Contents lists available at ScienceDirect

International Journal of Disaster Risk Reduction

Why disasters happen: Cultural framings from the Diamond Island stampede in Cambodia

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ARTICLE INFO

ABSTRACT

Human stampedes are anthropogenic disasters. The purpose of this study is to identify the *emic* construction of disaster in Cambodia and thus enable a cultural framing. The case study is the 2010 human stampede at Diamond Island in Phnom Penh, which resulted in the deaths of 347 people.

An ethnographic study was carried out in Phnom Penh and nine provinces, starting in 2010, with cases followed up for up to eight years. We explored the beliefs about the causes and meaning of the disaster held by 5 survivors and 8 of their family members, 34 bereaved relatives of 9 people who had been killed, 31 villagers, and 48 key informants (7 monks, 10 female Buddhist lay devotees, 22 Buddhist lay officiants, 4 mediums, and 5 traditional healers).

It was popularly believed that the disaster was a consequence of the supernatural "dark road" and the neoliberal development and disrespect to the Landlords of Water and Earth guardian spirits that triggered a retaliation by the spirits. Millenarian explanations for disaster were foretold through the "Buddha Predictions" and the "Three Vast Plains" of disaster.

The Diamond Island stampede powerfully illustrates how people confronted by mass disaster draw on cultural and religious explanations for misfortune, and it is woven into a wider narrative about the national tragedy of the Khmer Rouge era. It is proposed that an *emic* understanding of the ontology of disaster that is grounded in local knowledge can strengthen cultural responsiveness to disaster prevention and management.

1. Introduction

Koh Pich (Diamond Island), located in Phnom Penh, is an island in the Bassac River just before it reaches the Mekong River. After the fall of the Khmer Rouge regime in 1979, farmers and migrant fishermen moved into the area. In 2004, the municipality agreed with Canadia Bank to start generating investments on this island and, in 2006, at the height of the property boom, the bank's holding company, Overseas Cambodia Investment Corporation (OCIC), as part of a $200 million development, embarked on its plans. Many of the 300 local families were bought out with some cash, rice, and fish sauce and the remainder were forcibly evicted. Chinese enterprises were given licenses by the government to create a whole new city of towering casinos, condominiums, and businesses. This tinsel town went on to attract throngs of Phnom Penh's poorer citizens, who made weekend visits to gaze in amazement at this exotic "fake world."

Just after 10:00 pm on November 22, 2010, the third and final night of the Water Festival (Bon Om Touk), one of the major national celebrations that is held at the end of the rainy season, when one-third of the

country's population had been drawn to the capital, revelers gathered at the water's edge for the dragon boat races and fireworks. Crowds of people were on the Diamond Island pedestrian suspension bridge that crossed the Tonle Sap river. There was some movement of people as they crossed to get to the entertainment area on the island, while some were also leaving in the reverse direction. Others stood there simply for the view. Apparently, there was some security on both ends of the bridge.

Although the bridge was designed to sway, a stampede was triggered when people shouted, "The bridge is breaking!" and began to run. However, the exit was too narrow and had been barricaded by a chain to prevent motorbikes from entering. The crowd surged back and forth, trying to get off each end of the bridge and crushing those in the center. Hundreds were compressed and asphyxiated, and their bodies were intertwined into one large mass as people continued to press toward the exits. The police fired warning shots to disperse the crowd, but that simply set off more panic. Some plunged over the edge of the bridge and were electrocuted by the cables that they pulled loose or were killed upon landing in shallow water or on the concrete escarpments. Some were either pushed or lost consciousness and fell onto wires and were

electrocuted, which exacerbated the panic. Some survivors said that they had been electrocuted when the police fired a water cannon on them in an attempt to control the surging crowd. In the end, 347 people died because of compression and asphyxiation, and hundreds more were injured.

The stampede was ranked as a Class IV event, and was considered among the deadliest ever incidents recorded worldwide [1]. It is described as the greatest tragedy that Cambodia has experienced since the fall of the Khmer Rouge. This article presents the Diamond Island stampede as a powerful case study of a man-made or anthropogenic disaster.

1.1. Stampedes

Human stampedes (from Spanish *estampida*) are nothing new. Cohn et al. [2] noted that the Book of Two Kings in the Hebrew Bible tells the story of four starving lepers in the besieged city of Samaria, who, on finding food in the Syrian enemy camp, told their starving people, who then rushed out toward the food, trampling the king's men to death. Chaudhuri [3] noted that the Andalusian traveler Ibn Jubayr had reported the 1184 stampede of Hajj pilgrims on the road from Baghdad to Mecca who, maddened by thirst, were stampeded into the cisterns. In 1896, as Baker [4] reported, half a million gathered for festivities after the coronation of Nicholas II in Khodynka Field near Moscow and in the stampede for gifts, 1429 peasants were killed.

Jha [5] explained that human stampedes, like riots or war, are sociological disasters and are anthropogenic in nature, being caused by human actions, negligence, or errors. Given the number of pilgrimages and people visiting religious sites in South and Southeast Asia, as Prashanth [6] indicated, there is a need to pay greater attention to the issue.

Today, a crowd in excess of 1000 people is defined as a *mass gathering* (MG) [7], as an event that carries with it a high risk of human stampedes [8] [8]. Boev and Yastrebov [9] noted that stampedes often arise because of mass panic associated with an accident or even a rumor, and MG medicine is an emerging specialty [7] endorsed by organizations like the World Health Organization (WHO) [10] and focusing on emergency care at large gatherings. MG Medicine is relevant here because of the contention of this article that disasters have to be understood in cultural and often religious contexts. zdtampedes often occur during pilgrimages such as the Hajj, religious festivals, or sporting events [11]. In India, for example, 79% of stampedes occur at religious gatherings and pilgrimages [8]. They also occur in developed countries, such as for example during Black Friday sales at Walmart or Target stores [12]. It appears that there is a dearth of published reports on stampedes but, even so, according to Ngai et al. [11]; the number of reported stampedes has markedly increased in each decade since 1980.

Many MG disasters take place at cultural events, but the literature has often overlooked the cultural contexts in which they occur. One exception is Tam et al. [13]; who identified culture and language as priorities while researching mass gatherings. Hutton et al. [14] argued that the cultural predispositions of the audience needed to be examined to understand the motivations or behaviors of those who had gathered. This suggests that the cultural context of crowd behavior might be specific to particular kinds of mass events. The Cambodian youth who had gathered at Diamond Island, for example, while certainly "out for a good time," were also participating in an important annual ritual. The Water Festival is an ancient ceremony to mark the end of the rainy season and the spiritual transformation of the water and the land. The festival has sacred connotations that are deeply ingrained in 12th century Angkorian history, a showcase of the naval superiority of King Jayavarman VII during the Angkorian era, as shown in the bas-relief images in the ancient temple ruins. The naval forces protected the kingdom from the neighboring kingdom of Champa, and this significance is broadcast in the beginning of the Water Festival. According to Ledgerwood [15]; the boat races in the 1990s were a throwback to the ancient ones, when the navy of King Ang Chan protected the provinces

with three types of boats and at this time of year (late November) in the annual ceremony "the ministers of the four directions would assemble the navy and army to train one day and one night" (p. 209). This confluence of the four rivers was exactly where the modern Diamond Island Bridge was eventually constructed, and where the people fell.

1.2. Disasters, meaning-making, and cultural framing

1.2.1. Disaster anthropology

The field of "disaster anthropology" emerged 40 years ago, when Anthony Oliver-Smith [16] spent a year living with survivors of the earthquake at Yungay in the northcentral Andes in Peru, which claimed 70,000 lives and was declared the western hemisphere's worst disaster. Oliver-Smith went on to declare that disasters strike "at the moral and ethical core of the belief system and include a deep delving into concepts of both social and cosmic justice, [such as] sin and retribution, causality, the relationship of the secular to the sacred, and the existence and nature of the divine" [17]; p. 308).

In his pioneering pedagogical framework for disaster studies, Alexander [18] noted the anthropological approach. Henry [19]; p. 1) succinctly described how cultural systems are central to "a society's disaster vulnerability, preparedness, mobilization, and prevention" and that anthropology contributes "to the complete life cycle of disaster, from issues of vulnerable and perceived risk, to individual and social responses and coping strategies, to relief and recovery efforts" (p.111).

The anthropology of natural disasters in hazardous environments is relatively developed [20–22] when compared to anthropogenic disasters. In considering the cultural context of disasters, the conventional division between "natural" and "anthropogenic" disasters gives way.

1.2.2. Earlier neglect of culture and religion in disaster risk reduction (DRR)

Over the past decade, a chorus of DRR scholars [23–49] have argued convincingly that many efforts to reduce risk from hazards have failed because they have ignored local belief systems, cultural perceptions of risk, and the way in which people's beliefs may be misperceived by outsiders as "fatalistic" or "passive." Indeed, the International Federation of Red Cross and Red Crescent Societies regarded the issue of such importance that it dedicated its 2014 World Disasters Report to culture and risk [50,51].

Schipper and Dekens [52] suggested that culture is difficult to study and address. In their editorial in the journal Religion, Gaillard and Texier [53] remarked that even though disaster stories are part of all major religions, most treatises on disaster have omitted religion, and they warn against the oversimplification of stereotyping "culture" as simply a Judeo-Christian conception of risk and disasters, with deities punishing sinful people with disaster, whereas "religions are always embedded in local cultural contexts" (p. 82). This culture-religion interface will influence both the behavior after a disaster and the manner of preparation and prevention before one.

While all "world religions" offer meaning in the face of terrifying events and provide ways of coping with suffering in the aftermath of threats and mass disasters, DRR should never be stereotyped along "religious" lines. Moreover, culture is not static. The value of an anthropological approach is that it reveals the local from the bottom up.

1.2.3. Why consider culture in DRR

In their magisterial book on culture and disaster, Bankoff et al. [24]; p. 1) provided three reasons to link culture to DRR: "culture is a framing that can offer explanations" without which the behavior in disasters would not make sense; it "provides a self-reflexive base to think about the role and nature of DDR; " it helps or hinders people in dealing appropriately with hazards and "enables, or hinders, researchers to contribute to improving DDR." It is evident, as Bankoff et al. [24]; p. 1) pointed out, that any intervention with disasters must consider "people's interpretations, negotiations, experiences, and creative adaptations to

hazards."

1.2.4. Theology, fatalism and meaning in disaster – why does it happen?

A useful starting point is how people seek to make sense of suffering caused by catastrophes. Clearly, a belief in "God's providence" [54] in explaining disaster can only go so far. The implications of fatalistic beliefs about disaster and of the socio-cultural characteristics are serious for disaster preparation, as Baytiyeh and Naja's study [55,56] of Lebanese attitudes to earthquake preparedness in Lebanon. Fatalism is important in DRR in affecting individual and group behavior and, as Cannon [57] succinctly puts it in his argument for cultural understanding of "innocent" disasters, why it is that people, "do not do what we 'want' to them to do" (p. 356).

Most of the literature on the meaning of disaster focuses on the role of religious traditions. The theologian David Chester [58] pioneered the framing of Leibnizian philosophical models of the theodicy of disaster: dualist – good comes from God, disaster from an anti-God; Augustinian free will – disaster comes from human activity and reflects a choice; Irenean – suffering is necessary for the greater good; existential – good may come out of disaster; retributive – disaster is God's punishment; and chaotic – the world is unpredictable, and disaster can strike at any time. Chester and Duncan [59]; building on their argument for a dialogue between theology and disaster studies [60], later highlighted the greater attention given to viewing disasters as representing "human sinfulness which is manifested in national and international disparities in wealth, poverty, hazard preparedness and disaster losses" (p. 85). Incidentally, as Chester [61] argues persuasively, the theology and disaster research is biased in favor of Christian traditions while Islam is relatively overlooked. These models, embedded in western theodicy, are a valuable starting point for a cultural approach for the meaning of disaster. However, as Wisner [62] has rightly warned, religions and ideologies are divided into those, such as Christianity in which it is believed that people have agency in what happens and are instrumental in causing disaster (logos) and those, such as Hinduism or Buddhism in which humans are part of something larger and have limited agency but they may be more open to increased preparedness for disaster (cosmos). There may be useful points for comparison with the theodicies that hold in non-western societies, cultural systems, and religions. The theology of disaster is, or should be, contextualized in local culture.

A further nuance has to do with retribution for moral wrongdoings, often committed by those who are oppressors. Paul and Nadiruzzaman [63] carried out an in-depth analysis of the literature to compare the beliefs of the four major religious groups in six South and Southeast Asian countries regarding the causes of the earthquake-tsunami in the Indian Ocean in 2004, and found divine punishment to be the common element. In Indonesia, the Achanese Muslims considered it divine punishment for lay Muslims who had strayed, whereas the Christians saw it as God's revenge against the Muslims of Aceh for having mistreated Christians. Buddhist survivors in Thailand and Sri Lanka, like Hindu survivors in India, saw the tsunami somewhat differently, as an outcome of bad karma in their previous lives, and therefore not necessarily as divine punishment for their actions in this life.

Too often, religion can be woven into politics and ideology. Victoria [64] noted that Protestant televangelists such as Pat Robertson and Catholic priests such as Gerhard Wagner said that Hurricane Katrina was "the curse of God" against a sinful New Orleans and the Haiti earthquake was because of "a pact with the devil" (p. 53). In another example, the Iranian media reported that Iranian Ayatollah Hojjatoleslam Kazem Sediqi (or Sedighi), Tehran's Friday prayer leader, said that Iran's earthquakes were caused by immodestly dressed women who he claimed had led young men astray and spread adultery [65]. To test Sediqi's theory, Purdue University blogger Jennifer McCreight organized an international Boobquake day on April 26, 2010, where women wore immodest clothing [66]. Almost a million visited the blog and over 100,000 women took part in the event, and McCreight [67] reported that careful statistical analysis showed no increase in earthquakes on the

day.

Schlehe's [68] ethnography of the 2006 earthquake in Java described how disaster was perceived, beyond the formal teachings of Islam, as "local myths connected to the landscape" and, accordingly, the responses included "rituals to prevent more misery" (p. 112) which combined "ritual elements, motives, art forms and prayers from all available local, national and religious traditions" (p. 117). The 2004 tsunami was perceived by the Muslim majority in Southern Thailand as divine retribution and by the Buddhist population as a natural phenomenon [69].

1.2.5. Meaning-making, a catalyst for resilience

Meaning-making is central as a catalyst for resilience and post-traumatic growth after disaster [70], and Park [71] has argued convincingly for a meaning-making model in disasters. Following her lead, I suggest that a disaster such as a stampede has "unintentionality," in that individuals start with naturalistic attributions, such as the panicking crowd stampeded, for the immediate or proximal cause, "but also invoke religious or metaphysical explanations for the more distal, metaphysical cause" (p. 1235). Religion and culture are central to the "meaning-making" processes as a means of coping with disaster. It is evident, as argued by Islam et al. [72] in their study in 2010 and 2015 of the floods in north-western Bangladesh, that local knowledge is important in coping with disasters and adapting to their threats. Meaning-making in responding to disaster, which invariably includes both the private experience of grieving and the public rituals of mourning [73,74], is based at least as much on local knowledge as it is on formal religion.

1.2.6. Social and cultural perspectives on "disaster resilience"

Hugh Deeming [75] showed how "disaster resilience" has replaced "disaster vulnerability," with its negative connotations, as a solution-oriented approach. Deeming argued that disaster research in communities needs to embrace both the social and the individual, with greater attention to the "social calculus." If I may rephrase these ideas in cultural terms, they refer to how people understand "the underlying causes for vulnerabilities," how they utilize the capacities of their cultural capital (religious leaders, traditional healers) "to prevent and to prepare ahead for hazardous events," and how these cultural resources could augment "the capability to recover in a timely way in their aftermath" (p. 1). Resilience is both a process and an outcome [76]. My approach in this article echoes Deeming's call for bridging individual and psychological perspectives with collective and socially focused perspectives within resilience research.

In his work on anthropological perspectives on community resilience, Barrios [77] argued compellingly that cultural explanations of a disaster promoted psychological resilience and recovery from trauma. Cashman and Cronin [78] emphasized how culturally acceptable forms of explanation "help regain emotional stability within the community" and "enable communities to make sense of the experience" (p. 408). They stress that these explanations "commonly rely on creative interpretations based on 'cosmologies vibrant with metaphor' [79] … based on supernatural belief, or scientific proof, or both" (p. 408). Following a critique by Titz et al. [80]; it has to be said that 'community' is a highly ambiguous and problematic term in itself, especially in the disaster context.

1.3. Purpose of this article

The rationale for this study is that, as Thomalla et al. [47] put it, beliefs about the causes of a disaster influence, "how empowered individuals and communities feel to prepare and respond to environmental change or hazards; what actions are seen to be appropriate to take to prepare or respond to environmental changes or hazards; [and] which hazards are perceived to be worthy of attention" (p. 10).

The case study presented here is the human stampede that took place

at Diamond Island, an entirely appropriate selection as this was the biggest disaster to strike Cambodia since the Khmer Rouge regime in the 1970s. Cambodia has faced more than its fair share of upheavals [1] and psychological threats in the form of mass tragedy and emergencies. For many hundreds of years, most notably during the 1963 El Tor pandemic [81], the threat of cholera, known as an "alarming, nearby emergency disease" (ʔaasan rook), led to panic, and people sought comfort in rituals. The same can be said for the disruption of the nation as reflected in millenarian ideas – that the world will be destroyed and a redeemer will come and raise the righteous [82]. In Cambodia, these ideas are articulated in the "Buddha Predictions" and the "Three Vast Plains of illness, famine, and war," which are applied to many contemporary mass events such as genocide, civil war, starvation, coups d'état, and, most recently, outbreaks of mass fainting [83]. This millennium has witnessed a series of events that has gripped the Cambodian national imagination with fear and horror. These include the 2004 panic in the face of the Sumatra-Andaman tsunami and outbreaks of the highly pathogenic avian influenza [84]. In 2011, there was the emergent threat of Chikungunya [85] and Zika [86]. In 2015, a fraudulent doctor infected 280 men, women, and children in the village of Roka with [87]. All these threats of unpredictable death occurred against a backdrop of constant political unrest and mass protest against continuing structural violence.

The article first defines disasters as expressed in a range of Khmer expressions used to describe disasters in general and stampedes in particular. This is followed by a description of the Diamond Island stampede and its aftermath.

The article considers the cultural framing of why the stampede befell the nation. I propose four interlinked themes. First, there is the "dark road," a moral byway which is believed to have been led by individuals including those at the top. Second, indiscriminate and greedy neoliberal development that was coupled with disrespect to the Landlords of Water and Earth guardian spirits had triggered a retaliation by the spirits.

These social-political-spiritual infractions fall into a larger cosmic canvas of social corruption. The third theme is the millenarian theory that, as foretold in ancient texts, the world has been corrupted and has become morally bankrupt, and that disaster is a step toward destruction followed by rebuilding. I will show how the famous "Buddha Predictions" text provides a framework to understand what has gone wrong in contemporary society and the manner in which disaster follows. Finally, in a related theme, I will describe the "Three Vast Plains" of disaster. By so doing, the article elaborates how local Buddhist and animist cosmologies help people make sense of tragedy.

2. Methods

I am a Khmer-speaking medical anthropologist and transcultural psychiatrist who has worked in and visited Cambodia since 1990. During this time, I have led a research program on traditional healers and Buddhist monks in the context of mental distress and community mental health and gender-based violence. In the course of this work, supported by male and female Cambodian assistants (in particular, Chou Samath and Phally Chhun), I have engaged with a network of many hundreds of monks and healers across Cambodia. Approval was obtained from the National Ethics Committee for Health Research (NECHR) in Cambodia, and fieldwork for the study reported in this article was conducted with sensitivity to recent concerns raised by research ethics committees on the rigorous appraisal and review of disaster research [88]. Ferreira et al. [89] warned that people who are exposed to disaster research are more vulnerable and had different decision-making capabilities than those in other kinds of research because of the psychological impact of being subjected to the disaster and "which can affect the extent to which they can make capacitated and voluntary decisions to enroll in research" (p. 31). Voluntary oral consent was obtained after making clear that the purpose of the encounters was for research and not to provide therapeutic intervention. Participants were deidentified and the names in this article are pseudonyms.

There are advantages in starting the research soon after the event [89] and, as an ethics committee panel has noted, there is a post-disaster "window of opportunity" [88] during which, I argue, meaning-centered cultural research, such as the present study, has to start quickly. The morning after the stampede, we began to connect with the hospitals and authorities to gather contacts and their locations for fieldwork. We were as unobtrusive as possible and started by establishing short initial contact with individuals and families in a spirit of condolence. We then built up contact based on their emotional willingness and readiness to talk with us about the stampede. Citraningtyas [90] warns against the dangers of culturally inappropriate encounters with informants in a post-disaster context, and we took care to encourage informants to give vent to their feelings about the disaster in cooperation with Buddhist monks and female devotees. Although the participants remembered the events, efforts were made to avoid re-traumatization, for example, by helping an informant access a Buddhist monk to perform a ritual that would provide comfort to them in their time of grief. Disaster research should offer beneficence, and the informants in the present study found the discussions beneficial, felt relieved of their suffering, and were morally rearmed by the fact that the researcher had come to validate their experience that they otherwise kept to themselves. Apart from news media interviews, which were not geared to beneficence, the fieldwork encounters with us were the first time they had been given the opportunity to reflect on the meaning of the stampede from their perspective in their own local idioms that had salience to them and with respect for their cultural norms and traditions.

Ethnographic methods capture "the processual dimensions of disaster risk construction, vulnerability, disaster events, and post-disaster processes of recovery" powerfully [91]; p. 76) and provide "a textured view of the daily practices through which those most impacted by disasters make their lives meaningful" [25]; p. 122). DRR research, as articulated by Mercer et al. [92] is moving away from "top-down" strategies led by outsiders to participatory techniques that are meaningful to local people. In contrast, this study was designed as a person-centered ethnography using "ordinary discourse" [93,94], a method that has been applied to the study of Thai Buddhism [95] to develop ways of describing how the survivor and/or her psychology and experience shapes, and is shaped by, cultural constructs of disaster. As in the author's previous transcultural psychiatric research in Cambodia, this paper emphasizes the relationships between people's psycho-cultural "inner world" and the socio-cultural "outer world" of communities affected by the stampede.

2.1. Demography

We conducted an ethnographic study in Phnom Penh (n = 67), Kampong Speu (20), Prey Veng (12), Pursat (9), Kandal (6), Ta Keo (6), and Svay Rieng (3), and in Kampong Chhnang (1), Banteay Meanchey (1), and Siem Reap provinces (1), reflecting the areas where the informants who had been involved in the stampede came from. The encounters involved a total of 126 informants (55 women, 71 men).

We interviewed five survivors (two female and three male, average age 24.8 years, age range 18–34 years) and eight of their family members. After the initial encounters in the hospitals, these informants were followed up in Phnom Penh and Kandal province, or at their homes in various provinces.

We interviewed 34 bereaved relatives of 9 people who had been killed. Of these, 7 had been garment workers who had worked in the factory industrial zone around Phnom Penh and their families lived in the provinces.

We also interviewed 23 neighbors and villagers including the village head (11 female, 12 male, average age 53.2 years, age range 21–78 years). Of these, six inhabited Diamond Island for many years, some from before the Khmer Rouge era, who provided detailed information on the history of the place and the links between the violation of the land and the subsequent disaster. This group included the former

administrative head of Diamond Island and the former administrator of the land compensation scheme.

We also included 48 key informants comprising 7 monks (average age 36.5 years, age range 31–52 years), 10 female devotees (average age 65.8 years, age range 37–84 years), 22 Buddhist lay officiants (average age 69.7 years, age range 40–80 years), 4 mediums (2 female, 2 male, average age 52.7 years, age range 41–60 years), and 5 traditional healers (all male, average age 67.8 years, age range 54–79 years). These included informants who had been consulted by the victims' families or who were involved in carrying out ritual ceremonies for the victims.

2.2. Procedure

Once the acute trauma had passed within the first two or three days (the timeline differed from person to person, being longer, for example, for those families whose loved ones had died from their injuries over some days or weeks), we met seven families of those who had died instantly and another two who had died in hospital in the aftermath, five survivors, and two bystanders. Most of these were followed up at key moments such as at the funeral ceremonies held on the seven- and one-hundred days following the death, and at annual anniversaries. A selection of cases were followed up until May 2019. This comprised an in-depth study with a small sample of cases; cultural data were collected to identify and describe a cultural phenomenon rather than to identify and describe individuals. Therefore, nonprobability sampling was the method of choice [96]. All participants agreed to engage, and nobody dropped out during the research. The researchers were not involved in the patient care of those affected.

The encounters varied from single meetings lasting 1 h to more intensive and repeated ones lasting up to 10 h, sometimes accompanying the person to ritual ceremonies for those killed. Discussions included informants' interpretations of the stampede and their attributions of the cause, including predispositions and triggers and the ritual ceremonies performed to treat those affected. All encounters were conducted in Khmer and the areas of enquiry covered the terminology, phenomenology, and explanations of disasters, including the natural, mystical, animistic, and magical understandings thereof.

Informants were encouraged to share their views of the supernatural world that they understood was involved in the stampede and disaster, rather than confining themselves to the populist medical views that they may have thought we wanted to hear. The monks and healers were asked to expand on the taxonomy of disaster and the Buddhist teachings thereon. Efforts were made to explore the popular and formal canonical views of karma (literally, "works," "deeds," or "actions," and seen as the moral fruit of past actions that follows individuals throughout successive incarnations), astrology, misfortune, and other local beliefs around misfortune and disaster that helped them understand and treat it.

We continued sampling until we agreed on data saturation. Once we completed the audio and visual recordings and compiled all the fieldnotes, all materials were translated into English. With back-translation and further iterations, we established the validity of the English-language terms.

Using qualitative data techniques that ensured fidelity and minimized observer cultural bias, we analyzed the cultural idioms of stampedes and disasters. We explored the views of local and expert informants and examined their expressions to see how meaning was derived from the context and how attributions were made. We also paid careful attention to the informants' cultural registers and the use of popular Khmer culture references. We then compared the findings with the descriptions offered in English and Khmer media.

3. Results and discussion

3.1. The event

The stampede is described in the Introduction. This section provides further details. Immediately after the stampede, all the Khmer TV and radio stations and print media were filled with graphic reports of the tragedy. Within hours, Prime Minister Hun Sen addressed the nation, describing the stampede as a "tremendous tragedy," the worst since the Khmer Rouge era [97]. Hun Sen and the press used the Pali-Sanskrit term *maha saokaʔniedaʔkam*, one used for the most severe levels of disaster and is a compound word derived from the constituent *soka*, meaning grief, the derivative term *nāṭa*, meaning "a rhetorical and dramatic dance, often displaying the depth of profound grief," and the suffix *kamma*, meaning "action," a term found in the Candā-Kinnar-a-Jātaka which is described below. The Prime Minister was subsequently accused by some media outlets of trying to score political points in the process. Whatever the politics of it – after all, disaster is defined by people rather than by nature – there was no doubt that the stampede was seen to be catastrophic.

The survivors painted a graphic picture. Davy had been in the throng and said that she had heard supernatural voices of the "dark way" screaming on the bridge to people who had no astrological misfortune to get off the bridge before it was too late – that was how, in panic, she pushed herself to the entrance of the bridge and escaped the worst of it at the center. For a moment, there was a whirlwind and then the panic began. One young man thought of reciting the Buddhist dhamma as he witnessed his cousin being crushed to death and felt his legs being crushed, but he was so frozen that he could not remember any of the words. The police sprayed water to relieve the extreme thirst of those who were being crushed. Some survivors were guarded about telling us this as they feared that they would be punished by the authorities for implying that the water and the dangling live electrical cords, a recipe for electrocution, was the fault of the authorities.

The most popular terms used to depict the stampede were "*kruəh meaʔhantaʔraay*," from *kruəh*, meaning "misfortune related to the astrological configuration," and *meaʔhantaʔraay*, meaning "great disaster," and the most frequent term used in the Khmer-language media. People described the stampede as "a panicked crowd treading on one another and killed en masse" (*pʔaəl* = a panicky crowd or herd + *coan knie* = treading on one another + *slap kɔɔ cuəŋ* = killed, a pile of legs, amassed corpses, this description is the same as the one used during the Khmer Rouge era when piles of corpses lay in the killing pits). Another graphic term borrowed from the Khmer Rouge era used by some informants, and used in Khmer but not English-language media, was *meaʔhaakaolaahɑl,* derived from the Pali *kolāhala*, according to the Great Chronicle of the Buddhas, a tumult created by a mass of people on hearing the warning by the deities that the world is about to disintegrate [98]. In the Cambodian context of disaster, it connotes "the churning into ploughed furrows of soil," the stampede ploughing the masses as if they were clods of soil, depicting the upheaval of class and society as foreseen in the millennial texts and as manifested in the doctrine and the practice of the Khmer Rouge, when the revolution churned the New People with the Old People and reset time in Cambodia to Year Zero [99–101].

Commemorations continued for some time, and occasionally, these formal government-organized events and formal Buddhist ceremonies were "disrupted" in a popular vernacular voice. Here is a dramatic incident involving Chantrea, a 30-year-old garment worker from the Cambodia Handsome factory.

> Two weeks after the stampede, thousands marched to commemorate the souls of those who had been killed on the bridge. Grieving families brought garlands, and Chantrea joined her fellow garment workers in the procession. All of a sudden, during the commemoration, Chantrea's mouth opened, she convulsed, pulled her hair, her face was contorted in anger, and she fell in a trance. Chantrea's youngest son, who had not yet weaned from the breast, looked upon his mother and was so terrified of her that his father had to take him away from the scene. Chantrea's mother, expounding the popular view that children under a year of age have not yet lost the capacity

to see ghosts, concluded that her grandson's behavior was proof of Chantrea having been possessed.

Chantrea's fellow factory workers and other onlookers thought the ghosts of those who had been killed in the stampede had possessed Chantrea, as she spoke in a terrifying "ghost voice." Rong Chhun, the President of the Cambodian Confederations of Unions said that Chantrea had another view believing that she been possessed by the supernatural *pāramī* of Keo Mony, the Chief Landlord of the Water and Earth at Diamond Island.

When Chantrea came to, she groaned and made ghostly sounds. She was taken to the Wat Lanka temple where the monks were not convinced that the spirits had left her and said that she had to stay for a week. The monks performed the ritual pouring of lustral water to liberate her from the danger and misfortune, or *graha* (*rumdɑh krʋəh*), as signified by the expulsion of the ghosts from her. When Chantrea recovered, her youngest child was no longer afraid of her.

Chantrea gives expression to the popular view that fatal events are not simply to be understood merely in the language of formal Buddhist dhamma teachings, but as a structural process as much to do with the oppression of poor factory workers who, through no fault of their own, were killed, sometimes by faulty machinery or by collisions of transport vehicles [102].

The investigating committee, which included cabinet ministers and city officials, estimated that 7000–8000 people were on the bridge, adding up to a load of about 350 tons [103]. Investigations were conflicted on whether the deaths had been caused by electrocution from the colored lights strung along the bridge. In due course, officials and ordinary people came to address the issue of responsibility and accountability for the tragedy differently, making Oliver-Smith's [17] observations about the relationship between disaster and morality pertinent. For some, the losses were both of a social-material and profoundly emotional nature and the question of what "justice" meant for them was therefore relevant. Facebook, YouTube, blogs, and other social media were filled with speculation that the stampede was caused by the mechanical failure of the bridge, a supernatural event foretold in the millennial texts, or a diversion said to be sponsored by politicians to create chaos before the scheduled general elections. The Economist [104] reported that within three days of the stampede, a government task force that included only politicians from the ruling Cambodian People's Party (CPP) and the developer, OCIC, immediately released a report blaming the pedestrians for panicking, thereby exonerating both the OCIC and the police who were supposed to have been managing the crowds.

3.2. Why the disaster? Four themes

In the following sections, I examine various perspectives on the causes of the stampede. The politically incorrect views were found underground through anonymous posts in blogs and social media. For example:

Anonymous wrote: The cause of the Koh Pich Island tragedy, the murder of hundreds of innocent people, has been "smokescreened" by the government. PM Hun Sen has so blatantly stated this was a stampede, is a total LIE!... People are scared to tell the truth, fearing the government will unleash violence upon them and their families, not dissimilar to the Nazi SS Police. People were ELECTROCUTED, Police FIRED their GUNS, GATES had been deliberately placed across the exit to force the CRUSHING of the innocent people. This is the governments mindless MASS MURDER to instil FEAR into every Cambodian that they will never speak out against such … military force, they frequently use to displace village people and kill them if they resist. Hun Sen … [behaves] much more like a vicious animal than human … HE covers up TRUTH!... Koh Pich has been major

atrocity major CRIME. SEND THEM PERMANENT JAIL IN THE HAGUE! … Strip all of them of their assets, they been doing this to all poor citizens for nearly 40 years now!... cryFREEDOM4cambodia!! [105].

Such posts clearly show the passion of some ordinary people who felt that the disaster was either manipulated, caused, or even fabricated by those in power.

The focus of the results reported in this article, however, is on the popular attributions of the informants based largely on a mixture of local animist perspectives and Buddhist teachings and legends. There are four aspects to do with moral corruption in society, as flagged by the Diamond Island development, and discussed here as the "dark way," spiritual landlords of the water and earth at the site of the stampede, millenarian explanations, and the Three Vast Plains.

3.2.1. The dark road or way

Many societies depict disaster as arising from cosmic imbalances related to divine punishment. Vicente [106] noted that the indigenous Mapuche viewed disasters this way before the colonization of Chile by the Spanish Empire.

In Cambodia, a powerful idiom used by many informants was "the dark road" (*pləv ŋɔŋit*), a term derived from the Vietnamese *nghịt,* meaning something thick and dense, black as the night [107]. The "dark road" implies potentially lethal forces such as a curse from the world so dark that it cannot be seen by humans and only dogs can see these forces. One young man, Vannara, saw the "dark way" literally, as venomous snakes were enraged that the developers had dislodged their nest and were lying in wait under the bridge, ready to avenge their loss by casting mass disaster at that place. Even two years later, Vannara dared not cross, and he would hear others talking in fear about the den of snakes under the bridge, waiting to strike.

In one view conveyed to us by monks, it was humans, through their greed and lust, that had created the "dark road" that led to disaster. A monk explained the stampede through the Candā-Kinnara-Jātaka (J. iv.282ff; DhA.i.97). The Buddha, born as Candā, had lived with his mate Candā in the mountains. One day, they happened to wander into the human world, where the King of Benares saw Candā and, lusting for her, mortally wounded her with an arrow. Thanks to magical intervention, Candā was saved. The Buddha's final warning was "go not down from the Mountain of the Moon among the paths of men but abide here." The moral of the Jātaka is that it is humans who create and inhabit "the dark road," the monk's message to us being that human avarice destroys morality and that "development" seeds disaster, in which loved ones are brutally torn apart.

Some survivors thought that the phantoms (*bəysaac*) of those who had died in a previous event had cast a net to catch victims: although the death toll was approximately 347, a few people believed that the "dark road" had claimed thousands of lives. In the hectic days following the stampede, the Khmer-language media, for example in the major daily, Koh Santepheap [108], reported widespread rumors that Yamarāja, the King of Death, had met his quota of "1000" by taking the lives of the victims of the stampede.

This idea was echoed by Sophy, a medium in Kampong Chhnang, who entered a trance and was possessed by her spiritual master-teacher, the White Monkey *parami*. Her *parami* informed her that Yamarāja, the King of Death, had a quota of 10,000 victims, and had only taken the first 347, far below the quota, so now she sternly warned the onlookers to avoid traveling on the highways lest they be caught in the dragnet and taken away to their deaths. The terrified public rushed off to perform ritual sacrifices to offer spirit food to the spirits of the dead, but she did not need to join in because her White Monkey *parami* would protect her.

Yamarāja is the symbol of death and judgment in ancient Cambodia from the reign of Jayavarman IV (921–941) [109]. He is depicted as the

symbol of the Supreme Court [110] even today and is commonly invoked in popular depictions of all kinds of death. Faced with such lethal symbols of death, the ritual sacrifices fortified and re-moralized many people, who felt that at least now they had regained some control.

People also reported flocks of vultures hovering around the site of disaster. Some informants told us of the rumors that spread in the aftermath of the disaster, including a bus, as well as 50 road deaths in Takeo and 40 in Kampong Cham. In the heightened anxiety about ghosts on the loose, one informant said that people warned against answering the phone without checking that the displayed number was in the normal color. If the number was red, it was believed that a ghost would extract the soul of the person answering the call.

3.2.2. Neoliberal development - Landlords of Water and Earth

The Diamond Island area was thought of as guarded by spiritual tutelary lords who were said to have inhabited Diamond Island for more than two millennia. The generic terms for these guardian spirits is "Landlord of the Water and Earth and Forest" (*mcah tɨk mcah dəy mcah prey prɨksaa*), with various categories of landlord spirits ranging from the most powerful, the sacred Nāga, to the garden variety tutelary spirits of the land. Our informants, especially those from Diamond Island, thought that the developers, the construction company, the tourist business, and those in power, had provoked the local guardian spirits to retaliate with the stampede. Some posts on social media also reported a similar idea.

Several of our informants believed that a pair of mythical sacred Nāga serpents were the spiritual owners of Diamond Island, ranking higher than the guardian spirits of the site. At each of the entrances of the bridge a pair of statues of the sacred Nāga serpents were carved. People living in the vicinity said that they saw the serpents, sometimes, their diameter about the same as that of the calf of a muscular man. The Nāga serpents were thought to have caused the stampede because of having been disturbed by the developers, especially when they had killed the Nāga King's wife and chopped up their baby snakes. The surviving male, the King Nāga, was stirred to avenge this assault on his family by whipping up a whirlwind and spraying venom on anyone in the vicinity, most of all on other young people who reminded him of the infant snakes that he had lost. Several informants depicted this action as the Nāga's curse on the human bystanders (*dak bandaasaa*). Some people believed this to be a fact, that the widowed Nāga King still lived there and continued to smolder in anger. People came to call the place "Death Bridge" (*spien maraṇa*) [97] and one of our informants, Bunnary, described it more evocatively as the "Massacre Death Bridge" (*spien maccurāja*).

Chhoeun's aunt, Srey Mav, was a medium. She said that some months earlier, she had heard about some Cham fishermen who had witnessed the Nāga flying over the Four-Face River (which is not a good sign because the river and the fish in it are the domain of the Nāga, which had been disturbed by the fishermen). These dragons let everyone see them. While possessed by the ghosts of those killed in the stampede, Srey Mav had seen the pair of serpents circling in the waters and dragons hovering above the Diamond Island Bridge. She thought that the Nāga pair, enraged by the developers constructing the Diamond Island Bridge without seeking permission, had spat venom on the people, causing the stampede (one gets the impression that the poor always seem to pay for the sins of the rich). The survivors came to see the medium so that with her help, they could make the offering and that she would sprinkle lustral water on them to safeguard them from further attack.

One family felt directly implicated. A close relative of Farina, a young Cham woman who had been killed in the stampede, had been working as part of the construction crew of the Diamond Island Bridge. To his horror, the blade of Farina's relative's bulldozer had accidentally unearthed a pregnant snake who he thought was none other than the female sacred Nāga. The blade had severed her belly, killing her and scattering her offspring's remains everywhere. The onlookers quickly clubbed and crushed the baby snakes and cooked and ate the dead mother snake, though he did not join them, because he took pity on the snakes and he was terrified about a possible counter-attack by the father snake.

These informants along with the others who knew of this event likened it to The Snake King story (*Pʋəh keeŋ kaaŋ* or *Keŋ̇ Kaŋ̇*), which, according to legend, was the name given to the ancestor of all snakes. There lived a man named Manop who has married to Nhi, who was unfaithful to him. Manop, hidings his feelings of revenge, lulled Nhi into the forest and unsheathed his sword and slashed her belly in half. Nhi died at once, and all the new-born snakes crawled out of her belly and began slithering away. Manop pursued the baby snakes and chopped them up [111]. There is a compelling parallel between the Nāga who lost her babies and the human mothers who lost their youth to the crush of the stampede, in which the victims became entwined much like the way in which a snake would attack its prey. The Nāga, "chthonic and hyperintelligent snakelike beings of ambiguous morality and who live in and control the waters" [112]; p. 93), are certainly in the right place (inhabiting the river beneath the bridge) at the right time (the Water Festival).

The next ranking landlord was the Guardian of the Royal Palace, which was not very far away from the bridge. Several informants including a prominent Trade Union leader and various traditional healers and mediums called the guardian spirit of Diamond Island "the Precious Crystal Stone" (*kaev meaʔnii*), which referred to the protective Parami of the Emerald Pagoda within the Silver Pagoda complex of the Royal Palace less than a kilometer away. These guardian spirits took exception to the revelers and the developers alike who disturbed their territory on Diamond Island. The people who had been evicted from Diamond Island by the developers, continued to return to pay their respects to the Landlords of Water and Earth who had once cared for them. On returning one year to pay homage to the ancient location of their old guardian spirits, they returned to find that bulldozers had destroyed the spirit huts and a major construction project was underway. These people believed that the stampede was an act of revenge by the guardian spirit to shame the developers before the international community.

These popular accounts of disaster as arising from disrespect for the spiritual owners of the territory echo a deep-seated prototype for mishap [113]. Here is a popular commentary written by Acariya Buddhaghosa, who received it from the Elders going back to the Buddha himself [114].

Five hundred monks went into a remote forest where they chose a majestic tree to meditate under. Little did they know that they had chosen a tree inhabited by the Asurakaya spirits. The next morning, the monks went looking for food. The spirits climbed their tree, expecting that the monks would depart. However, after a week, they were still there. Angered, they transformed themselves into "haunting ghosts" with big eyes, making piercingly high-pitched sounds while also howling like dogs. Like the spirits displaced by the developments at Diamond Island, the spirits of the trees had been displaced and stood aside waiting for the 500 monks to move. In the end, they lost patience and attacked the monks.

The message in this legend is that invading a space inappropriately leads to trouble. In the case of the legend, the monks, who are human, stumble into the territory of the Asurakaya demon spirits, and pay the price for doing so. In 2010, it is neoliberal development that has violated the space of the guardian spirits. The disaster is a warning. It is these sort of boundary violations that have been viewed by some garment workers as triggering mass fainting in the factories in Cambodia during this period of neoliberal development [102,113]. The same phenomenon was reported in other disasters that have been said to be representations of tradition and modernity. Schlehe [68] argued that the culturalization of a natural event brings both cultural and transcultural dynamics to light. She noted that in the discourse on the earthquake in Java in 2006,

which was a reminder to live a moral life, "there is a new tendency to polarise: on the one hand, modernity is associated with secularisation, materialism, moral decay and ecological exploitation, while on the other hand tradition is idealised according to a global model of spirituality and harmony" (p. 112).

A related idea is that the spirit and human worlds mirror one another. Dove [115]; inspired by Jeremy Bentham's concept of the "panopticon," a method for promoting not only surveillance but also self-surveillance, argued that in Yogyakarta in Central Java, it is believed that the spirit world in the crater of the Merapi volcano mirrors the world of humans, and that "by monitoring the volcano the Javanese can gain insight into what is happening in their everyday world" (p. 121). In the case of the Diamond Island stampede, it appears that something similar took place.

Other strange events had also occurred during the construction at Diamond Island. Even if the municipal authorities had granted approval, the spiritual landlords had not. Bulldozers became "paralyzed" and stopped working. The manager took this to be a portent of disaster and suggested to the company that they make an offering to beg the pardon of and retrospectively seek permission from the Landlords of Water and Earth. Once the company had done so, the bulldozers started working properly again. Savy, a Buddhist female devotee, explained the inauspicious events as follows:

> Before felling a tree to construct a house, a person should make offerings to the tree so that the guardian spirits will help protect the house. The developers had trampled on Diamond Island and had angered the Earth deity, causing it to "wound" the "arms and legs" of its own descendants.

This account is an example of what disaster researchers describe as a culturally mediated risk perception [23], depicting the hazard posed to ordinary people by those in power and the developers who were disrespectful of the land and of its human and spirit inhabitants. As pointed out by Quarantelli [116]; disasters were once viewed in the West as Acts of God, then as Acts of Nature, and now as Acts of Men and Women though, as pointed out by Merli [69]; these ideas are not mutually exclusive and can coexist in the same social context. However, there is an added dimension in that disasters are also characterized as moral acts mediated by the supernatural. Our findings illustrate how the human stampede was seen at one level to be a consequence of an anthropogenic "mistake"—poor crowd control—and, at another level, a result of local spirits giving vent to their dissatisfaction with neoliberal developments such as the commercialization of Diamond Island, which led to forced evictions that disrupted the traditional structures of nature and the community. This "double" interpretation is precisely what is found in other disasters in Southeast Asia. For example, Quilo et al. [117] found that among the Subanen, an indigenous animist community in Zamboanga Peninsula in Mindanao in the Southern Philippines, there were strong relationships between the human, non-human (nature and animals), and metaphysical (deity) in making sense of disasters. The Subanen animist worldview is remarkably similar to the worldview in Cambodia, with spirits living in big trees, rocks, and so forth. The Subanen interpret disasters through both animistic cosmologies as Magbabaya's (Supreme Being) punishments for the community members' failure to perform their role as good stewards of natural resources, and as a consequence of anthropogenic activities such as illegal logging and forest denudation.

These notions of "progress" leading to disaster have obvious parallels in western thinking. For example, Rozario [118]; in his cultural history of the Chicago fire of 1871 and the San Francisco earthquake and fire of 1906, suggested that such disasters that befell a "capitalist" United States were viewed by Americans as part of the headlong race to free-enterprise and prosperity.

3.2.3. Millenarian explanations for disaster - The Buddha predictions

Disasters have been seen throughout history as manifestations of divine displeasure toward human actions and have triggered millenarian fervor [119]. History is replete with prophecies of "divine retribution" striking as disaster and leading, in the end, to salvation. Jeremiah foresaw the social and economic injustices as the fruit of idolatry and as causes leading to disaster – slaughter, captivity, and exile – typified as "the collapse of the world, cosmic crumbling, and the end of culture" [120]; p. 22). Gosse [121] showed this in the ancient biblical account in Jeremiah: in the first (7:35), God wreaks disaster upon Jerusalem; in the second (1:45), God brings the same disaster upon Jerusalem and the nations; and in the third (1:51), God finally brings upon Babylon the disaster and the salvation of Jerusalem and the nations. Jeremiah foresaw God's judgment on his wicked people, whose political fickleness led to punitive attacks by Assyria and Egypt, as "a pot of stew … boiling over an open fire, but tilting badly on its stones, threatening to spill its contents and … a danger to any child playing nearby" [120]; p. 57).

In a similar moral vein, man's immorality can lead to an epidemic or a disaster. When the ancient Israelites allowed themselves to be seduced by the Moabite women who were sent to seduce them, a plague was brought to an end; specifically, when Pinchas speared Zimri and the Middianite woman in flagrante delicto, the plague ended instantly [122]. The disaster brought about atonement. Janku [123] described how the "Record of Auspicious and Inauspicious Phenomena" in Linfen county in north central China depicted the moral reading of natural disasters during the 18th century as related to the ancient theory of the Heavenly Mandate and triggered by deficiencies in people's behavior and of the government's performance.

Millenarian explanations associated with upheaval and disaster are common in Southeast Asia, for example, in Thailand [124,125]. In Cambodia, the Diamond Island stampede provoked some thought about the "dark way," an explanation for disaster that implied that misfortune does not fall at random, but that its timing and nature signal a cosmic response to moral wrongdoing by people – or by their leaders and multinationals. The notion of moral corruption leading to disaster is seen in millenarian texts, most of all in Cambodia in a popular text known as "Buddha Prediction," or Buddh Damnāy, in which it is mentioned that moral corruption will unfold at a grand scale, and will be followed by mass destruction. The Buddh Damnāy, along with other similar texts, possibly go back to the 16 dreams of the King of Kosala and which the Buddha interpreted as a prophetic dream portraying, far into the future, the unruliness and moral bankruptcy of the nation in the future and the consequent disaster that will strike. As Young [126] observed, "beyond the lifetime of the king, thereby rendering them personally meaningless to the king" (p. 96).

The "Buddha Predictions" are seen to forecast endemic violence in Cambodia [127,128]. According to Ledgerwood [15], the Buddh Damnāy included the forecast that during the 1950s, there would be a period of death and destruction and that the ignorant savages will come to rule the nation. In a similar vein, people also draw upon it to make sense of national catastrophes such as the Khmer Rouge regime [129, 130]. The most graphic element in recent history was the prediction that "there will be houses in which no one will live and roads upon which no one will travel; people will fight over a single grain of rice stuck to the tail of a dog" [129]; p. 789), which foretold the scene of the abandoned capital and the starvation of the oppressed by the Khmer Rouge. The Buddh Damnāy is also used by people in the here-and-now to make sense of senseless personal violence, such as violence against women [131, 132] and the sexual abuse of children [133].

Some older informants who were triggered by the horrible images of the bodies that had crushed one another in the stampede depicted the scenes of the stampede as blood rising to the elephant's belly.

> Vannara recalled how, in 2003, an elder, signaling to him that disaster would strike at Diamond Island, had posed him a riddle: blood would rise to the elephant's belly, the landscape would be

changed for new construction, and security cameras would become like magical eyes and ears. For seven years, Vannara puzzled over the riddle and then with the stampede, he realized that the river of blood had signaled the 347 dead, the landscape being flattened were the skyscrapers that had been erected, and the security cameras were the new regime in that they were associated with the surveillance that came with progress.

These allusions recalled the Buddha Prediction that fighting would lead to mass casualties with the entangled limbs of the corpses, so much so that "blood (or corpses) will reach the belly of the elephant," and popularly depicted as in the war, the blood would saturate the bellies of elephants used to transport wounded troops (*saŋkriem cʰiem daap cʰiem daap pʋəh damrəy*). This image of blood-soaked mass death is also seen in the depiction of the Khmer Rouge era as one when the rivers of blood flowed so copiously that the land was saturated with it, as in the phrase (*cʰiem kraal tʰɔɔreaʔnii*), an allusion linking the stampede to the bloody Khmer Rouge regime of the 1970s that remains embedded in the national consciousness. Thus, the "Three Vast Plains" (explained in detail below) were invoked retrospectively to explain the disaster that had already occurred. The older informants said that they had gained comfort from the Buddha Predictions since it provided a comprehensive explanation for their contemporary social and political crises as well as their historical ones during the Khmer Rouge era.

We can see the links between the various explanatory ideas, for example the dark road, the curse invoked by the Buddha Predictions, and the subsequent whirlpool generated by the angered guardian spirits.

A medium depicted this ominous scene of the angry water spirits causing a stampede like this. Moggallāna, one of the Buddha's chief disciples and a renowned shapeshifter, met up with the Water Ghost Army commanded by the Nāga serpents of the underworld. Moggallāna made a wager that if he lost a chess match with the commander, he would offer 500 of his soldiers, and he did lose, but had no soldier to give. To fulfill his debt, Moggallāna magically created "Water foam soldiers" from the river.

The "Buddha Prediction" and other early Buddhist texts depict many disasters – even the prediction of the death of Buddhism itself involving various timelines of decline and a foreboding of catastrophe at the end [134], and among these, the people thought that this battle of the Water Ghost Army was at the heart of the stampede.

3.2.4. The three Vast Plains

The stampede occurred toward the end of the Year of the Tiger, which is thought to be an inauspicious year. In his speech following the stampede, the Prime Minister declared that it was associated with the "Three Vast Plains," prompting people, within a day, to frantically distribute photocopies of the fragments of the Buddha Predictions (in the old days, they would scribble handwritten copies on scraps of paper). This text includes several mentions of a disaster that would take place at the intersection of the "four rivers," namely the Upper and Lower Mekong, the Tonle Sap, and Bassac rivers. Older people were quite familiar with the text and, as shown in the following example, seemed to use it as a means of containing their panic:

Mrs. CC lived in a suburb far from the stampede. In her youth, she would hear the old folks utter the phrase, "The Vast Plain in which people die with their limbs entwined – at the confluence of the four rivers," and she had long feared a disaster. Sure enough, decades later, her fears came true, as Diamond Island is indeed situated at the confluence of the four rivers. Srey Mav was a medium who was possessed at a funeral ceremony for the victims. She believed that the stampede was related to the Three Vast Plains, and she quoted the well-known phrase, "There will be a field of blood reaching the

height of the bellies of elephants, corpses entwined at the crossing of the four rivers."

In the aftermath of the disaster, the older informants and the ritual officiants and female devotees said that the stampede was a sign of the Three Vast Plains. These were about the suffering and loss of life caused by war, starvation, and illness.

We asked Sophy, the medium, about the links with the Three Vast Plains, and her master-teacher defined these to be the 1970s "Vast Plain of Pol Pot," associated with "The Vast Plain of War," the famine of the 1980s which the master-teacher called "The Field of the End-of-Life" and associated it with the continuing deaths owing to poor crops and illness, and the third was called "The Vast Plain of Dying by Stampede" and was associated with the event in 2010.

The stampede took a toll on families that had lost their young people, and triggered flashbacks among the older people, by bringing up memories of the Khmer Rouge era.

Chhoeun's grandmother, Pealika, looked back to the early 1970s when she had endured the constant US bombing in her province. She said that she had crossed The Vast Plain of War. Then she had to cross The Vast Plain of Hunger during the Khmer Rouge era, that is, from 1975 to 1979. Now, she had to endure The Third Vast Plain and was not sure how it would happen.

Vanna, in her late 60s, remembered her parents' words about the Khmer Regime as the "Field of Famine" and how they had pulled through those years by secretly circulating fragments of the Three Vast Plains papers, and now she experienced the stampede as a manifestation of yet another of the Vast Plains.

The millenarian idea of disasters as harbingers of the impending millennium is widespread in mainland Southeast Asia, with the "theme of apocalyptic omens made manifest in the natural world" [124]; p. 686). Bowie described how, in Northern Thailand, hardships such as famine, political oppression, dislocation and migration, epidemics, animal diseases, and natural disasters are all tropes of disaster, "omens of cosmological disharmony and the result of a morally corrupt government" (p. 704). People recalled predictions such as, "There will be roads, but no one will walk on them; there will be rice, but no one will pound it … and that the religion will decline" (p. 695). Bowie concluded that "Buddhism has provided its suffering adherents with seminal tropes of disaster and salvation" (p. 707). These are strikingly similar to the Buddha Predictions in Cambodia. Nevertheless, the authorities in Cambodia seem intent on downplaying the importance of these superstitions, perhaps as they challenge political control.

Indeed, in talking about the Buddha Predictions, our informants spoke about the interconnections among these with the Three Vast Plains as mentioned earlier, and the Buddhist Triple Poison, the three unwholesome roots (*akusala-mūla*) of greed, anger, and ignorance, in which the Vast Plains of war, hunger, and illness were linked with the Triple Poison of craving, anger, and ignorance. These Triple Poisons led the victims of the disaster to pay for the moral shortcomings of those at the top, the developers and profiteers of Diamond Island, by falling into the Four Abysses (*ʔanlʋəŋ buən*), which were well-known to the elderly and the members of the clergy. The Abysses were a way of expressing a metaphoric flood or *ogha* [135]. The Ogha Sutta delineates four types of flood, or ogha (*ʔaokʰeaʔ* in Khmer), the Floods of Sensuality, View, Existence, and Ignorance, (*Kama Ogha, Ditti Ogha, Bhava Ogha,* and *Avidya Ogha* respectively), and which impede progress in life. The Sutta tells the story of how the Buddha managed, simply by standing still, to cross these without drowning the *ogha*, as if the person struck by disaster is floundering. These floods submerge a person repeatedly in the cycle of birth and death; and in the case of the stampede, they did so through suffocation.

The explanatory frameworks, namely the dark road, neoliberal development, and the millenarian predictions, alert us to the injustice of

disaster. The developers of Diamond Island (and the factories where so many of the victims toiled) had been blinded by their craving for wealth (ʔɑnlʊəŋ kaam), and innocent victims, many of whom were poor garment workers, bore the consequences of the mistakes or wrongdoings of others. To the western observer, there is an apparent contradiction with karmic law, "do good get good, do bad get bad" [136], but the informants believed in the Buddhist teachings that they could receive karmic outcomes for good or bad actions committed in a previous life and that those responsible for the stampede would pay in a subsequent life if not in this one.

4. Conclusion

This article identifies the *emic* construction of the stampede as an emblem of disaster in Cambodia and provides a cultural framing for the popularly-perceived reasons for why disaster strikes. The article also shows the importance of digging deeper than simply stereotyping a society according to the dominant religion, for example, as "Buddhist", whereas the drivers for risk perception including the role of fate/fatalism and hazard awareness flow in the deeper currents of local cosmology (for example, animism).

A cultural lens shows the deep ontological roots of disaster. The contemporary disasters that challenged modern-day Cambodia, such as the Khmer Rouge era, the civil war, the Diamond Island stampede, the outbreak of HIV/AIDS, the current neoliberal accentuation of the division into wealth and abject poverty, could all be said to have been foretold two millennia before the events took place.

It seems that a community undergoing rapid neoliberalization may draw upon and adapt old explanatory recipes, such as the wrath of the local spiritual landlords as responding to contemporary inequalities and injustices in society. This is why traditional millenarian explanations for disaster become so popular. The article highlights the moral overlay given to disaster, an amalgam of political and social forces in contemporary Cambodia, interpreted through old idioms such as the "dark road" and astrology.

The Diamond Island disaster was inscribed on a society that was already deeply scarred by the Khmer Rouge era and the subsequent civil war, with a cultural memory of wounds that remain fresh. The case material presented in this study demonstrates how people continue to grapple with these events. In the aftermath of the disaster, references to the Khmer Rouge began to surface and this is a fascinating and crucial point, showing how a contemporary disaster is framed in the unresolved trauma of scars on the national psyche. This study demonstrates how the Diamond Island stampede, although it occurred decades after the Khmer Rouge regime, was stained by the older trauma.

There are implications for the cultural framing of trauma after a disaster. Notwithstanding the stereotype that survivors in "fatalistic" societies, drawing on karmic and "pessimistic explanatory styles" to explain disaster being prone to PTSD [137], the findings in the present study show how karma is simply a part of a broader cultural explanatory model and, if anything, could be protective against trauma. Traumatogenicity has been defined as a threat to the integrity of relations that is characterized by loss, unpredictability, proximity, and suddenness [138], and the Diamond Island stampede is a catastrophic threat that fulfills all these criteria. Nine years on, we continue to follow up with the survivors and families of those who died to trace the further evolution and devolution of their post-trauma states.

The Diamond Island stampede is woven into a wider narrative of disaster. The stereotype of disaster is of an unpredictable and extreme event from which recovery comprises a return to the status quo. Earlier on in the field of disaster anthropology, Hoffman and Oliver-Smith [139] highlighted important advances that are central to the argument in this paper. They redefined disasters as chronic elements that are, to some degree, constructed by humans, and argued that societies were "established settings within dangerous zones" because of neoliberal advantages, which often, as they put it, put some segments of the

population in more perilous situations than others.

The findings in this article provide the integrated perspective championed by Oliver-Smith's [91] most recent review of what is necessary for effective risk reduction. The local realities of the stampede are situated in the national context and, above all, uncover the "local risk perception and interpretation, local participation, and the inclusion of local knowledge" (p. 76). This perspective offers potential in relating disaster to morality and the notions of social and cosmic justice. An *emic* understanding that illuminates local risk perception and interpretation and the inclusion of local knowledge can underpin culturally sensitive responses to disasters.

Acknowledgements

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