Tsunami. The same is also true for both branches (Mahayana and Theravada) of Buddhism.

There are several possibilities for future explorations regarding religion and hazard events. An obvious direction would be an investigation of intrareligious interpretations for causes of extreme events, including the Tsunami, and an exploration of whether theological differences within a particular religious group guide or influence disbursement of emergency aid. This is suggested because each branch and/or denomination is far from internal homogeneity. Focusing on a different disaster might also prove useful. Finally, to make findings more conclusive, future research in this area should be based on empirical studies.

References

