CAPTURING THE NEXT GENERATION OF CULTURAL MEMORIES – THE PROCESS OF VIDEO INTERVIEWING TSUNAMI SURVIVORS

W. Dudley[1], J. Goff[2], C. Chagué-Goff[2], and J. Johnston[3]

1. Department of Marine Science, University of Hawaii at Hilo, Hilo, HI 96720, USA

2. Australian Tsunami Research Centre, University of New South Wales, Sydney 2052, NSW, Australia

3. Disaster Preparedness Solutions, Inc., Kailua, HI 96734, USA

ABSTRACT

Traditional story telling is rare in many cultures these days and yet stories are an effective way of educating people of all ages. The technology of modern media is increasingly accessing all corners of the world and if used wisely can help capture and communicate messages of disaster preparedness. Planned video interviewing of tsunami survivors began around 1998 and an extensive archive has been assembled at the Pacific Tsunami Museum. Video interviewing is an effective way to collect data that are both educational and scientific. The technique however, is not simple and a protocol has been developed to achieve the best results. We explain the protocol in detail using examples where appropriate, and discuss a wide range of applications that have been developed using interview materials. Recent advances in analytical techniques mean that the previously difficult to access qualitative data of these interviews are now available for more robust scientific analysis. The database continues to grow each year. It seems likely that this publicly-available database will now be available for a whole suite of new applications that can be developed.

Keywords: Tsunami, video interview, community awareness, public education.

1. INTRODUCTION

"If history were taught in the form of stories, it would never be forgotten" (Rudyard Kipling Quotes 2009). The French explorer Jean-François de Galoup, Comte de la Pérouse, first entered Lituya Bay, Alaska on July 2, 1786. He soon encountered the local Tlingit tribe who recounted a legend which told the story of a monster that dwelt in the bay. This demon would periodically "destroy all who entered his domain by grasping the surface of the water and shaking it as if it were a sheet" (Emmons 1911). The truth behind the legend was demonstrated on July 9, 1958, when a powerful, local, landslide-generated tsunami swept through the bay. The life-saving power of such legends was demonstrated during the 2004 Indian Ocean Tsunami (2004 IOT), when stories handed down from generation to generation saved lives in the Simeulue Islands, Indonesia (McAdoo et al. 2006) and Surin Islands, Thailand (Arunotai 2008). The value of these stories was once again shown during the 2007 Solomon Islands tsunami when the indigenous population suffered fewer deaths than immigrant Gilbertese who had no traditional stories about tsunamis as part of their cultural memory (McAdoo et al. 2008).

Traditional story telling is becoming a lost art, as this form of knowledge sharing is increasingly limited to adults and the elderly, and rarely passed on to the young generations (Arunotai 2008). Meyers and Watson (2008) note that "modern communication methods are less focussed on information pertaining to the local area and disseminate information in a much broader manner. Lessons are taken from the world beyond instead of from the past or the specific local context". They go on to add that "new means to inform communities about the threats of disaster in their localities must be found. These means must carry relevant information and must also replicate the effectiveness of the oral story-telling tradition in dissemination and immediate relevance to local communities."

The technology of modern media will ultimately infiltrate every corner of the planet, hastening the loss of traditional story telling, but modern technology can also be used wisely to help capture and communicate the life saving messages of disaster preparedness (Dudley 2008a). This paper lays out approaches and techniques for capturing the stories of tsunami survivors on high quality video for use in hazard education and as a valuable source of both physical and social science information about hazards and the human response to these events. Though not replacing traditional story telling, capturing these powerful stories of survival on video presents the information in a format that is relevant to younger generations. Furthermore, the video recording of these stories permanently archives an important part of community cultural memory.

2. WHY VIDEO?

Until recently there have been few first-hand post-event accounts of tsunami disasters collected in a timely manner. Following the 2004 IOT commendable efforts were made to gather information from eye witnesses through questionnaires distributed to survivors (e.g. Tinti et al. 2005; Kelman et al. 2008). These are a valuable aid for integrating the physical data acquired through field surveys however, they lack the emotive power of stories. Written collections of tsunami stories have been used as part of education programs in school curricula in Hawaii and by the U.S. Geological Survey (Atwater et al. 1999). In 2004, the offices of emergency management of Washington State and British Columbia jointly produced a compelling 14-minute video

recounting a native American legend about tsunamis and earthquakes, which is narrated by an elder of the Hoh Tribe (WA-EMD, 2004). Yet, none of these have the power of the first-hand experiences told by tsunami survivors.

The collection of oral histories has long been a valuable part of many disciplines including anthropology, history, psychology and sociology (King et al. 2007). These have mostly been carried out with audio recording equipment, the prevailing view being that video was too intrusive and that it made the subject too nervous (Nishimoto W. pers. comm. 1999). However, this was prior to the widespread use of consumer video equipment, when video recording was confined to professional news media. The news media regularly cover natural disasters. They rushed to the areas impacted by the 2004 IOT and recorded scenes of death and destruction. However, their coverage was largely confined to their own national news media and nearly all interviews were brief in order to fit short format news time slots. Furthermore, the material collected by professional media is typically not available or difficult to obtain for scholarly or educational use.

Even if professional video crews were available to carry out detailed survivor interviews, there are several advantages to not using a media crew. In addition to the appreciable cost of a professional video crew, our experience has been that communities respond better to scientists and their local student assistants, whose objective is not to make a television news story or commercial documentary, but to create materials for education that can be used at the local level (Dudley and Lee 1998). The typical community experience with professional media is that they come, they shoot, they leave, and the community never hears from them again. Furthermore, professional media are more concerned with the quality of their production than with community sensibilities (Bryan, T. pers. comm. May 2007).

If used appropriately, the process of video interviewing can show sensitivity to individual being videotaped and to the community. Furthermore, the finished products can contain important physical and social science information, and provide a valuable education tool for both the local community and international use (Dudley 2007).

2.1 Video Interview Techniques

For over a decade the Pacific Tsunami Museum has sponsored the collection of video oral histories of tsunami survivors. At present the museum's archives contain over 400 survivor interviews representing first-hand accounts of some ten different tsunamis in the Pacific and India Ocean from 1923 to 2006 (Dudley 2008b). Accounts prior to 1998 were recorded many years after the events and memories may have changed over time, or even been replaced with details learned during the intervening years (the archival material provide a useful database to study this metamorphosis of memory). In one instance, we interviewed five siblings who all experienced the same tsunami in the same location and their recollections were quite different from one another. All five had vivid recollections, one talked about the sounds, another about the smell, still another about how it felt physically to be in the water. If you did not know they were together you never would have guessed they were in the same location. However, together they wove a tapestry of what it was like to be on the second floor of a wooden building and see a tsunami come through the window, destroy the building and have the roof fall in on top of them.

Accounts collected from survivors of the 2004 IOT and the 2006 Java tsunami were recorded as soon as was feasible allowing sufficient time for recovery from immediate post-event trauma (Bryant 2006). The current protocol is based upon a combination of scientific and pragmatic

lessons learned during the time that we have been carrying out tsunami survivor interviews. The progression from set questionnaires, to written accounts, to a combination of audio tapes and their transcription, and finally to a combination of video recordings and their transcription, is indicative of this learning process. From our experience, scientifically and pragmatically, video recordings and their transcription provide the richest data source.

These videos are of excellent quality, having been recorded on sophisticated digital video equipment. This has been made possible by recent advances in video technology and the advent of "prosumer" equipment. This is less expensive than top-of-the-line professional equipment, but is capable of recording video of a higher quality than inexpensive, consumer-grade cameras. The current model in use is a Sony HDR FX1 high-definition (1080i) digital video camera with a BeachTek DXA-FX audio adaptor to allow for XLR stereo microphone inputs. Good equipment however, is only one aspect of achieving high quality interviews. During a decade of video-interviewing we have developed a protocol which has proved successful under a wide range of different and challenging circumstances in a variety of nations around the world.

3. PROTOCOL

A team of four people is used. A Project Director (PD) serves as producer, camera operator, sound and light technician. A Field Coordinator (FC) serves as production assistant and who is chosen on the basis of previous experience in the region. The On-Site Facilitator (OSF) is typically a local resident, with expertise and/or sincere interest in tsunami preparedness, knowledge of the tsunami event(s) in question, fluency in local languages and the ability to translate interviews into English (if required). A Logistical Coordinator (LC) liaises between interviewees and team members. Normally the OSF serves as interviewer (after on-site coaching), although the role can also be carried out by either the FC or LC.

For organisational purposes, the process of collecting video interviews is divided into three phases: pre-interview, interview, post-interview.

3.1 Pre-interview Phase

The OSF contacts potential interviewees, explains the reason why the data are being collected and the interview process. Among the factors the OSF considers in the selection of potential interviewees are:

- The individual's personal experience during the tsunami event.
- The ability to effectively communicate this experience.
- The lesson(s) that can be learned from the experience.

When possible, interviewees should also reflect a range of ages, sexes, and community positions. If the OSF believes the interviewee meets the necessary criteria, an appointment for the video interview will be set up and a location chosen. Typically the location is one that makes the interviewee feel comfortable, but where feasible it also needs to fulfil certain criteria to ensure the overall quality of the video output. The site should not be a high noise area and, where possible, should be away from all motor traffic noise. The OSF uses their judgment and local knowledge to select the initial interview site.

It is often desirable to schedule time to meet with, and potentially arrange to interview, local

leaders or other community members. This serves two purposes. It helps establish community cooperation for the project and also makes it more likely that there will be effective use of the outputs in sustainable local community disaster education programmes.

Several important steps are followed before the first on-site interview. A test interview is carried out by the entire crew and reviewed for all aspects of the process to include interview technique, camera work, lighting and sound. At this time the OSF is provided with a list of recommended interview questions which include queries designed to gather important physical and social science data, as well as deliver a powerful tsunami experience. They are coached in the interviewing techniques required and practice asking the questions to ensure that they are grammatically and culturally appropriate. This is particularly important when dealing with material translated from English. If necessary, culturally appropriate behaviour is discussed with the OSF once the mix of interviewees is known. The LC ensures that all appropriate documentation is in order to record key personal information for each interviewee (Fig. 1a). Each individual (or authorised guardian for minors) signs a release form which allows use of the recording for educational purposes (Fig. 2). The contents and reasons for completing the Biographical Data Sheet (Fig. 1a) and Oral/Video Tape Release Form (Fig. 2) are explained to the interviewee prior to completion. Where possible, the forms should be translated into the local language so that the interviewee understands fully what they are signing. The nature and extent of the questions to be asked are also discussed at this time either by the LC or OSF (Sample questionnaire: Fig. 3).

Prior to the interview, all forms (biographical, release) and the tape (and case) for each interviewee are assigned a unique Interview Code number consisting of a location abbreviation, the date of interview, and the interview number in the series for the particular assignment. Photos of the site and interviewee (full face) are taken either prior to, during, or after the interview, whichever is felt to be least intrusive. These actions help to minimise the likelihood of incorrect archiving in the future.

Tsunami survivor interviews are unlike most in that there are no second takes. For many survivors this is not the telling of a story but the reliving of an intense emotional experience, the most traumatic experience of their lives. Interviewees must be allowed to recall and describe events without coaching. They must also be allowed to tell their story without interrupting their train of thought and should never be interrogated with closed-questions. Interviewees should also never be "led". This can give the interviewee a sense of what the interviewer might be "looking for" leading them to give the responses that they perceive are desired. When the initial narrative is complete however, the interviewee may be gently prodded for additional information, overlooked details, and other useful information.

3.2 Interview Phase

Interviews are scheduled for a minimum of two hours. This includes travel to and from the site, equipment set-up and repacking, pre-interview and interview activities. Experience has shown that, depending upon travel times between sites, a maximum of six interviews can be accomplished in a full day. If an interviewee is willing and capable, additional footage may be shot at sites meaningful to the story, otherwise background footage (B-roll) is shot separately.

Upon arrival at the interview site it is important for the PD and FC to determine if it meets the criteria for sound, light and movement. If not, then an alternative site must be chosen in

consultation with the OSF. A powerful interview will be ruined by the sounds of passing motorcycles, trucks, motorboats, barking dogs, or background conversations. Once a suitable site has been found with reasonable sound quality, it must be checked for appropriate lighting. It is important to take as much advantage of the "golden hours" as possible, those hours of the day when the sun is low in the sky producing gentle, warm light effects. It is impossible however, to carry out all interviews at dusk, so in order to avoid the harsh light of mid-day a partially shaded area should be selected. In these circumstances, the subject is placed in the shade with their face illuminated by reflected light without making them squint. This cannot always be successfully achieved. In one instance, an early morning interview was arranged with a resort manager but he was called away to the reception. He returned an hour later by which time the sun was so bright that the background was over-saturated with light, resulting in a video with too much contrast. Greenery, such as a backyard garden or jungle back drop, makes a good background because it absorbs and diffuses light, allowing most skin colours to show adequate contrast. It is important though to choose an area where nothing can move behind the subject. People or animals wandering around in the background are distracting to the viewer. One way to mitigate these effects is to use a low "F stop" on the camera to help blur the background while keeping the subject in clear focus.

Spending time on site selection is vital, but ensuring that the interviewee is well set-up is equally important. The subject should always be comfortably seated so that they do not fidget, and on a seat that does not squeak. It is important to let the subject attach the microphone themselves, only providing assistance when asked, so as to do nothing offensive in the host culture. Nothing should actually touch the microphone however, such as a scarf or jewellery and this often requires assistance to ensure the interviewee understands. A lavaliere microphone attached at shirt collar level works best. Under windy conditions the interviewee is shielded from direct wind blowing over the microphone. A microphone windscreen is also used to further dampen wind noise. In spite of all possible care, one must always expect the unexpected. In one instance, the sound location was perfect, lighting was excellent at dusk, and the interviewee was comfortable. Suddenly the village loudspeakers began broadcasting the evening call to prayer at full volume and the interview was abandoned. It pays to check on regularly scheduled events which may require adjusting the scheduled interview time.

3.3 Immediate Post-interview Phase

Following each interview our practice has been to have the OSF immediately provide a short written summary of the story in English. This applies equally to English and non-English interviews. This is given to the LC and placed with the basic personal data collected about each survivor (Fig. 1b). It is important to allow time for this process immediately after the interview. While this can sometimes be difficult when several interviews are scheduled in one session, it is crucial to double-check the information on Biographical Data Sheet and the interview summary (e.g. do we have the name of all the children mentioned in the interview on the biographical data sheet? Was the child mentioned a daughter or son?). The immediate post-interview phase also offers the opportunity to arrange for the copying of any documentation of the tsunami provided by the interviewee (e.g. photos), and to accept and process any donated memorabilia.

At the end of the day, the team meets to review the day's interviews. Any necessary revisions or additions to the descriptive data that accompany the interview tapes are made immediately

while the details are still fresh. An electronic summary interview document is set-up for each assignment. This is updated daily with each reference number assigned to the appropriate interviewee photograph, and brief biographical details.

Some interviews are naturally more powerful than others and some contain new or critical information. Our practice has been to create a backup copy of these particular interview tapes during the evening following the interview. It would be best for all originals to be backed-up immediately, but because copying occurs in real-time this is time consuming and as such is not feasible during an expedition. To partially address this issue it is best to have the capability to simultaneously record directly to a hard drive. This will produce a digital videotape and a hard drive copy of interviews, thereby eliminating the chore of making backup videotape copies during an expedition. If travelling by plane during or at the end of an expedition, the original videotapes should never placed in the airline's checked baggage.

Immediately following an expedition, all interview tapes are backed up and the back-ups stored in separate, secure, climate-controlled locations. The process is lengthy because as mentioned it is carried out in real-time, but we also simultaneously burn a DVD copy of each interview. These DVDs are complete, unedited copies of the interview and contain the time code recorded on the original videotape.

3.4 Transcription and Translation of Interviews

Where translation is necessary the DVDs are sent to the OSF who carries out or supervises the transcription and translation of the interviews. The video time code must be entered at frequent intervals alongside the translated transcription of the interview in order to permit editing of the video. Typically we ask that the time code be entered at two to five minute intervals depending upon the context and before and after every important "sound bite" (i.e. a statement of special value). These transcriptions can then be easily converted into a video storyboard.

A typical interview lasts between 20 and 40 minutes, although we have had interviews of up to two hours (requiring two 60-minute videotapes). Selected interviews may be edited to a three to four minute final product, which includes the most important lessons learned. This is a suitable length without exceeding the typical listener's attention span. Our practice has been to offer DVD copies of the interviews to the interviewee whenever feasible, typically in full form. Due to the different video standards used internationally (NTSC, PAL, SECAM), providing copies of interviews for commercial video players can be both an unexpectedly problematic and expensive component of any project. The provision of videotape copies however, if often a necessary expense.

Interviews are recorded in a searchable archive database keyed to specific tsunami events.

4. APPLICATION OF INTERVIEW MATERIALS

The use to which tsunami survivor interviews have been put has far exceeded our expectations when we first began collecting them on video in 1998. The interviews carried out for the Pacific Tsunami Museum have been routinely copied to videotape and made available for viewing by visitors to the museum (The Pacific Tsunami Museum 2009). Several books and peer-reviewed papers have already been written as a result of the open access to the materials (Dudley 1999a;

1999b; Dudley and Stone 2000; Johnston 2003a; Goff et al. 2006). An interview with a tsunami survivor in Hawaii was combined with stories about the 1960 tsunami in Chile and Japan to produce a published circular by the U.S. Geological Survey (Atwater et al. 1999) which has been widely distributed and republished several times. These products help increase public awareness of the tsunami hazard.

From a scientific perspective the interviews have produced valuable new information about tsunamis. For example, prior to an interview with former Navy Petty Officer, Lee Edtl, no information existed about the impact of the 1946 tsunami at French Frigate Shoals, a group of small islands in the leeward chain of the Hawaiian Islands. Mr. Edtl provided data concerning wave height and timing, as well as discussing his fear of being washed off the low-lying island (Edtl 2001).

Research on disaster communication was carried out using a number of interviews with survivors of the 1946 and 1960 tsunami in Hawaii (Johnston 2003b). Among the facts that emerged was the distrust by local police of "high technology". They required an officer to stand on the local pier, watch the water level, and radio in to the station confirming the arrival of tsunami waves. On the Island of Hawaii in 1960, the Kau Police Department dispatched a fisherman with a walkie-talkie and a flashlight to the southernmost point of the island to watch for the tsunami. He was to call the officer stationed uphill when he saw the first wave. The officer in turn was to radio the information to the Hilo Police Department even though waves actually reached the easternmost point of the island, close to Hilo, first (Johnston 2003b).

Survivor interviews have become a key element in many of the major exhibits at the Pacific Tsunami Museum. Exhibits focussing on particular events use survivor stories chosen for their emotional power and the vital lessons they offer. Interviews are also selected based on their appeal to particular demographics, with an attempt made to represent children and elders, as well as young and middle-aged men and women. Furthermore, we believe that hearing from a wide range of people within a community is instructive hence interviews with government officials, teachers, fisher people, resort staff, school children, religious figures, artisans, and labourers are all presented in the hope of "connecting" with the visitors to the museum. Interviews that were originally in a language other than English have been dubbed using a voice similar in age and tenor to that of the interviewee. A synopsis of each survivor interview is presented in a display adjacent to the touch-screen computer kiosk. The visitor may then select an interview of particular interest by pushing on an icon, usually a photo of the survivor, on the monitor (Muffler 2009). Similar accessibility and displays will be an integral part of a new travelling tsunami museum that is being planned for the Hawaiian Islands. The museum will be installed in a standard shipping container and house educational displays, touch-screen computer kiosk with animations of tsunami wave generation and propagation, and video footage of tsunami wave inundation. A second touch-screen computer kiosk will have different modules for each separate island featuring interviews with tsunami survivors from that island. This will provide added relevance for local residents, and included within these interviews will be those with respected elders discussing indigenous knowledge of the tsunami hazard.

The popularity of survivor interviews as museum exhibits has ultimately led to the establishment in 2007 of community tsunami museums in Kamphuan, Thailand (USAID 2008) and Alappad, Kerala, India (Anon. 2008). In these small museums, computer kiosks offer the choice of hearing the interviews dubbed into English or in the original language, thereby serving both the local population and the majority of visitors. Museums using tsunami survivor interviews as key exhibits are also planned for Sri Lanka and Indonesia.

Video interviews have also been incorporated into a number of different outreach education activities:

- A selection of interviews, representing areas most impacted by the 2004 IOT, have been placed on DVDs and made available to school teachers as a supplement to their curriculum materials on natural hazards.
- The availability of high-quality video footage featuring tsunami survivors has led to the production of public service announcements (PSAs) which have been broadcasted throughout the Hawaiian Islands. Six PSAs are currently being shown on different channels dedicated to programming for children, (cartoon networks), adolescents (music video networks) and adults (vintage movie, financial, and all news networks), hence covering different age groups and demographics.
- Local affiliates of major national television networks have produced news stories about natural hazards based around survivor interviews. Recording broadcast quality audio and video is essential, and giving the network stations use of the materials at no cost, has resulted in free public education reaching many thousands.

It is perhaps not surprising that many of the initiatives discussed above are US-based, because the archive is maintained and stored in Hawaii. All archived data are however, available for educational activities and research scholars. The Pacific Tsunami Museum is a non-profit organisation and as such requires only a data management fee to ensure the ongoing support of their archivists. It seems likely that the value of the existing, and growing, dataset will become increasingly recognised over time and be used in more international venues. For example, a recent study carried out in Sri Lanka considered audio-visual means to be the most effective tool for disaster education (Kurita et al. 2006). In the past the ability to effectively interrogate and interpret such complex qualitative datasets has been limited. There are however, new software packages that can be used for analysing complex qualitative datasets and it is hoped that this will enable a more effective use of the information contained in the interview archive (e.g. Crowley et al. 2002).

5. CONCLUSIONS

From the perspective of the survivor, one of us (JJ- survivor of the 1946 tsunami) felt that in the pre-2004 IOT world it was important to collect and save the stories because she did not want them lost as the survivors of the 1946 and 1960 tsunamis died. She felt that the stories should be saved for historical purposes and for them to be used for public education in tsunami mitigation programmes.

Video interviewing of tsunami survivors is an effective and efficient way to gather data and learn from tsunami survivors. Videotapes also make compelling educational tools because they contain visual emotive elements not found in other media. Set questionnaires fail to adequately cover the broad range of data that can be acquired through video, but can be more easily gathered. Since 1998 (audio interviewing began in 1996) the collection of video interviews has added to a growing archive of material that has only recently been seen to add immense value to education initiatives and scientific research. If they are to continue to be valuable and add value, then it is vitally important that a consistent and pragmatic protocol be adopted so that we can effectively harness the technology of modern media.

Acknowledgements

We would like to thank Warren Nishimoto, Mick Kalber, and Tim Bryan for helpful comments about audio and video interviewing techniques.

REFERENCES

Anon., 2008. Tsunami documented. *Kerala Calling*, **28**, 3, 46.

Arunotai, N., 2008. Saved by an old legend and keen observation: The Case of Moken Sea Nomads in Thailand, In: Indigenous Knowledge for Disaster Reduction: Good Practices and Lessons Learned from Experiences in the Asia-Pacific Region, Shaw, R., Uy, N., and Baumwoll, J. (Eds.), United Nations International Strategy for Disaster Reduction, Bangkok, 73-78.

Atwater, B. F., Cisternas V., M., Bourgeois, J., Dudley, W. C., Hendley II, J. W., and Stauffer, 1999. Surviving a Tsunami — Lessons from Chile, Hawaii, and Japan, U.S. Geological Survey, Circular 1187, Dept. of Interior, U. S. Government Printing Off.

Bryant, R.A., 2006. Recovery after the tsunami: Timeline for rehabilitation. *J. Clin. Psychiat.*, **67**, Supp. 2, 50-55.

Crowley, C., Harré, R., and Tagg, C., 2002. Qualitative research and computing: methodological issues and practices in using QSR NVivo and NUD*IST. *Int. J. Social Res. Methodol.*, **5**, 193-197.

Dudley, W. C., 1999a. The Pacific Tsunami Museum: A memorial to those lost to tsunamis, and an educational center to prevent further casualties. *Sci. Tsunami Haz.*, **17**, 1, 127-134.

Dudley, W. C., 1999b. Local Tsunamis in Hawaii, Pacific Tsunami Museum Publications, Hilo, 56 pp.

Dudley, W. C., 2007. Learning from the victims. Proceedings of the 1st International Tsunami Training Institute, University of Washington, Seattle.

Dudley, W. C., 2008a. Remembering the tsunami. Proc. Report Post-Tsunami Sustainable Livelihoods and Integrated Ecosystem Management workshop, Asian Institute of Technology, Bangkok. 28.

Dudley, W. C., 2008b: Pacific Tsunami Museum and International Community Preparedness Activities. In: Report North Pacific Tsunami Awareness Conference, Hendricks, T. (Ed.), Honolulu, 20-21.

Dudley, W. C. and Lee, M., 1998. Tsunami!, 2nd edition, University of Hawaii Press, Honolulu, 375 pp.

Dudley, W. C. and Stone, S. C., 2000. The Tsunamis of 1946 and 1960, Donning Press, Virginia Beach, 64 pp.

Edtl, L., 2001. The Tsunami of April 1, 1946 at French Frigate Shoals, event report submitted to the Pacific Tsunami Museum archive.

Emmons, G. T., 1911. Native account of the meeting between La Perouse and the Tlingit, *Am. Anthropol.*, **13**, 294-298.

Goff, J. R., Dudley, W. C., deMaintenon, M. Cain, G., and Coney, J. P., 2006. The largest local tsunami in 20th century Hawaii. *Mar. Geol*., **226**, 65-79.

Johnston, J. B., 2003a. Tsunamis in Maui County: Oral Histories, Center for Oral History, University of Hawaii Press, Honolulu, 501 pp.

Johnston, J. B., 2003b. Personal accounts from survivors of the Hilo tsunamis of 1946 and 1960: Toward a disaster communication model, ProQuest Company, Ann Arbor, 142 pp.

Kelman, I., Spence, R., Palmer, J., Petal, M., and Saito, K.,2008. Tourists and disasters: lessons from the 26 December 2004 tsunami. *J. Coast. Conservation*, **12**, 105-113.

King, D., Goff, J. R., and Skipper, A., 2007. Māori environmental knowledge and natural hazards in New Zealand. *J. Royal Soc. N. Z.*, **37**, 59-73.

Kurita, T., Nakamura, A., Kodama, M., and Colombage, S. R. N., 2006. Tsunami public awareness and the disaster management system of Sri Lanka. *Disaster Prev. Managt*, **15**, 1, 92-110.

McAdoo, B. G., Baumwell, J., and Moore, A., 2008. Indigenous knowledge saved lives during 2007 Solomon Islands tsunami, In: Indigenous Knowledge for Disaster Reduction: Good Practices and Lessons Learned from Experiences in the Asia-Pacific Region, Shaw, R., Uy, N., and Baumwoll, J. (Eds.), United Nations International Strategy for Disaster Reduction, Bangkok, 64-67.

McAdoo, B. G., Dengler, L., Prasetya, G., and Titov, V., 2006. Smong: How an oral history saved thousands on Indonesia's Simeulue Island during the December 2004 and March 2005 tsunamis. *Earthq. Spectra*, **22**, S3, S661-S669.

Meyers, K. and Watson, P., 2008. Legend, ritual and architecture on the Ring of Fire. In: Indigenous Knowledge for Disaster Reduction: Good Practices and Lessons Learned from Experiences in the Asia-Pacific Region, Shaw, R., Uy, N., and Baumwoll, J. (Eds.), United Nations International Strategy for Disaster Reduction, Bangkok, 17-22.

Muffler, B., 2009. Successful Exhibit Opening, Museum News, Pacific Tsunami Museum, 13, 1.

Rudyard Kipling Quotes, 2009. Rudyard Kipling.net – Biography, pictures, videos, & quotes http://www.rudyardkipling.net/more.html. Accessed 22 March 2009.

The Pacific Tsunami Museum, 2009. http://www.tsunami.org/ Accessed 22 March 2009.

Tinti, S., Maramai, S. A., Tonini, R., Graziani, L., Topazio, S., and Boschi, E., 2005. Sai dello Tsunami: Tell us your tsunami: a way to collect eye-witnesses accounts of the 26th December 2004 Sumatra tsunami. Poster EGU05-A-11104, EGU 2005, Vienna.

USAID (United States Agency for International Development), 2008. Kamphuan Memorial Tsunami Museum opens. USAID Tsunami Reconstruction Update, June 2007, 6.

WA-EMD (Washington State/Local Tsunami Workgroup, Washington State Military Department Emergency Management Division and the Provincial Emergency Program of British Columbia), 2004. Run to High Ground. WA-EMD and Global Net Productions, Video/DVD, Las Vegas, New Mexico.

FIGURES

Fig. 1. a) Summary Biographical Data Sheet used by the Pacific Tsunami Museum (it should be noted that legal requirements may cause variations in the format). When working in predominantly non-English speaking countries this form is translated into the appropriate language. The OSF and LC liaise to produce the summary of the interview. A unique Interview Code is assigned to each interviewee record; b) Tsunami Recollection Summary used by the Pacific Tsunami Museum – this is filed together with the Biographical Data Sheet.

INTERVIEW CODE (Fig. 1a)

Pacific Tsunami Museum
P.O. Box 806 • Hilo, Hawai'i 96721
(808) 935-0926 • (808) 935-0842
tsunami@tsunami.org

BIOGRAPHICAL DATA SHEET

Contacted by:		Date:
Name:	M/F	Phone:
Address:		
Ethnicity:		Language(s) spoken:
Birthdate:	Birthplace:	Citizenship:
Marital status:	Spouse's name:	
Children		
Child's name (son/daughter)		Birthdate/age
Education:		
Occupation/Job:		
Other relevant information		

(a)

INTERVIEW CODE (Fig. 1b)

Pacific Tsunami Museum
P.O. Box 806 • Hilo, Hawai'i 96721
(808) 935-0926 • (808) 935-0842
tsunami@tsunami.org

TSUNAMI RECOLLECTION SUMMARY

Tsunami Recollections summarized by OSF
Tsunami Year/Location:
Brief summary of experience noting details of other family members and friends (names, age, sex, relationship) where not mentioned in the Biographical Data Sheet

(b)

Fig. 2. (below). Summary Oral/Video Tape Release Form used by the Pacific Tsunami Museum (it should be noted that legal requirements may cause variations in the format). A unique Interview Code is assigned to each interviewee record. Separate archival numbers are logged in the searchable database (For Museum Reference only). When working in predominantly non-English speaking countries this form is translated into the appropriate language, so that interviewees understand what they are signing, although the English form is to be signed.

INTERVIEW CODE (Fig. 2)

Pacific Tsunami Museum
P.O. Box 806 • Hilo, Hawai'i 96721
(808) 935-0926 • (808) 935-0842
tsunami@tsunami.org

ORAL/VIDEO TAPE RELEASE FORM

I, _____(**interviewee**), hereby give, grant, assign, forever to the Pacific Tsunami Museum, as a donation, all my rights, title and interest in and to the recorded conversations made by me and

_____(**interviewer**), as further described below, and any written summaries or transcripts or copies thereof and any documentation, materials and things accompanying the recordings, for use and disposition by the Pacific Tsunami Museum or its successors and assign in any lawful way including publication, except as specified below, if any:

The **audio/video** tape-recorded material is further described as follows:

Number of tapes**:** _____ Date(s) **recorded:** _____ Place**:**_____

Length of interview**:** _____ Camera crew**:**_____

Tsunami Year(s)/Location(s): _____

Topics:_____

_____

Signed: _____ **Date:** _____
(interviewee)

Interviewee Address:_____

_____

Signed: _____ **Date:** _____
(interviewer)

THE FOREGOING MATERIAL IS ACCEPTED FOR THE PACIFIC TSUNAMI MUSEUM

by_____,_____on_____
(name) (title) (date)

For Museum Reference only
Accession No. _____ Object ID No. _____

Fig. 3. A representative set of questions for tsunami interviews. It is important to note that for the bulk of the interview the interviewee is allowed to talk freely without interruption.

Pacific Tsunami Museum

P.O. Box 806
Hilo, HI 96721
808-935-0926 • 808-935-0842
tsunami@tsunami.org

INTERVIEW QUESTIONNAIRE

A. PRE-EVENT QUESTIONS

1. What is your full name? When and where were you born?

2. Did you grow up in the area the tsunami struck?

3. Could you describe the area you were in before the tsunami (e.g. house, building, street, people around you)? Tell us what it looked like.

B. EVENT QUESTION – *LET THEM TALK*

4. Please describe your experience starting the morning of that day?

AND THEN, IF NOT SAID DURING INTERVIEW

5. What can you tell us about the actual tsunami? For example, how many waves were there? How high was it/were they? How far inland did it/they go? Did you hear any sound associated with any of the waves?

C. POST-EVENT QUESTIONS

6. How did the tsunami affect the area and the people in the area?

7. Where do you live now? If you moved because of the tsunami, please tell us why.

8. What would be your advice to people who hear a tsunami warning, feel a large earthquake, and/or see the sea recede?