

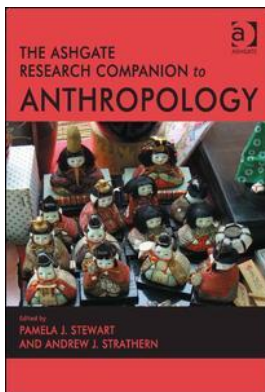
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Access details: *subscription number*

Publisher: *Routledge*

Informa Ltd Registered in England and Wales Registered Number: 1072954 Registered office: 5 Howick Place, London SW1P 1WG, UK



The Ashgate Research Companion to Anthropology

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Publication details

<https://test.routledgehandbooks.com/doi/10.4324/9781315612744.ch20>

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Published online on: 28 May 2015

How to cite :- Pamela J. Stewart, Andrew J. Strathern. 28 May 2015, *Disaster Anthropology from: The Ashgate Research Companion to Anthropology* Routledge

Accessed on: 10 Jun 2023

<https://test.routledgehandbooks.com/doi/10.4324/9781315612744.ch20>

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Disaster Anthropology

Pamela J. Stewart and Andrew J. Strathern

For a long time, anthropologists have been aware of the need to handle questions of change and history in their ethnographic studies and theoretical explorations. The increasing volatility and pace of change, often associated with migration and phenomena loosely labeled as globalization, coupled with the rise of international NGOs and the employment of anthropologists as consultants, has accelerated the urgency of dealing with types of complex and disordered change in society. Studies of areas affected by large-scale or pervasive disasters present key challenges in this context. Further, concern with global climatic change has highlighted the relevance of such studies. It is in the light of these challenges, and the growing number of empirical studies in this area, that we have found it important to define the sub-discipline of what we are calling Disaster Anthropology.

Our ongoing work in this relatively new and rapidly developing arena of research stems from our fieldwork in Papua New Guinea (PNG) and particularly Taiwan and is now extended to Samoa in the Pacific area and to Japan. Memories and traditions of disasters that have overtaken populations are widely spread throughout the world, underscoring the point that this is a salient arena of human experience (see for example, Carr 1993, on the Night of the Big Wind in 1839 in Ireland).

It is also an arena that impinges on people's consciousness through a kind of proxy experience of it. In 2012, when we were delivering a set of lectures (the De Carle Lectures) at the University of Otago in Dunedin, New Zealand, we heard narratives of the earthquake and its aftershocks that had devastated the city of Christchurch to the north. We had planned to visit and give a talk at the Centre for European Union Studies there, only to find that the Director of the Centre had lost his house in the disaster, and everyone was facing stress, so that it seemed advisable to forego the visit. In Dunedin people remarked that they had felt the tremors of the earthquake. In Dunedin also, during our stay there, a warning went out over TV early one morning that a tsunami or high wave might hit exposed coastal parts, resulting from an earthquake in Chile. We hastily took some essentials and prepared to retreat to high ground, but the waves turned out to be minor. Earlier, in 2006 we were due to make a return field visit to the Atherton Tablelands in Northern Queensland, and had made a booking in a forested area in the hills outside of Cairns. We found on arrival that our hosts had to put us up in another location because the picturesque setting of their own cabins had been devastated by falling trees as a result of a cyclone that had just passed through the area. In a later year we read about the huge floods that had affected Queensland including the city of Brisbane itself—cities built around the mouths of rivers become at risk with storms that bring floodwater downstream. These, then, were experiences, minor for us, major for those primarily affected, that coincidentally occurred on our field travels and through our academic connections.

Whether the incidence of disasters is increasing or not is difficult to assess. The partial globalization of communications through news media means that a wider net of information

is thrown around the world and public consciousness is raised. News is often bad news and disasters grip human attention, conveying the vulnerability and vicissitudes of life. Natural disasters bring this sense of vulnerability to the fore in a particularly compelling way. We recognize, of course, that a hard and fast distinction between human-made and natural disasters cannot be maintained, because many adverse events are precipitated by a combination of causes operating as ecological phenomena. Nevertheless, we are interested in events that are classified by those involved in them primarily as events brought on by forces beyond human agency. In the aftermath of such events, causes relating to humans and/or animal stock are often adduced, giving rise to scenarios of blame, exculpation, ideological arguments, and eschatology that are very relevant to the theme of how people deal with the fact of disastrous events.

One of our early encounters with the theme of such disasters was in the Mount Hagen area of the Western Highlands of Papua New Guinea. This was the story of the “ash fall” that suddenly overtook the ancestors of current generations of people. That the event (or events) incorporated into local legends was very widespread has been demonstrated by the research of Russell Blong (1982) who diligently recorded ash fall narratives all across the New Guinea Highlands (and later studied the risks of volcanic eruptions throughout his career). For Hagen the story was first recorded by Georg Vicedom (Vicedom and Tischner 1943–48), a Lutheran missionary stationed at Ogelbeng near to Hagen in the 1930s who compiled a massive corpus of ethnographic data (Strathern and Stewart 2007). The form of the story is broadly shared among the Highlands societies. It basically tells of a period of days in which ash fell from the sky and covered all the gardens and houses and people had to stay inside their houses. Eventually the boldest among them came out when the ash falls stopped and found their whole world blanketed with the ash and crops and trees damaged. But afterwards everything recovered, the narratives say, and in the version recorded by Vicedom it is suggested that a new set of people sprang up following the event, which turned out not to be such a disaster after all. Vicedom noted that the legend was probably based in historical reality because the gold miner Michael Leahy (a pioneer explorer of the Highlands) found thick layers of volcanic ash in mining trenches his workers made below the surface. These traces in turn have proved to be important dating devices for Prof. Golson’s archaeological team at the site Kuk in the Hagen area, since different compacted layers of ash have been found at Kuk and have been dated and where possible traced to the eruptions that resulted in their deposition in the local soil over time. While the legends tend to recount a single event, the archaeological evidence indicates that there were multiple occasions of ash fall during the overall time depth of human occupation. The ash can often be sampled and identified as belonging to particular, historical dates, and sites of volcanic eruptions, and so it can contribute to the overall chronology of archaeological phases in the evidence of early agriculture (see for background Strathern and Stewart 1998). Blong identified the ash at Kuk as what he called Tibito and Olgaboli tephra deposits from the eruption of Long Island off the northern coast of PNG some 300 years BP.

From our viewpoint here the major interest of the narrative is that it contains a message of recovery. The ash that appeared to destroy everything enabled its later regeneration. The fertility of volcanic soil is the reason why populations often choose to live and flourish in such sites, thereby becoming vulnerable to future disaster if the volcanic eruptions should be renewed. In the Hagen case, it is interesting also that the narrative was preserved as legend, but not, it seems, as a warning that the ash fall might at some time come back and that people should be prepared for it. In places where such eruptions continue, and in places where tsunami events regularly recur, a different form of memory is preserved, containing the warnings and advice on how to flee and stay alive.

In the PNG Highlands more recently there was a climatic El Niño event which caused an inversion of temperatures, with colder air near to the ground bringing frost damage to vulnerable leafy vegetable crops, including the staple sweet potato. The ensuing shortages of food were severe enough for people to request aid from the government until they could replant another set of crops and harvest them, a process that takes several months. Drought, and shortages of food as well as sharp changes in temperatures caused an outbreak of illnesses, from which some people died, and numbers of suspicions or accusations of witchcraft or sorcery emerged as a result. The ecological disturbance caused a disturbance in social relations. This kind of event was not unknown to the people, however, particularly those whose habitats are in mountains above 6,000' a.s.l., and higher altitude dwellers developed exchange ties with ones living in lower more favorable places that enabled them to take refuge for short periods of time when this was needed. Valued mountain products, such as forest nut pandanus could be exchanged for lower altitude crops such as the long fruit pandanus. The El Niño, however, tended to affect gardens in the valley floors as well as on hillsides, so ordinary activities of adaptation did not work so well. Finally, when the cold air was not so severe, we ourselves noted that the crops rebounded, becoming healthy and very strong again. Large insects such as colored spiders also emerged. There was therefore a general sense of renewal and growth that mirrored the themes in the ash fall legends. (We encountered a similar phenomenon in a different cultural context, in the spring of 2013 in Ireland and Scotland where a great shortage of grass for fodder had occurred owing to bad weather. When sunshine finally came and the grass for hay and silage sprang up farmers experienced a sense of relief and appreciation for the "power of nature," as they themselves put it.)

These disaster and recovery narratives encapsulate the two main themes of our own project, on the phases of coping and hoping in people's experiences in disaster situations. Coping comes first and also has to continue over time, but is supplemented by hope that circumstances can improve or are improving. Creative actions by people foster and help senses of hope to grow. Actions that we call symbolic come into play and may operate in any sphere, intimate, public, or political, and at any stage of recovery from trauma. In Japan, the disaster known as the Great East Japan Earthquake and Tsunami happened up and down the eastern coasts around Sendai with the incursion of the huge tsunami wave on March 11, 2011 (and is accordingly referred to in some writings as 3/11).

A special edition of *Nikkei Eastern Review* of March 6, 2014, was produced to commemorate this cataclysmic event, and noted that some 20,000 people had died or gone missing and some 400,000 homes were destroyed as well as huge damage done to roads and services. Some 470,000 people had to leave their homes, in particular because of leakage from the crippled Fukushima Daiichi nuclear plant. The latter presents an especially poignant problem because of long-term pollution that makes it problematic whether some residents will ever be able to return to their homes. In the cherry blossom season of 2014 we watched NHK television programs depicting trees blooming in well-known areas where the residents were not permitted to return and view them. Given the iconic significance of the cherry blossom, this was regarded as a mark of the serious deprivation suffered by people. Annoyance with this enforced removal from their land has led to recriminations on the part of farmers. One farmer, Kenichi Hasegawa, published a book in March 2012 entitled "Fukushima's Stolen Lives," severely criticizing government handling of the nuclear disaster in his area 40 kms from the nuclear plant (*Japan Times*, Sat. April 12, 2014, p. 3).

In April 2014 we watched another NHK television program in Japan that carried the story of a mother who had borne her daughter in a hospital shaken by the earthquake on the date of the tsunami. It was her first child and she was terrified, and a nurse had told her just to keep the newborn close to her own skin and so help it to be warm. She had hidden in her

car and done so and mother and child both survived. Later she felt, as survivors often do, guilty for being alive and uncertain whether she should feel able to celebrate the daughter's birthday. A company, however, was giving out small chairs for children born on 3/11 and the daughter had grown very fond of one such chair given to her. The chairs were called "hope chairs," and the mother felt she now could celebrate the daughter's birth, because it represented the idea of hope for the future, that the daughter will grow up and help to create new life.

The model of coping and hoping, which is both processual and phenomenological in its import, applies certainly to other events in addition to those we are demarcating as "natural disasters." In the broader sense, for example, wars must be seen as disasters in terms of their natural and human effects, and recovery from war goes through the same phases of coping and hoping that we have applied here. Disorder, stress, risk, trauma, and reordering of memories, are all crucially involved. Recovery from war also has to be preceded by the conclusion of a war and the terms of making and building peace as a way of resolving issues between those who have been enemies and also within the various groups on each side. Using this point, in our work on disasters we point out that disasters often also implicate internal divisions or conflicts, as well as senses of disharmony with the environment, and disaster recovery may therefore further involve making peace between people and with the environment. It may also involve long-term arguments about responsibility, culpability, blame, and compensation. Such arguments continue to this day about the aftermaths of World Wars I and II or as far back as the Sino-Japanese war of the nineteenth century. Compensation issues can be particularly stubborn and hard to settle finally, especially in relation to events where human responsibility is involved, such as in nuclear power disasters. (Chernobyl as well as Fukushima come to mind.) In a different context, mine pollution effects often spread out from the immediate mining area to more distant places, as happened among the Duna people of Lake Kapiago in Papua New Guinea (Stewart and Strathern 2002). The big river Strickland at the border between the Duna and Oksapmin was thought to have suffered pollution from mine tailings out of Porgera in the Enga Province. The company decided to offer compensation without openly admitting culpability, and local groups all received a portion of the money offered and distributed to designated "leaders" and their networks. Mining companies seek to contain the negative effects of environmental pollution from mine tailings by agreeing to pay compensation in this way even while arguing about the objectivity of evidence for pollution.

Our interests in issues of this kind were quickened by field experiences in southern Taiwan following devastation of mountain areas among the indigenous Austronesian groups. In 2009 a powerful typhoon named typhoon Morakot slammed through many communities perched on the edges of large river systems, and the heavy, slashing rainfall precipitated massive landslides, in one case completely covering up a village (Shaolin) and burying its inhabitants. In other instances the landslides destroyed the hillside and riverine gardens of the people and/or ripped away many of the village houses built alongside a river course. A historical background to these experiences of the people is to be found in the fact that they had often been subjected to a number of relocations unrelated to an immediate environmental disaster. In the Pingtung area the people of Laiyi village explained that they had been moved a number of times from the earliest remembered settlement site high up in the mountains. This, the true "ancestral" village site, is seen as not being subject to landslips. People can still hike up there to make a day visit. They were then relocated at some point by Japanese colonial authorities further down the mountain side to make them more accessible to governmental control. After the defeat of the Japanese in World War II Taiwan was granted to the Kuomintang (KMT) Republican leader General Chiang Kai-shek fleeing from China and it is said that the KMT authorities brought the Laiyi people further downhill to the

settlement that was recently rendered hazardous and partly destroyed by typhoon Morakot and another typhoon that followed it after 2009. This settlement sits close to a very broad path of the local river and the river broke or eroded its banks with the swell of rainwater, sweeping away riverine gardens and houses. The present KMT government then decreed that villagers should move again, this time to flat plains areas where houses could easily be built and within reasonable reach of services but without provision of significant land for gardening.

Large garden areas and some dwelling houses have been lost. The government allows people to make daytime visits to what is now “Old Laiyii” from their relocated settlement of “New Laiyii,” requiring them to return to the new area by evening. However, numbers of people, who did not lose their houses and still use pieces of high-set land for gardens, remain ambivalent about the new order of things and have refused to sign contractual agreements to move. The chief’s house is still in Old Laiyii.

A complication in the Laiyii situation results from a division in the community between traditionalists and Christians. The members of the leading chiefly line (*mamazangilan* is the Paiwan term for this category), as we were told by the local Christian pastor who is Han but was brought up by the chief’s household, all converted to Christianity, joining the Church of the Nazarene located in the valley area beside the river but away from the areas that flooded. People of a different section of the whole group, who also claim to have chiefly leaders, opposed this move and insisted to stay in their part of the old village. Predictably, the two sides, Christian and non-Christian, had opposed explanations for why the river had burst its banks and landslides had happened. Christians said it was because some people had turned back to pagan ways and thus brought punishment from God upon themselves. The pastor had a more complex version of this story. She said that the people had reinstated an enactment of an old harvest ritual, intending this for tourists, but that instead the ritual was carried out seriously rather than just as a touristic “performance,” and so there had been trouble. The non-Christian or pagan side declared, to the contrary, that the disaster occurred because the ancestors were displeased that people had turned away from the proper sacrifices to them and adopted the new religion instead. On a visit to Old Laiyii we saw the village shrine to the ancestors, just beside the chief’s house, a bare structure with some space for offerings, so the ritual site was still in place, but the pagans, or traditionalists, said that it was neglected. Controversy between the two sides was spirited, and a meeting was arranged for us with the village councilor in 2012. We were told that the traditionalists had decided to find a pig and cast it into the river as a propitiatory sacrifice in order to avert further damage. The competing moral eschatologies tied in with the environment reflected similar modes of thought but dissimilar visions of the cosmos.¹

Pagans hung on to the old village, while the Christians were at least partly relocated in the new resettlement area. We visited both the old village and the new area. Houses in the new area were built in permanent fashion, of wood or concrete-based materials in the main. Given the scope of the devastation, several other villages besides Laiyii were involved. Different aid agencies had undertaken to build blocks of houses, which accordingly caused some distinctions of appearance. The Red Cross built some blocks, World Vision (a Christian organization) others, and Tzu Chi, a major Buddhist aid NGO based in Hualien, Taiwan, built yet others. All these houses were erected without charge to those who came to occupy

1 We have found that this theme of competing moral eschatologies has been documented in work by Judith Schlehe on parts of Java in Indonesia that have suffered earthquakes, e.g., Schlehe (2010). This constitutes a comparative theoretical issue of great interest. We suggest that cosmology is most likely to be invoked when there are in fact splits in community views and that disasters accentuate such splits. Conflict between Christians and traditionalists lends itself to this process, as it did after the tsunami that hit the northern coast of Papua New Guinea at Aitape in 1998.

them and the occupiers paid no rent but had to pay for services. The aid organizations supplied furniture and appliances such as washing machines and TVs. The drawback, as we were told, was that the occupiers could not sell or pass the dwellings to others. We were also told that they were required to sign a contract promising not to go back and resettle in the old area. The contract was signed as a pledge to government authorities. Residents were mainly middle-aged and older people at first. After another two years on return visits we noticed that there were schoolchildren, school buildings were in use, and churches were being built in various designated corners belonging to particular groups and sub-groups of people who had all been put together in a single named relocation site. The NGOs had built the houses but the churches were said to be the people's own responsibility, and they collected money among themselves to pay for the construction costs as they did in the old village areas. We observed this developing pattern at Rinari (Linali) as well as New Laiyii and Taewu. Churches that were already finished and in use had been well built and supplied with furniture and carvings for their interiors. We saw Presbyterian and Catholic churches, either completed or underway. These would form nodes of identification for people of particular tribal or local identities who wished to maintain some degree of distinctiveness while being aggregated in the new composite resettlement context.

As with Japan, there is a long history of experience with natural disasters in Taiwan. For example in the center of the island in Nantou there was a severe earthquake in 2013 and an earlier destructive one in the 1990s. We made a visit to Nantou 10 years after the earlier event and studied recovery processes, including an efflorescence of craft work in bamboo for sale to tourists.

Our fieldwork has taken us in particular to resettlement places among the Paiwan speakers both in the south-east around Taitung and the south-west in Pingtung. Our visits began in 2010, on the eastern side. We already knew one village, Lalauran (Xiang-Lan in Mandarin) where there is a charismatic leader who is a Presbyterian pastor. His village just escaped the depredations of Morakot, lying to the south of the river course where most of the damage occurred. In riverine flats to the north of Lalauran we saw great swaths of land where everything was flattened and trucks were the only things operating to carry gravel from the riverbed and to build up the river's edges with concrete slabs and blocks. People living near to the coast had been relocated in small pockets of wooden housing built for them by World Vision. Some were on isolated patches of high land overlooking water, others were in the middle of urban areas wherever space was made available. People had begun to plant crops and flowers in the tiny areas of frontage on their house sites. Two separate dwellings were often combined in one unit.

One interior village on the eastern side that we visited in 2010 was Jalan. We saw how the river had sliced through a part of the village built near to its banks (as we later saw also in Laiyii). The Chief's house was upended in the middle of the new river bed. Huge spans of timber logs had come crashing down with the water, and these were piled up in various places awaiting what was to happen to them. On the further bank a sole resident had clung to his original house, refusing to move. A local doctor was trying to establish a school for young men, teaching them about hunting and the preparation of healthy foods; but the village was clearly suffering from the shock of the typhoon. Three years later, in 2013, we visited again, and found the village transformed. First, the relocation houses to replace those destroyed were situated within the territory of the village itself, not far away from it. Second, we were told that World Vision, which had built many of the houses, had given extra money to each household to enable it to have tribal identification decorations in Paiwan style to be created by artists on the exteriors of the houses. Third, the relocation area was connected by a new road and bridge system that joined together parts of the village and its gardens that had been separated by the river floods. We also saw at a distance uphill, but did not

directly visit, numbers of further new houses which were said to have been built by the government. On this same visit we were driven up to the settlement on the hillside of a local enthusiast for craft work and traditional practices. His family actually came from Pingtung on the western side of the island. He showed us the treasures of his storehouses, including the last harvest of millet that he had taken at the time of his mother's death. The survival of this pocket of traditionalism in the midst of change told us much about how "tradition" and "modernity" can coexist, depending on the availability of durable local themes. By recursive iconic references back to the integrity of the past, people can also more easily begin to craft their futures and develop hope for their creative imaginations.

Visits in 2013 to the other resettlement areas we know conveyed a similar message. Each village has shown signs of recovery and development. In Rinari, we found a new craft industry house, in which women were busy making artifacts and visitors were encouraged also to stay in a bed and breakfast style of accommodation. In another village, we saw busy sets of women working in gardens of vegetables or beans growing in bushes, used in making soup. In another, we saw that in a public building centered on coffee production and sale, the coffee shop was now open and, again, local artifacts were on sale. The transition from a gardening to a service-oriented economy geared to tourism was taking place. High up in the mountains we have studied the business of an enterprising villager who has established a coffee plantation from old stock originally planted in the time of Japanese colonial control (1895–1945), and sells his own brand in packets with a logo he designed incorporating the mountain Daewu that separates the western and eastern Paiwan areas and a star that represents the inspiration he received from his grandfather. He is already in competition with other such entrepreneurs around him, but he prides himself on retaining young workers to help him who thereby remain committed to the ancestral land rather than disappearing into the big city of Kaohsiung in the plains below Pingtung.

In December 2014 we were fortunate to be able to revisit a number of areas in Pingtung affected by Morakot, including Rinari and the nearby town of Sandimen, a center of craft industries, and there we learned from a representative of a local NGO that he was helping to advise several such entrepreneurs who were producing their own brands of high quality coffee. Coffee was clearly becoming a major focus of entrepreneurial activity as a part of the recovery from disaster. (Thanks go here to Dr Sung Shih-Hsiang for introducing us to this NGO worker and translating his account.)

Each disaster area carries its own potential for illumination on the topic of recovery and resilience. In (Western) Samoa we found a feature that is important everywhere but was particularly evident there: the significance of local social structures in determining both initial and long-term adaptations to disaster. Samoa is a society with strong and elaborate chiefly lines in which leadership is formally invested in clan titles obtained through succession. Further, each village is headed by a particular chief and each has its gathering place of *fono* in which decisions are made and communicated. Finally, Samoans converted to various denominations of Christian churches early on in colonial history (Methodism, Anglicanism, and Catholicism, for example) and each village has its own church, to which villagers are expected to belong. These three factors make of each village a unit that can quickly mobilize for action in the face of challenges. Villagers who had relatives affected by the tsunami were swiftly able to come to the rescue. Mormons have also established themselves in numbers of small communities and we were told that they institute very efficient ways of mobilizing their members, so they were to the fore in rescue operations, along with the Samoan Red Cross organization. The tsunami hit the southern coastline, wiping out all the settlements, and some inhabitants died while trying to reach higher ground and safety. In one case a church minister lost his wife in this way, and was praised for nevertheless continuing his own compassionate work among his surviving parishioners. Villagers not only had high

land to which they could, with luck, retreat, but also their land rights extended to these areas, and they had made gardens there. Relocation simply meant, therefore, resettlement on their own garden land. It is obvious that all these factors together meant that evacuation was swift and relocation easy, without any extra strain in legal, social, and political terms. The small scale of the population and their close knit ties of religion, kinship, and chiefship meant that recovery could be relatively quick. The Samoan case is instructive as an example of how social structure has a major impact on disaster recovery in small-scale contexts.

Research in Japan provides an interesting comparison with the Samoan case. Japan has suffered numerous earthquakes and tsunami incursions over a long history and memories of these are well established in stories and in stone memorials that have been set up in the past. In spite of this, settlements have continued to be established, as a result of industrial expansion and shortages of land for dwellings, in areas vulnerable to tsunami, often because of a resurgence of fishing stocks there. The Great East Japan Earthquake and Tsunami Disaster of March 3, 2011 revealed the immense power of a tsunami that broke over strong sea walls and destroyed many communal areas of occupation in the Miyagi and Iwate prefectures of the Sendai region. The scale involved was far greater than in Samoa, and the ensuing problems have been for many complex and intractable. Part of the problem results from the fact that the tsunami destroyed the insulation of the Fukushima nuclear power plant, adding radioactive pollution to material destruction and making reoccupation of areas hazardous or not possible. The “natural” disaster is thus compounded by the effects of human actions. Human settlement in hazardous places similarly magnifies danger. Our own work, however, is concentrated on issues of recovery where such severe, indeed crippling, results of the tsunami are not found. Hence, we can examine the complexity of decision-making about re-occupation or re-location of areas without long-term absolute blockages of choice.²

Political issues, nevertheless remain. A major point of contention relates to the sea walls. These walls are a prominent coastal feature and there are government plans to strengthen and raise them. In some places, however, there is resistance to, or questioning of, this policy. The resistance may have two reasons. One is that the height of the walls would have to be raised considerably, yet still might not be sufficient to hold back the next tsunami. The second form of objections, from at least one area, is that the walls block the view and experience of the city in port contexts where people see ships coming and leaving. In such areas the idea is that people “live with” the tsunami rather than trying to beat nature by human technology. If high ground is nearby, people can retreat relatively easily. In one such area, people can expect to experience, we were told, two tsunamis in their lifetime. Knowledge of this is kept alive and people are aware of the risks.

Another important issue has to do with the making of memorials (see Hayashi n.d. for an informed review of this topic). The impulse to memorialize has several aspects: the management, expression, and channeling of grief; the wish to keep memories alive on longer terms; and the often stated aim of reducing vulnerability to future disasters. The equivalent in terms of war memorials is the declaration that war should be avoided in future and peace-making should be built on the realization of the negative character of war, while still maintaining respect for lives lost in combat as well as recognizing the loss of civilian lives. At one disaster site in Sendai which we were privileged to visit we saw various stages and contexts of memorialization. One was an officially established hillock or

2 We thank here the National Museum of Ethnology in Osaka, Japan, and in particular our colleague there Isao Hayashi, for the opportunity to spend three months in Japan in 2014 to help us understand the impacts of the 2011 disaster. Special thanks also to Dr Sebastien Boret, who kindly instructed us on local contexts in the Sendai area, as referred to below.

mount that now stood out from what had become a flat desolate plain covered with coarse dry grasses. Here there was a war shrine previously set up, along with newer improvised Buddhist memorial shrines, added to and altered from time to time, an old pine tree, and a newly planted cherry tree. At the base there was a small shop selling artifacts and food, a hillside design in flowers with the settlement name, and at the back two old tsunami warning stones. People visit this composite memorial regularly. Some distance away there is a high school, now abandoned, where 14 students' deaths in the tsunami have been memorialized, in an array of plaques and signs at the school entrance, including a black incised granite stone with the students' names. We were told that the stone was meant to be touched by visitors and gradually worn down over time. Beside the access road, a hut had been set up which continued a more elaborate set of records, including montages created by students with images of the destruction and a vision of a future place protected from tsunami damage. Memorialization is a process that gathers into itself many facets of memory, imagination, and hope.

We saw signs of this process in many formal and informal contexts. The center we visited hosts story-tellers who give accounts of suffering, loss, survival, and positive feelings. Personal narratives in general are an important part of the records and means of adjustment including narratives that contain critical elements. Japanese newspaper and television regularly cover those. An example comes from the *Japan Times* National section for April 12, 2014, p. 3, mentioned above, where there is a report of a farmer from the Fukushima area that was affected by the nuclear accident as a result of the tsunami: The farmer, Kenichi Hasegawa, published his book in 2012 called *Fukushima's Stolen Lives* documenting tragedies and what he saw as governmental mistakes. When the order for evacuation came, he also had to say goodbye to the herd of dairy cattle he had worked with over his whole life. Farmers elsewhere would sympathize.

Anger there is, then, and angst in plenty. There is also pride in achievements attained in spite of the destruction. A young figure skater from Sendai, Yuzuru Hanyu, won a gold medal at the Sochi Winter Olympics in Russia in 2014, and he returned to the welcome of a huge crowd in his home city, saying that he hoped his success would enable him to find ways to help his fellow citizens (April 2014). We had only recently returned from a visit to Sendai, where we had also met with a former student in anthropology at the University of Pittsburgh, now on a Japan Society for the Promotion of Science Fellowship in Sendai, and she accompanied us to the railway station at Sendai to say goodbye. There she found two stalls run by craftsmen she knows who are specialists in the production of a popular traditional type of wooden doll, the Kokeshi dolls. The dolls represent stylized versions of young females, and we saw a small one which was new and had the face of the girl looking up to the sky instead of straight forward. The artist explained that this doll was made to be a mark of hope for the future after the tsunami. So hope enters in many ways, assisting people to think positively about their future.

As our work continued from April onwards we observed two further processes, both a part of the consolidated expression of hope. One was that sports personalities who excelled at national and international levels all now continuously said that they were devoting some of their efforts and resources to disaster relief and recovery. As we have noted, the figure-skating champion at the Winter Olympics, Yuzuru Hanyu, is from the Sendai area, and was given a rapturous welcome back in his home city, declaring that he wanted to help the recovery process. International organizations also declared their support. On March 11, 2014 a photo exhibition was held in Chicago which featured Chicago residents of Tohoku and Japanese students who had travelled to Chicago. The flyer for the exhibition expressed the value of giving hope to others, "thereby growing the unbroken circle of hope and human conviction."

Second, NHK also ran many programs showing two things; first, communities exercising self-help, including demonstrations of how food supplies, including sea food and fruits, can be considered safe for consumption; and second, tours of impacted areas were organized in order to draw attention to community suffering and needs, as well as their achievements. The latter process was described as “dark tourism,” and is partly reminiscent of tourism in other areas of the world such as in Northern Ireland after the worst times of the Troubles in the 1960s were over following the Peace Accords of 1998.

“Dark tourism” is a part of a larger process of memorialization and encapsulation into national sensibilities that will continue long after the disaster event itself. The processes, as we learned, include the creation of museums. In Niigata prefecture, a severe earthquake caused damage and 10 years later there are plans to set up a heritage museum recording the event and the recovery from it. Museums encompass both parts of the whole sequence of coping and hoping that we have identified, a record of how people coped in the face of suffering and loss, and a demonstration of the hope that leads to recovery in the long run and a consolidation of the memory of survival and renewal.

At the practical level of government actions, however, many difficulties tend to remain. In our April 2014 visit to Sendai we saw the temporary housing units supplied to people from Yuriage, and wondered how long people would be staying in these, small and crowded as they were. On June 14, 2014 we recorded an NHK clip that described the situations of many people in Iwate prefecture who had been placed in temporary housing, and now were faced with the possibility of being shifted out to a different set of consolidated places. Authorities had placed them in an area where a sewage redevelopment had been planned. This was delayed when they were given the relocation housing, but now the land was required for the redevelopment. What was interesting was first that, as in Yuriage, permanent housing had not been provided, and second that the residents complained that after many struggles they had developed a community consciousness which they did not wish to have disrupted by a further set of shifts. Authorities promised to respect this concern, but the circumstances revealed the importance of community relations for those involved and indeed the primary significance of such relations in the whole configuration of coping and hoping. Our work will continue to focus on this aspect of adaptation and change.

There is a rapidly growing recent literature on disaster studies in anthropology, and we append here a selection of references to these: Bacon and Hobson 2014; Button 2010; de Alwis and Hedman 2009; Ehrlich 2013; Gaillard and Texier 2010; Gill, Steger and Slater 2013; Hayashi 2008, 2012, 2013, n.d.; Kawata 2005; Kimura 2012; Maly 2014; Mauch and Pfister 2009; McDowell 2013; Okada 2012; Oliver-Smith 1999, 2011; Oliver-Smith and Hoffman 1999; Samuels 2013; Schlehe 2010; Simpson 2014; Starrs 2014; Stars and Stripes 2011; Stewart and Strathern 2014a, 2014b.

The exponential growth of studies and discussions centering on problems of climate change, food security, and disasters is shown clearly by a number of sessions at the Society for Applied Anthropology meeting in Pittsburgh in March of 2015.

Conclusion

Empirical studies such as those we have discussed and others to which we have referred can be drawn on to provide two main pointers for future direction of study. The first is that we need to develop explicit comparisons between cases. Each case is unique, but comparisons among cases are vital if we are to develop greater understanding. At the most accessible and molar level of comparison, structures of social life clearly make a great difference in

terms of how effectively people can respond to, and recover from, disasters. The scale of events and differential power among social actors are equally obvious factors. The second pointer is that valid studies of responses and recovery have to be long term, with horizons of around three years, five years, or longer runs of time. Both of these pointers would also apply to the development of analysis and theory in any other branch of anthropology. With Disaster Anthropology we can take these two pointers as benchmarks from which to create a sub-discipline that is obviously important and relevant in the world of today and the future.

References

- Bacon, Paul and Hobson, Christopher (eds) (2014), *Human Security and Japan's Triple Disaster: Responding to the 2011 Earthquake, Tsunami and Fukushima Nuclear Crisis* (Oxford and New York: Routledge, Humanitarian Studies).
- Blong, Russell (1982), *The Time of Darkness: Local Legends and Volcanic Reality in Papua New Guinea* (Canberra: Australian National University Press).
- Button, Gregory (2010), *Disaster Culture: Knowledge and Uncertainty in the Wake of Human and Environmental Catastrophe* (Walnut Creek, CA: Left Coast Press).
- Carr, Peter (1993), *The Night of the Big Wind: The Story of the Legendary Big Wind of 1839, Ireland's Greatest Natural Disaster* (Belfast: The White Row Press).
- De Alwis, Malathi and Hedman, Eva-Lotta E. (eds) (2009), *Tsunami in a Time of War: Aid Activism and Reconstruction in Sri Lanka and Aceh*, Special Issue of *Domains*, the Journal of the International Centre for Ethnic Studies, Colombo, Sri Lanka.
- Ehrlich, Gretel (2013), *Facing the Wave: A Journey in the Wake of the Tsunami* (New York: Vintage Books).
- Gaillard, Jean-Christophe and Texier, Pauline (eds) (2010), "Religions, Natural Hazards, and Disasters," Special Issue of *Religion* 40(2), 81–146.
- Gill, Tom, Steger, Brigitte and Slater, David H. (eds) (2013), *Japan Copes with Calamity: Ethnographies of the Earthquake, Tsunami, and Nuclear Disasters of March 2011* (Oxford: Peter Lang).
- Hayashi, Isao (2008), *Ethnographical Studies of Disaster Response and Management in the Asia-Pacific Region* (Osaka: National Museum of Ethnology).
- (2012), "Folk Performing Art in the Aftermath of the Great East Japan Earthquake," *Asian Anthropology* 11, 75–88.
- (2013), *Catastrophic Natural Disasters: Studies of Environmental and Social Change and Activities to Reduce Future Vulnerabilities* (Osaka: National Museum of Ethnology).
- (n.d.), "Materializing Memories" (Unpublished manuscript).
- Kawata, Yoshiaki (2005), *Comprehensive Analysis of the Damage and Its Impact on Coastal Zones by the 2004 Indian Ocean Tsunami Disaster* (Kyoto: Disaster Prevention Research Institute, Kyoto University).
- Kimura, Shuhei (2012), "Lesson from the Great East Japan Earthquake: The Public Use of Anthropological Knowledge," *Asian Anthropology* 11, 65–74.
- Maly, Elizabeth (2014), "Towards a People-centered Housing Recovery after the Triple Disaster," in P. Bacon and C. Hobson (eds) *Human Security and Japan's Triple Disaster*, 108–26 (Oxford and New York: Routledge).
- Mauch, Christof and Pfister, Christian (eds) (2009), *Natural Disasters, Cultural Responses: Case Studies Toward a Global Environmental History* (Lanham, MD: Lexington Books).
- McDowell, Jennifer E. (2013), "Kokeshi as Home—Kokeshi as Hope: The Narrative Journeys of a Tohoku Doll," *Japanese Studies Association Journal* 11, 179–201.

- Okada, Hiroki (2012), "An Anthropological Examination of Differences between the Great East Japan Earthquake and the Great Hanshin Earthquake," *Asian Anthropology* 11, 55–64.
- Oliver-Smith, Anthony (1999), "What is a Disaster? Anthropological Perspectives on a Persistent Question," in A. Oliver-Smith and S. Hoffman (eds.), *The Angry Earth*, 18–34 (New York: Routledge).
- (2011), "Revealing Root Causes: The Disaster Anthropology of Gregory Button," *American Anthropologist* 113(4), 646–8.
- Oliver-Smith, Anthony and Hoffman, Susanna (eds) (1999), *The Angry Earth* (New York: Routledge).
- Samuels, Richard J. (2013), *3.11: Disaster and Change in Japan* (Ithaca, NY and London: Cornell University Press).
- Schlehe, Judith (2010), "Anthropology of Religion: Disasters and the Representations of Tradition and Modernity," *Religion* 40, 112–20.
- Simpson, Edward (2014), *The Political Biography of an Earthquake: Aftermath and Amnesia in Gujarat, India* (New York: Oxford University Press).
- Starrs, Roy (ed.) (2014), *When the Tsunami Came to Shore: Culture and Disaster in Japan* (Leiden: Brill).
- Stars and Stripes Special Publication (2011), "Operation Tomodachi: The Great East Japan Earthquake," *Stars and Stripes* June 2011.
- Stewart, Pamela J. and Strathern, Andrew (2002), *Remaking the World: Myth, Mining, and Ritual Change among the Duna of Papua New Guinea* (Washington, DC and London: Smithsonian Institution Press).
- (2014a), *Ritual: Key Concepts in Religion* (London: Bloomsbury).
- (2014b), *Working in the Field: Anthropological Experiences across the World* (New York: Palgrave Macmillan).
- Strathern, Andrew and Stewart, Pamela J. (eds) (1998), *Kuk Heritage: Issues and Debates in Papua New Guinea* (Port Moresby: National Museum of Papua New Guinea; and the JLU Centre for Pacific Studies, Queensland, Australia, along with the Okari Research Group, Dept. of Anthropology, University of Pittsburgh).
- (2007), "Ethnographic Records from the Western Highlands of Papua New Guinea: Missionary Linguists, Missionary-Ethnographers," in L. Plotnicov, P. Brown and V. Sutlive (eds) *Anthropology's Debt to Missionaries*, Ethnology Monograph Series no. 20, 151–60 (Pittsburgh, PA: University of Pittsburgh Dept. of Anthropology).
- Vicedom, Georg and Tischner, Herbert (1943–48), *Die Mbowamb*, 3 vols (Hamburg: Friederichsen, DeGruyter and Co.).