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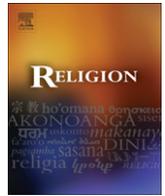
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## Religions, natural hazards, and disasters: An introduction

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### ABSTRACT

This editorial serves as an introduction to the special issue of Religion on Religions, Natural Hazards, and Disasters. It sets out some conceptual background and briefly reviews the existing literature on religion, natural hazards, and disasters. It also provides a brief assessment of the role of religious and groups in reducing the risk of disasters.

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Disasters associated with natural hazards are on the rise worldwide. Disasters basically result from the spatial and temporal conjunction between the occurrence of a harmful natural hazard and a vulnerable human society. Available databases show that the number of disastrous events increased sharply between the first and second half of the 20th century ([Centre for Research on Epidemiology of Disasters, 2008](#); [Corporación OSSO and La Red de Estudios Sociales en Prevención de Desastres en América Latina, 2008](#)). The first decade of the 21st century has since brought about further damage. [Guha-Sapir et al. \(2004\)](#) reported that, between 1974 and 2003, more than 2 million individuals were killed and 182 million rendered homeless, with about 5.1 billion people cumulatively affected. Over the same period, estimated reported damages reached US\$ 1.38 trillion. Overall, there is sufficient evidence to support the widely acknowledged assertion that the occurrence of disasters is increasing. This serves as a rationale for the present special issue.

In a time of disasters, religion easily stirs the attention of the media, who are keen to cover alleged “acts of god” or the religion-related fatalistic attitudes of victims. Furthermore, disaster stories are omnipresent in the tradition of the three major monotheist religions, Islam, Judaism and Christianity ([Dynes, 1998](#)). Surprisingly, however, the set of scientific studies on the topic is limited. All major recent treaties on hazards and disasters – as well as older ones – have overlooked or totally omitted religion in their assessment of the works issues in the field (see, for example, [Burton et al., 1993](#); [Drabek, 1986](#); [Dynes, 1994](#); [Hewitt, 1983a, 1997](#); [Lewis, 1999](#); [Oliver-Smith and Hoffman, 1999](#); [Rodriguez et al., 2006](#); [Wisner et al., 2004](#); [White and Haas, 1975](#)). Likewise, no journal has so far dedicated a special issue to the interplay of religion and disasters. Only [Dynes and Yutzey \(1965\)](#) provided an initial theoretical overview. The religious studies and theology fields have been similarly silent on issues pertaining to natural hazards and disasters ([Chester, 1998](#)).

This special edition of *Religion* is an attempt to fill this gap. It compiles three Southeast Asian case studies which were prepared for a panel of the 5th European Association for South East Asian Studies (EuroSEAS) conference held in Naples, Italy, between 12 and 15 September 2007 ([Lindberg-Falk](#); [Merli](#); [Schlehe](#)). These initial articles were complemented by three additional contributions ([Chester and Duncan](#); [Dove](#); [Wisner](#)). In this editorial, we set out some conceptual background and briefly review the existing literature on religion, natural hazards, and disasters. This should enable the reader to critically assess the contribution of the present volume.

### Natural hazards and disasters: some theoretical issues

Disasters have long been explained in terms of their being the consequence of the extreme dimension of natural hazards. The so-called dominant hazard disaster paradigm emphasizes the rare (in time) and extreme (in magnitude) dimension of earthquakes, volcanic eruptions, cyclones, floods, and so on. Scientists, institutions, governments and media often mention ‘extra-ordinary’ and ‘un-certain’

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phenomena, 'un-expected' disasters, 'un-scheduled' and 'un-anticipated' damage that affect regions which are 'under-developed', 'over-populated', 'un-informed', 'un-prepared', or 'un-planned'. Natural hazards and disasters are thus often considered exceptional with reference to the prevailing social fabric (see [Hewitt, 1983b](#); [Gaillard, in press](#) for a critique). People's response depends on how they perceive the risk from these rare and extreme threats. Individuals or societies with low perception of the threat to themselves are likely to adjust poorly to threats of natural hazards, while those with a high risk perception tend to behave in a positive anticipatory way. As a consequence, measures planned to prevent disaster are geared toward the extreme dimension of natural phenomena and include specific, technocratic, command-and-control measures such as engineering structures, hazard-based land-use planning and hazard awareness campaigns.

In the late 1970s, the initial challenge to the dominant hazard paradigm emerged ([Torry, 1979](#); [Waddell, 1977](#)). Scholars such as [Hewitt \(1983b\)](#), [O'Keefe et al. \(1976\)](#) and [Wisner et al. \(2004\)](#) argue that peoples' behavior in the face of natural hazards is contextual and constrained by social, economic and political forces more than by individual risk perception. Political neglect, social marginalization and limited access to livelihoods compel helpless people to live and work in hazard-prone areas. This perspective emphasizes peoples' vulnerability to disasters, the root causes of such vulnerability, and the expression of this vulnerability in their local and quotidian contexts ([Cannon, 1994](#); [Wisner, 1993, 2004](#)). Natural hazards are then viewed as amplifiers of daily hardship and emergency, rather than as extreme and rare phenomena ([Hewitt, 1983b](#); [Maskrey, 1989](#)). Recommendations to mitigate peoples' vulnerability to natural hazards, according to this school of thought, consist largely of non-engineering measures, such as poverty reduction, fair access to land and resources, greater government investments in social services, and so on. In addition, this approach emphasizes community-based disaster risk reduction which underscores peoples' participation in hazard, vulnerability and risk assessment (see, for example, [Anderson and Woodrow, 1989](#); [Bankoff et al., 2004](#)).

### Religions in the disaster literature

In this issue, Chester and Duncan expand [Chester's \(1998, 2005\)](#) early studies and assert that looking at disasters as acts of God and the punishment of deities mirrors the approach which dominates disaster studies and the way catastrophic events are considered. This view emphasizes victims' 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 that the proponents of the hazard paradigm quickly associate with a very low perception of risk. This allegedly leads to inappropriate or helpless behaviors in the face of natural hazards. Such a discourse on fatalism has long been applied to traditional and pre-industrial societies in Middle-Age Europe and to the contemporary so-called developing countries (see, for example, [Akasoy, 2007](#); [Burton et al., 1993](#); [Kates et al., 1973](#); [Schneider, 1957](#)). This approach has also been considered in the context of major religions, such as Christianity during the 1951 awakening of Mt Lamington in Papua New Guinea ([Belshaw, 1951](#); [Keesing, 1952](#)), or Buddhism and Islam in the aftermath of the 2004 tsunami in Sri Lanka and Indonesia ([Kraus, 2007](#); [Levy et al., 2009](#)). In their article within this issue, Chester and Duncan add an impressive list of religious reactions to earthquakes and volcanic eruptions.

From the perspective of the vulnerability paradigm, this conception of religion, natural hazards, and disasters is tainted by significant shortcomings. First, it fails to consider the diversity of religious beliefs throughout the world and basically follows the Judeo-Christian concept of deities' command over and punishment of sinful people. In that sense, it reflects the imposition on the entire world of a single and simplifying model of allegedly efficient and sustainable disaster risk reduction based on policies developed in Western countries ([Hewitt, 1983b](#)). Yet, places matter and religions are always embedded in local cultural contexts. As an example, the Christian conception of disasters described by [Bankoff \(2004\)](#) in the Philippines significantly differs from that documented by Chester ([Chester et al., 2008](#)) in the Italian context. In some places, different religious beliefs combine into unique constructions of natural hazards and disasters, as observed among communities under the threat of Mt Merapi, in Indonesia, where both Hindu and Islamic spiritualities interact ([Schlehe, 1996, 2008](#)). On the other hand, in the U.S.A., religion seems to play a limited role in people's response to natural hazards ([Mitchell, 2000, 2003](#)). In this special issue, Schlehe adds that Javanese interpretations of volcanic eruptions are interconnected with their understanding of tradition and modernity. The confrontation of tradition and modernity is here reflected in the power struggle between traditional community leaders who have unequally adopted the large array of political and economic changes undergone during recent decades in Indonesia. This conflict is further evident in Dove's analysis of the way Mt Merapi is monitored by westernized scientists and traditional institutions for both scientific and social panoptic surveillance purposes. He shows that the Javanese consider Mt Merapi to be a mirror of their daily existence, that is, perturbations in the island's social and political life are intimately linked to and reflected in volcanic activity. Javanese and the Yogyakarta traditional courts in particular thus monitor the volcano, not only to predict natural hazards, but also to unobtrusively observe themselves and foresee social and political events. With this in mind, the huge investment in scientific monitoring of the volcano does not reflect the number of human lives at stake but rather the crucial importance of local communities (microcosm) as a mirror of the larger Javanese society (macrocosm).

Religion can thus never be detached from the larger picture, as it always interacts with social, economic and political constraints in the construction of people's vulnerability in the face of natural hazards. People do not assess risk in simple terms, in terms of either the threat of hazard or religious and cultural filters. Their assessment always balances a large array of losses and benefits for their everyday life. For instance, the response of Javanese communities in facing eruptions of Mt Merapi is shaped both by syncretic religious beliefs and by a rational evaluation of the risks to livelihoods in the event of an evacuation ([Lavigne et al., 2008](#)). In this volume, Merli draws on the same argument based on a case study from Muslim communities affected by the 2004 tsunami in Southern Thailand. She highlights that interpretations of disasters are highly heterogeneous and depend on local socio-historical and ethno-political contexts. Religion further intermingles with structural causes of vulnerability and often serves as a factor of marginalization that leads some groups to be discriminated against. Discrimination may lead to greater vulnerability and unequal access to aid in the aftermath of disasters. This is exemplified in Bangladesh, where Hindu communities face greater difficulties in accessing livelihoods than Muslim communities, a difference manifested in uneven death tolls in times of poor harvest and famine ([Hartmann and Boyce, 1983](#)). In this issue, Chester and Duncan demonstrate that the vulnerability paradigm thus no longer stresses victims' sinfulness but focuses instead on structural sinfulness reflected by the unequal distribution of wealth and power.

Similarly, religion may hinder quick recovery. In the Muslim province of Aceh, in Indonesia, the late-2004 tsunami swept away people's meagre savings and capital made of gold jewels and accessories kept at home rather than in interest-based bank accounts, which are

prohibited by the *Qur'an* (Gaillard et al., 2008). On the other hand, Bankoff (2004), Gillard and Paton (1999), Schmuck (2000), Smith et al. (2000) and Torry (1986) argue that religion may serve as a coping strategy in the face of recurring hazards or disasters among Muslim, Hindu and Christian communities. Referring to Gods is far from being a reflection of fatalism, but rather a convenient and rational way of pointing to someone or something that is out of people's reach in a context of daily hardship. At the level of authorities, however, this may result in the search for a convenient scapegoat to evade responsibility in the construction of people's vulnerability (Steinberg, 2000). The role of prayers in times of suffering has also been considered to be both mentally and socially effective in coping with disastrous situations and is believed to ward off further events by appeasing deities (Bankoff, 2004; Mitchell, 2003; Nolan, 1972). In this special issue, Lindberg-Falk in particular documents the role of religion in coping with the aftermath of the 2004 tsunami in Thailand. She focuses on Buddhist communities of Southern Thailand, demonstrating that religious beliefs and practices (for example, imitation funerals, Buddhist ordinations, communication across boundaries) are ways to cope with suffering in the aftermath of an enormous disaster. This case is a powerful demonstration that resorting to religious practices in a time of hardship should be seen as a potential resource, rather than as a sign of guilt, sinfulness or helplessness.

### Religious groups and disaster risk reduction

If the lack of scientific interest in the study of religion and disasters contrasts with the importance of religious beliefs in shaping people's behavior in the face of natural hazards, it further neglects the role of religious and faith groups in reducing the risk of disasters. In this issue, Wisner emphasizes the role of faith organizations in disaster risk reduction. Religious groups are usually well integrated within local communities and thus often able to respond to disaster in a very short time span (see, for example Ali, 1992; Bolin and Bolton, 1986; Crawford, 1998; Fisher, 1985; Fountain et al., 2004; Merli, 2005; Smith, 1978). Moreover, these organizations often benefit from a high level of trust among local communities. For these reasons, religious non-governmental organizations (NGOs) have long been at the cutting edge of disaster risk reduction. A number of Christian and Muslim NGOs (see, for example, Christian Aid, 2006; Davis and Wall, 1992; De Cordier, 2008, 2009; La Trobe and Davis, 2005; Moss, 2007; Osman, 2009; Venton and Hansford, 2006; Worldvision, 2008) have spearheaded community-based disaster risk reduction with significant results (Wisner et al., 2004). Their involvement in relief and reconstruction activities has also been crucial in fostering post-disaster recovery in many regions of the world (see, for example, Clarke, 2008; Islamic Relief, 2007; Muslim Aid Bangladesh Field Office, 2008). On the other hand, Gaillard (2006), Olivo Ensor (2003) and Schwimmer (1969) notice that the reconstruction stage may be an opportunity for proselytizing organizations to evangelize fragile affected communities. In this issue, Chester and Duncan show how the activities and practices of religious groups have evolved over time and how this development is rooted in changing theological perspectives on people suffering.

### Contribution of the present issue of Religion

The papers in this special issue of *Religion* develop a number of themes arising from the scarce literature available on religions, natural hazards, and disasters. They span four major religions, Catholicism, Islam, Buddhism and Hinduism, with a special emphasis on Southeast Asia. Chester and Duncan, along with Schlehe and Merli offer critical examinations of victims' interpretation of disasters in Catholic, Muslim and Buddhist settings. Lindberg-Falk addresses post-disaster recovery and the role of religious practices. Dove shows how government policies in the face of natural hazards reflect state–citizen relationships. Finally, Wisner closes the issue with practical recommendations and offers perspectives for bridging the gap between scientific knowledge and policy. Authors provide field-based evidence which is of great help in enhancing our understanding of people's behavior in the face of natural hazards and disasters. All authors advocate for a better and more sensitive understanding of the local contexts in which religions and religious practices intermingle with social, political and economic constraints. There is consensus also for considering religion as a resource rather than a hindrance in the planning of disaster risk-reduction policies.

This special issue modestly contributes to the exploration of new grounds for the study of natural hazards and disasters. It further opens the debate on how to continue to improve disaster risk reduction in various religious settings. Hopefully, future studies will build on this contribution and further increase our understanding of people's behavior in the face of natural hazards and thus help in reducing the occurrence of disasters.

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