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ACURIL XLI: Proceedings from the Annual Conference: The Role of Libraries and Archives in Disaster Preparedness, Response, and Research

Alicia K. Long
University of South Florida, aklong2@usf.edu

Vicki Gregory
University of South Florida, gregory@usf.edu

Kathleen de la Peña McCook
University of South Florida, School of Information, kmccook@usf.edu

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ACURIL XLI

PROCEEDINGS FROM THE ANNUAL CONFERENCE
ACTAS DE LA CONFERENCIA ANNUAL
ACTES DE LA CONFÉRENCE ANNUEL

May 30-June 3, 2011
Tampa, Florida
Edited by Alicia Long



ACURIL XLI is dedicated to all those Information Professionals who have committed themselves to the preservation and safeguarding of Patrimonial Documentation in the Caribbean.

Association of Caribbean University, Research and Institutional Libraries
Asociación de Bibliotecas Universitarias, de Investigación e Institucionales del Caribe
Association des Bibliothèques Universitaires, de Recherche et Institutionnelles de la Caraïbe
<http://acuril.uprrp.edu>

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Tampa, Florida
30 May - 3 June / 30 mayo - 3 junio
30 mai - 3 juin
2011

The Role of Libraries and Archives in Disaster Preparedness, Response, and Research

El Papel de las Bibliotecas y Archivos en los Desastres: La Preparación, Respuesta, e Investigación

Le Rôle des Bibliothèques et des Archives en cas de Catastrophes: la Préparation, les Interventions, et la Recherche

Edited by Alicia K. Long

Publications Sub-Committee:

Dr. Vicki Gregory

Alicia K. Long

Dr. Kathleen de la Peña McCook

Dr. James Andrews, Director, University of South Florida, School of Information

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Preface

“We need the revelations that come from our apocalypses—and never so much as we do now. Without this knowledge how can we ever hope to take responsibility for the social practices that bring on our disasters?”

-- Junot Díaz, “Apocalypse: What Disasters Reveal.”

(Boston Review 2011)

These Proceedings of the XLI Conference of the Association of Caribbean University, Research, and Institutional Libraries -- The Role of Libraries and Archives in Disaster Preparedness, Response, and Research—reflect the intent of the 2010-2011 ACURIL President, Ardis Hanson, University of South Florida, College of Behavioral and Community Sciences (USA) to inform librarians of best practices through the experiences of others and through research.

As Chair of the Publications Committee I would like to extend gratitude to General Rapporteur, Vicki L. Gregory, Professor, University of South Florida, School of Information (USA) and to James E. Andrews, Director, University of South Florida, School of Information (USA) for Principal Grant Development for Proceedings. I am especially honored to express appreciation to Alicia K. Long, Librarian at the State College of Florida (USA) for her insightful and skillful organization of conference materials submitted in 2011.

We give congratulations to Françoise Thybulle, 2011-2012 ACURIL President, National Library of Haiti and look forward to continued documentation of the deliberations of participants in the XLII Conference of the Association of Caribbean University, Research, and Institutional Libraries in 2012.

--Kathleen de la Peña McCook

Distinguished University Professor, University of South Florida, School of Information (USA), December, 2011.

Director's Comments

The University of South Florida's School of Information was proud to be an active affiliate of this year's ACURIL Conference local Program Committee. The University of South Florida has both a geographical and academic focus on the Caribbean region, with researchers covering a range of areas important to understanding and impacting the lives of our neighbors across the region. The theme this year is particularly relevant given recent natural and manmade disasters that have devastated so many lives in so many ways. It is with special pride that so many professionals in librarianship, archives, and other information professions are bringing their knowledge, experiences, and expertise to helping communities before, during, and after catastrophic events.

With representatives from so many areas across the Caribbean congregating here in Tampa, this was an extraordinary opportunity for the School of Information faculty and students to engage with others to better understand the planning, processes, and best practices in disaster preparedness. The function of librarians and archivists require an understanding not only of how to physically protect and preserve artifacts, but special knowledge of timely and accurate information to help communities prepare and cope and the concomitant and critical role of information technology.

Collectively, the papers and presentations, as well as the workshops, covered an impressive array of topics, providing useful insights and ideas for future directions regarding libraries and archives in the context of disaster preparedness and research. The poster session, hosted in part by the School of Information, enabled a special kind of interaction between presenters and attendees. Since many posters offer an early look into new ideas, this well-attended session enables important feedback to the presenters so these ideas can continue to evolve.

The School of Information was pleased to have had the opportunity to connect with our ACURIL colleagues in our own backyard for this particular conference. We hope that these proceedings will help in recording what was shared during the meeting, and somehow contribute to future discourse on the topics.

--Dr. James E. Andrews, Director, School of Information, University of South Florida

A Message About the Conference

Disaster Planning: Cooperation and Networking

Vicki L. Gregory, Professor

School of Information, University of South Florida

Introduction

As General Rapporteur of the 2011 ACURIL Conference, the overriding theme of this conference seemed to be cooperation and networking. Disaster planning is essential on the part of each library or archive, but knowing who you can call on in an emergency is the real key in preserving your collection in the face of a disaster. The disaster plan can delineate what your staff should have on hand and the kinds of problems that you can deal with locally, but also look ahead to who can help you locally, regionally, nationally or even internationally. Depending upon the extent of the disaster, also consider those people or organizations that may be able to help you locally in the early times after a disaster before outside help could reach you. In the aftermath of a disaster is not the time to begin trying to find out about possible assistance, so this information should be ready to hand. A number of presentations during the conference addressed these issues. Below is a short summary of some of the presentations represented in these proceedings as well as some comparative information from other parts of the world dealing with disaster planning and recovery through cooperative networks.

ACURIL Presentations

In her plenary address, Professor Pat Young, Resource Collection Coordinator of the Disaster Research Center at the University of Delaware, started the conference off

with an excellent discussion of these issues which she followed up on at the closing panel with a look at building disaster information research centers which is underway under the auspices of ACURIL for the Caribbean area. Young challenged all participants to come away from ACURIL with a toolkit of skills, resources, and contacts that can help mitigate the impact of future disasters on themselves, their libraries, and their communities.

The role of the Centre de Recherche et de Formation en Français et Communication (CREFFCO) in the aftermath of the Haitian earthquake on January 12, 2010 was presented by Dr. Iramène Destin, the Coordinator of CREFFCO. She discussed the formation of CREFFCO and its role in the support of both private and public university libraries in the efforts to conserve and preserve as much of their collections as possible and to get the libraries back up and running for their users. There were a number of presentations on how the Haitian libraries dealt with the problems caused by the massive earthquake. All of which contributed to the understanding of the participants as to the challenges faced by these librarians and the Haitian people. We all look forward to a chance to see the efforts of recovery at the XLII ACURIL conference in Haiti.

Dr. Alma Dawson, the Russell B. Long at Louisiana State University, described her Project Recovery, funded by an Institute of Museum and Library Studies grant, in the recovery of libraries effected by Hurricane Katrina (2005) in south Louisiana. Her presentation demonstrated how library educators could collaborate with practitioners in libraries effected by a disaster by providing both help to the local library while providing and experiential learning experience for students more vivid than simply reading about disaster recovery,

Laurie Taylor and Brooke Wooldridge presented the role of digital libraries in disaster preparedness and recovery including working to provide reference resources to assist first responders, and working with others to restore materials lost in disaster and preserve materials from future disasters. They discussed the Digital Library of the Caribbean (dLOC) as an important source for such efforts in that region. The Digital Library of the Caribbean (<http://www.dloc.com/>) is a cooperative digital library for resources from and about the Caribbean and surrounding area that provides access to digitized versions of Caribbean cultural, historical and research materials currently held in archives, libraries, and private collections.

Another organization which was repeatedly referred to in a number of presentations was the Caribbean Information Disaster (CARDIN). Beverley Lashley's paper in particular discussed the formation and roll of CARDIN (<http://www.dloc.com/>), which is a framework of organizations in the Caribbean region involved in disaster response and management that was founded in 1999 by the European Community Humanitarian Office (ECHO). The major objective of CARDIN is to serve as a clearinghouse of information about disasters, which can be accessed through its database.

Other Cooperative Efforts in Disaster Planning and Recovery

In addition to the organizations represented at ACURIL, there are a number of other organizations that can assist with preservation issues. These organizations conduct training and workshops, give advice on funding sources, post their publications on the World Wide Web, and assist on a regional, national, and international basis when preservation questions arise.

Many disaster-oriented organizations have readily accessible information on the World Wide Web. For example, the Asian Disaster Reduction Center (http://www.adrc.asia/adrcreport_e/) provides, on their website, a glossary on natural disasters, disaster information from 23 member countries, the latest disaster information, and an Internet exhibition. Many sites provide answers to questions or links to other sources.

Another excellent source of information is the International Federation of Library Associations (IFLA), whose website for preservation activities is <http://www.ifla.org/en/pac>. The mission of the International Federation of Library Associations and Institutions is to serve as the global voice of the library and information profession. With a current membership of 143 countries, IFLA has regional sections in Africa, Asia and Oceania, Latin America, and the Caribbean to support its mission. IFLA also has working relations with the World Intellectual Property Organization (WIPO), UNESCO, and the United Nations which makes them a worldwide source of information to aid in times of crisis.

An organization that serves some of the ACURIL area is LYRASIL, which was created in 2009 by the merger of PALINET and SOLINET and joined shortly thereafter by NELINET, provides a host of disaster planning and recovery information and help to member libraries. Through their work with the National Endowment for the Humanities, LYRASIL (<http://www.lyrasis.org/Products-and-Services/Digital-and-Preservation-Services/Disaster-Resources.aspx>) provides a variety of publications and linked resources for institutions to more fully develop an understanding of the roles and responsibilities of disaster planning and response.

Conclusion

The need for the continuing involvement of these kinds of organizations with individual libraries will not lessen in the future. New technologies facilitate cooperation by providing Web access and the ability to develop interactive databases. The advantages of taking cooperative, centralized action are numerous:

- Regional preservation centers promote the centralization of capital-intensive equipment such as ultrasonic encapsulators, and microfilm cameras/scanners, and of facilities such as cold storage for damaged materials;
- Regional centers can have more cost-effective ways of conducting preservation and disseminating information;
- Regional preservation centers allow for the specialization of staff, and thus reduce staff training and education time; and,
- Possible grant funders are more likely to support cooperation than individual effort.

Among librarians and preservation professionals of possible cooperation often leads to common solutions and grant-funded projects. In addition, knowing other professionals in the area of preservation and disaster recovery make it easier to contact them in times of crisis for your library and collection. National or regional library association meetings are often valuable resources in this regard.

I want to thank the speakers who made their papers available to be published in these proceedings, and I hope that these proceedings are a valuable addition to your toolkit for disaster planning and recovery.

Collaboration and leadership for times of disaster: The XLI ACURIL Conference

Alicia K. Long

Regional and international conferences implemented by organizations such as the Association of Caribbean University, Research, and Institutional Libraries (ACURIL) constitute a very unique experience. Not only are they a colorful encounter of cultures and individuals, but they also pose many challenges and questions like: How to socialize in different languages? How to make the ideas showcased in the conference applicable to unique institutions? What do professionals from such a variety of backgrounds have in common? These and other valid questions might provoke a state of avoidance on the part of possible attendees and their sponsoring institutions. In addition, technological advances that make communication much more attainable pose the big question: Are regional and international conferences still needed when we have digital networks, webinars, and other media platforms to communicate without the hassles and expenses related to travel?

Organizations like ACURIL, who want to promote the need to spend time and resources traveling to a different country to physically meet with colleagues, respond to the challenge by offering a valid answer to the “*What’s in it for me?*” question. The facilitation of a place, a time, and the resources set aside with the purpose of getting together and exchanging information is one of several ways in which collaboration occurs. Regional conferences and meetings facilitate **collaboration** and develop **leadership** skills for the librarians who participate, and consequently, the institutions they represent. The network of support and knowledge that results is the safety net that Caribbean librarians will have when disaster strikes and it is time for rapid response.

Facilitating collaboration:

For the purpose of this introduction, the terms collaboration and cooperation are used with similar connotations. Although collaboration (from the Latin *com+laborare*, to labor together) implies a more active stance than cooperation, in the literature regarding librarians from different institutions working together, both terms are used.

Back in 2003, Ferguson posed the question of how cooperation/collaboration can take place in a region (Caribbean) that encompasses so many different socio-political, economical, and linguistic characteristics. At that time, the author reported that cooperation in the Caribbean was merely “alive” (p. 31). In all these years, different efforts at cooperation have taken place with different degrees of success. Some initiatives have directly approached the need for cooperation for disaster relief (Arnesen, Cid, Scott, Perez, & Zervaas, 2007; Ferguson, 2003; Sullivan and Ochoa, 2009; Wedgeworth, 2004).

Cooperation is one aspect where organizations such as ACURIL develop a primordial role. The organization “originated as part of a movement for Caribbean cooperation at the university level, initiated in the late 1960s by the Association of Caribbean Universities (UNICA)” (ACURIL, 2010). The original members of the organization recognized the need for close cooperation in the region university libraries as their main objective, which later expanded to other types of libraries as well (ACURIL, 2010).

ACURIL’s website states the organizations’ three major objectives as follows:

a. to facilitate development and use of libraries, archives, and information services, and the identification, collection and preservation of information resources in support of the whole range of intellectual and educational endeavors throughout the Caribbean area;

- b. to strengthen the archival, library and information professions;*
- c. to unite information workers in them, and to promote cooperative activities in pursuit of these objectives.*

In her keynote address for ACURIL XLI which was included in this publication, Pat Young stated: “ACURIL has enjoyed a long history of networking on issues and concerns of common interest among members – why should disaster related issues be any different?”

The heterogeneous character of the region presents, however, some roadblocks for collaborative initiatives, and that has meant a different degree of success over the years. As previously reported, “the achievements [did] not seem to match the efforts expended” (Ferguson, 2003, p. 31). In present times, opportunities such as the Annual Conferences provided by ACURIL provide the research background and networking space that make cooperation possible and successful.

In fact, collaborative activities depend highly on the participant libraries’ historical, cultural, and social relationships. For this reason, real cooperation and working together takes time. The face-to-face social networking and establishment of meaningful relationships between members that take place during the annual meetings provide an invaluable source of connections that spur cooperative efforts. The results might not be seen as a direct output from a specific conference, but interpersonal relationships are cemented through attending these events over the years.

One of the successful examples of collaboration in the region is the Digital Library of the Caribbean (dLOC.) This cooperative project brings together the collections of different countries in the region and provides centralized digital access to

their records for researchers and interested parties everywhere (Sullivan & Ochoa, 2009; Wooldridge, Taylor, & Sullivan, 2009). For their contribution to ACURIL XLI, Taylor and Wooldridge analyzed digital libraries' role in disaster relief and mitigation, which demonstrated not only the role of technology, but they also emphasized the vital part played by the communities that support the digital libraries.

The dLOC project was born as a result of a cooperation agreement between the University of the Virgin Islands, the University of Florida, and Florida International University. The group of interested parties presented their idea at the 2004 ACURIL Conference, and since its implementation, the Executive Committee meets annually at the ACURIL Conferences (Wooldridge, Taylor, & Sullivan, 2009), a fact that demonstrates how a "digital" initiative takes advantage of "personal" meetings in the conferences.

Developing Leadership:

Every profession needs leadership. Librarians have been trained for leadership ever since the education of librarians moved to the graduate level, advocating for librarian-leaders to move the profession into the future (Wedgeworth, 2004). The role of leaders, however, is more important when disasters strike. In these times, the ability to act quickly and efficiently can determine the success or failure of vital operations.

Regional as well as national conferences and networks provide the ground to develop leaders in every area of this vast region. It is important to highlight the fact that, as Ford (2008) stated, leaders exist in every culture, country, or institution, but also their characteristics are unique to their social and cultural context.

The role of associations such as ACURIL is listed as paramount by many publications that compile leadership opportunities (Wedgeworth, 2004; Weintraub,

2004). The possibility of addressing those unique characteristics of the Caribbean is what makes ACURIL different from other organizations or events such as the International Federation of Library Associations (IFLA) and other international groups.

Other efforts to satisfy the need for global leadership in the profession include initiatives such as those implemented at the Walter C. and Brenda G. Mortenson Center for Library Programs. Their institutes and publications seize the opportunity to think outside of the box and reach out to leaders from different regions (Mortenson Center & Illinois State Library, 2008). In the same way, organizations such as ACURIL play a role of providing the place, the time, and the space dedicated to create and develop leaders for the Caribbean.

In *Global Librarianship*, Kesselman and Weintraub (2004) include a complete bibliography of literature on global librarianship. This resource includes sections for documents in different formats, but also the organizations and agencies that play a role in promoting global librarianship, including ACURIL. Any of these associations offer leadership opportunities, and getting to meet with other leaders in the profession is what makes events such as the ACURIL conferences so important.

When disasters strike, true leaders react with knowledge and decisiveness. In the periods before, between, and after disasters, those leaders are formed in the conferences, training opportunities, and sharing of resources that their regional organizations provide. This is true for many professions, and librarianship is not an exception.

Facing the Challenges:

As with many professional activities, the developments in communications and technology have changed the way in which professionals collaborate. Today's regional

conferences are not the same as those from the past. They do, however, provide opportunities for establishing meaningful contacts that can develop into cooperative initiatives or leadership advancement for Caribbean librarians.

The discussion as to the necessity of actually conducting these meetings in the same physical space, virtually, or something in the middle (such as a conference attended in person but also transmitted virtually to non-attendees) is the challenge that organizations such as ACURIL have to face. Research regarding what Caribbean professionals prefer and how they would implement changes to their meetings is still needed. In the meantime, we have the examples that many of the presenters shared during ACURIL XLI: examples of leadership, cooperative programs, collaboration for disaster relief, and collaborative cataloguing of collections and depositories. The contributors to this publication shared those examples which almost exclusively indicate either face-to-face or virtual collaboration between the leaders from the respective regions addressed. Would some of those initiatives been possible without a network such as ACURIL?

Collaborating and developing local as well as global leaders has many challenges. Librarians in the Caribbean region know that they have the responsibility of making those possible. ACURIL and other organizations provide the opportunities. Now it is time to explore the outcomes. We hope that the publication of these proceedings will serve to provide a continuation of the conversation.

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SELECTED PAPERS

1. Focus on Management and Triage of Books, Media & Other Documentation

“Objects of Value: Addressing Emergency and Disaster Mitigation, Preparedness, Response and Research in Libraries and Archives”

Pat Young

Recent events have helped to refocus our attention on the importance of addressing disaster related issues in libraries and archives. Some of the events that have served this purpose are the severe flooding along the Mississippi River and the unusually destructive tornadoes in the Southwest region of the U.S., the earthquake, subsequent tsunami and nuclear plant safety issues in Japan, and, of course, the Haiti earthquake of January, 2010. All of these events serve as a springboard for this conference and its daily themes.

The daily themes for this conference are as follows:

- “Response of libraries and archives to disasters: focus on management and triage, books, media and other documentation” – addressing disaster issues **in** libraries
- “Response of libraries and archives to disasters: preserving memories, community, and restoring hope” – addressing disaster roles of libraries in communities
- “The role of libraries and archives in disaster research”

This paper will address these three areas, working to draw connections among the three themes. It will also strive to challenge conference attendees to utilize the various opportunities offered to enhance their skills and expand their knowledge, better enabling them to address disaster related issues in libraries and archives.

In order to understand the various disaster related issues impacting libraries and archives, some context must be established by way of historical background. In 2005, prior to Hurricane Katrina, Historic Preservation and the Institute of Museum and Library Services (IMLS) partnered to conduct an extensive survey of museums and libraries throughout the United States to determine the overall “health” of collections. Survey results were published in December, 2005, under the title “A Public Trust at Risk: The Heritage Health Index Report on the State of America’s Collections.” At that time, the report indicated that “2.6 billion items of historic, cultural, and scientific significance were not protected by an emergency plan” (p. 6) and that 70% of archives and libraries had no emergency plan or staff trained to implement the plan (p. 7).

Watershed events have helped to significantly raise our awareness of the need to address disaster related issues in libraries. Prior to the completion of the Heritage Health Index, the U.S. had been dealing with the ramifications of the terrorist attacks of September 11, 2001, in New York City, at the U.S. Pentagon in Washington, D.C., and at the plane crash site in Shanksville, Pennsylvania. Although these events renewed concern about the impacts of disasters on libraries and archives, far more attention was focused on museum collections that had been impacted. At best, this served as only a minor nudge at best to address disaster related issues in libraries. When Hurricane Katrina hit in the fall of 2005, it served as a strong wakeup call to address these issues in

a more concrete and substantive way. The major earthquake that struck Haiti last January only furthered that awareness and made the call stronger.

Thinking of one's own library or archive one must ask the following questions: Does our library or archive have a disaster plan? Was that plan updated within the past year? More libraries are taking disaster planning to heart, however many still do not even have the basics in place in the form of an updated disaster plan. We do not passively permit the destruction of library resources due to day-to-day maintenance problems or related basic issues – why would we permit the destruction of these resources due to a disaster?

The perception of libraries and the potential roles that they can play following disasters is also improving among government emergency management organizations. For example, the Federal Emergency Management Agency (FEMA) in the U.S. recently established a policy that designates libraries as “essential community services,” categorizing them with other “first response” entities such as fire departments, police, hospitals, and schools and qualifying them to apply for federal funding to support a temporary relocation to enable continuity of operations. This is a major step forward for U.S. libraries, but it also carries greater responsibility to plan adequately for potential disasters. Part of that challenge is the fact that the federal funding allows for coverage of expenses incurred to rent a temporary space while it does not provide for financial support to replace critical systems such as Internet access or critical equipment such as computers. Libraries now must make an effort to think in even greater detail about the steps involved in getting back up and running and the equipment necessary to do so as well. Perhaps a vital part of our plans should be to consider how we would go about

mobilizing equipment on temporary loan from outside our impacted region and who might provide such resources.

Another element often overlooked when developing a thorough disaster plan is the people – library staff members and patrons. Again in one's own library situation it is imperative to consider when the last time an unannounced fire drill was held while patrons were present. This should be done on a regular basis to increase familiarity with safe procedures and responses among both the staff and the patrons. Another important question to consider: would your patrons know where to go in your archive or library for safety during a quick onset disaster situation? Not only do we have a responsibility to mitigate the impact of disasters on our collections, but we have an even greater responsibility to ensure as much safety as possible for our staff and our patrons during disasters.

When one is considering the human element, one should also consider this: studies have shown that people are better able to focus on one task if they are not distracted by the worries of a related or unrelated problem. For example, people responsible for critical disaster related functions tied to their jobs are better able to focus on the tasks at hand if they are relatively certain that the disaster related situation as it impacts their homes and families is under control. Therefore it is tremendously important that library staff members have personal and family disaster plans in place to help alleviate any personal concerns or worries that might arise following a disaster impacting both home and work place.

As stated previously, the perceptions of libraries and their roles following disasters is improving, however several challenges still remain. Among traditional

emergency managers, for example, the focus remains on safety and specifically the safety of people impacted in disasters first. This is as it should be without a doubt.

Additionally, emergency management organizations tend to operate in a monetary based system, reducing all disaster impact and loss to a dollars-and-cents value. Because much of the value in libraries goes well beyond the physical collections to the services provided, staff knowledge and wisdom, etc., it becomes exceedingly difficult to place a financial figure on that loss, thus making it difficult at best for emergency management professionals to grasp the true value of what can be lost when disasters hit libraries.

Much can be done, however, to improve both the perceptions emergency managers have of libraries in the larger disaster framework as well as the relationship between emergency management professionals and libraries. First, we must be clear about our argument for considering libraries and archives as essential service providers. During non-disaster times, libraries often serve as community hubs and gathering places thus community members become accustomed to turning to libraries for a variety of non-disaster purposes. Among the more basic and commonplace services provided and utilized these days is Internet access. If patrons are accustomed to using their local libraries for this service prior to a disaster, it seems only reasonable to presume they would look to their library for the same service after a disaster. Libraries can also serve other vital functions post-disaster in addition to information and communication access in the short-term recovery phase. For example, libraries can serve as tourism promoters and employment information clearinghouses during the long-term recovery. The key in determining any number of potential roles for libraries pre- and post-disaster is to think creatively.

Before a disaster strikes, the obvious role of libraries and archives is to serve as a source of information and educational tools to better equip community members to prepare for what may lie ahead. When we consider the role of libraries and archives in disaster research then, we must consider not one but two distinct groups of potential “disaster researchers.” The first is what might come to mind immediately when considering the term – those traditional academics and scientists who are engaged in developing best practices and attempting to mitigate the impact of disasters on a theoretical level. The second and perhaps less obvious group are informal “researchers” – community members in search of the information that will best enable them to minimize the impact of disasters on their families. To fulfill our duties thoroughly and completely, we must develop skills and resources that will serve both populations.

In developing the skills and resources necessary to address the multifaceted issues of disasters and libraries we will benefit greatest from a shared effort. It is ironic that often times the libraries with the most limited resources serve the communities with the most limited resources. By drawing on and fostering professional connections and relationships established between libraries, among libraries, and between libraries and local and regional emergency management professionals, we can create an environment that taps into the best shared resources and also enables the best possible scenario in terms of disaster preparedness, response, and research.

ACURIL has enjoyed a long history of networking on issues and concerns of common interest among members – why should disaster related issues be any different? As this conference moves forward, participants are asked to consider accepting the following challenge: establish or enhance a connection with one other library or

organization in attendance. By doing so, each participant will most assuredly enhance their ability to address disaster related matters more effectively.

The following is a quote taken from the ACURIL XLI conference description:

Disasters, in whatever form they take, rob us of our sense of well-being, our security, our community, our loved ones, and our homes. Disasters forever change 'life as we know it' and seriously impact our ability to function. We may rebuild buildings and replace lost books but the impact on staff, their families and loved ones, and their communities linger.

This presenter challenges all participants to utilize this conference to build individual toolkits of skills, resources, and contacts that will help mitigate the impact of disasters on themselves, their libraries, and their communities.

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Research Center.

Présentation du Centre de Recherche et de formation en Français et communication (CREFFCO) au 41e congrès d'ACURIL du 31 mai au 3 juin 2011 à Tampa, Floride

Thème : Les bibliothèques universitaires d'Haïti et la catastrophe du 12 janvier 2010 : impacts et perspectives.

Iramène Destin

Résumé

Le 12 Janvier 2010, un terrible tremblement de terre a frappé l'île d'Haïti. Tous les secteurs ont été touchés, les bibliothèques n'ont pas été épargnées. La situation de ces institutions ne nous laisse pas indifférents, nous qui sommes conscients de leur importance dans la société et dans le monde universitaire en particulier. Dans ce présent travail, nous nous proposons de faire un bilan de l'état des bibliothèques universitaires privées et publiques dans la capitale haïtienne après la catastrophe. Pour réaliser ce travail, nous avons procédé par une enquête dans les universités, nous nous sommes déplacés pour visiter les bibliothèques, rencontrer les bibliothécaires, les directeurs d'université, qui se font le plaisir de nous accueillir et de nous informer. Après notre recueil de données, nous avons constaté que la situation des bibliothèques universitaires à Port-au-Prince est critique. Car, les plus importantes bibliothèques universitaires qui sont celles de l'Université d'Etat d'Haïti (UEH) peinent encore à se remettre. Et celles des universités privées qui même avant le séisme du 12 janvier faisaient face à toute sorte de difficultés (problèmes budgétaires pour le fonctionnement et l'achat des livres, manque d'ouvrage, d'espace et de personnel) voient aujourd'hui leur situation s'empirer. Ainsi, notre travail pourra contribuer, nous l'espérons, à une sensibilisation à la nécessité pour

des bibliothèques universitaires en Haïti de se reconstruire plus d'un an après la catastrophe et à une réflexion sur la conservation et la préservation des collections des bibliothèques en cas d'éventuel désastre. A la fin de notre intervention nous présenterons brièvement le projet de bibliothèque spécialisée en didactique des langues et des cultures de CREFFCO.

L'objet de notre présente réflexion nous a été inspiré d'un questionnement fondamental formulé, directement ou implicitement dans le milieu universitaire notamment par les étudiants et les enseignants au moment où la majorité des bibliothèques du milieu ne peut plus donner accès à la documentation. Ce questionnement porte sur les impacts d'une telle situation sur les formations universitaires quand nous révisons le rôle essentiel des bibliothèques dans la satisfaction des besoins de l'enseignement /apprentissage supérieur et des spécialités.

Pour contribuer aux réflexions sur une telle situation, le Centre de Recherche et de Formation en Français et Communication (CREFFCO) étant composé de jeunes universitaires haïtiens s'intéressant à la documentation et à la formation des enseignants, se propose de faire un bilan de l'état des bibliothèques universitaires privées et publiques après le terrible tremblement de terre de 2010.

Les principaux objectifs de ce travail sont les suivants :

- Contribuer à une sensibilisation à la nécessité des bibliothèques universitaires en Haïti à se reconstruire

- Contribuer à la réflexion sur la conservation et la préservation des collections des bibliothèques en cas d'éventuel désastre (tremblement de terre, cyclone, feu, inondation, tempête, ...).
- Présenter brièvement le projet de bibliothèque spécialisée en didactique des langues et des cultures de CREFFCO.

Nous avons procédé par une enquête dans les universités, nous nous sommes déplacés pour visiter les bibliothèques, rencontrer les bibliothécaires, les directeurs d'université, qui se font le plaisir de nous accueillir et de nous informer sur la situation des bibliothèques après le 12 janvier.

Après notre recueil de données, nous avons constaté que la situation des bibliothèques universitaires à Port-au-Prince est critique. Car, les plus importantes bibliothèques universitaires qui sont celles de l'Université d'Etat d'Haïti (UEH) peinent encore à se remettre. Et celles des universités privées qui même avant le séisme du 12 janvier faisaient face à de nombreux défis structurels et des difficultés en terme de ressource (manque d'ouvrage, d'espace et de personnel) voient aujourd'hui leur situation s'empirer.

Les bibliothèques de l'Université d'État d'Haïti (UEH)

Les bibliothèques les plus importantes de l'Université d'État d'Haïti à Port-au-Prince sont au nombre de neuf (09). Plusieurs cas de figure se présentent dans la situation de ces bibliothèques qui, plus d'un an après la catastrophe du 12 janvier n'ont pas pu remonter la pente. Certaines ont été détruites complètement avec des pertes d'ouvrages, d'autres ont été sérieusement endommagées. Une seule n'a pas été touchée, c'est le cas de la faculté de Droit.

Quatre (04) parmi les bibliothèques de l'UEH ont été détruites complètement avec des pertes d'ouvrages allant de 50 à 100%. Il s'agit des bibliothèques de:

- L'Ecole Normale Supérieure =50%
- La Faculté des Sciences=100%
- La Faculté de Linguistique Appliquée= 100%
- La Faculté de Sciences Humaines : beaucoup de perte et l'inventaire de ce qui reste n'est pas encore possible, faute d'espace.

Quatre (04) ont été sérieusement endommagées mais pas de perte d'ouvrages considérable. Il s'agit des bibliothèques de : l'Agronomie, l'INAGHEI, l'Ethnologie et la Faculté de Médecine

Autres cas de figures

La majorité des bibliothèques de l'UEH, tente de fonctionner malgré leur situation difficile car elles doivent répondre à la demande de documentation de leurs nombreux étudiants et enseignants et même à la demande de ceux des universités privées. Ici aussi les cas de figure sont différents :

- A l'Ecole Normale Supérieure et à la faculté des Sciences Humaines, les livres sont empilés dans des boites dans une salle fissurée. Il n'y pas moyen de donner accès à la lecture. Les étudiants peuvent photocopier les documents désirés si ceux-ci ne sont pas trop loin dans les boites. Dans ces conditions les livres s'épuisent facilement, on assiste même à des pertes car il ne peut pas encore y avoir une vraie organisation.



Photos Iramène DESTIN, bibliothèque des Sciences Humaines et de l'ENS

- La faculté de Linguistique Appliquée (FLA) et l'Agronomie tentent de fonctionner sans une vraie salle de lecture. La bibliothèque de la FLA fonctionne dans une petite salle de dix (10) places pour des centaines d'étudiants tandis que les étudiants de l'Agronomie ont du mal à lire sous la tente qui sert de salle de lecture car il y fait trop chaud. Donc dans ces bibliothèques les étudiants peuvent

- lire dans leurs salles de cours ou sur la cour de la faculté. Là aussi on peut assister à des pertes et à l'épuisement des ouvrages.
- Les bibliothèques des facultés d'Ethnologie et de l'INAGHEI fonctionnent dans des locaux fissurés. Par conséquent elles sont devenues très peu fréquentées. Celle de l'INAGHEI a perdu une partie considérable des livres due à une infiltration d'eau causée par le tremblement de terre. Les catalogues manuels sont détruits.
 - La bibliothèque de la faculté de Médecine et de celle des Sciences ne fonctionnent plus après le 12 janvier. Le fonds documentaire de la faculté de Médecine existe encore, mais personne n'y touche car la salle de lecture est transformée en salle de cours. La faculté des Sciences, quant elle, a perdu son fonds documentaire et ses locaux.

Donc la seule bibliothèque de l'UEH qui fonctionne normalement, sans changement par rapport à 12 janvier est celle de la faculté de Droit.

Les bibliothèques des universités privées

Comme nous l'avons mentionné ci-dessus, les bibliothèques des universités privées à Port-au-Prince faisaient face à beaucoup plus de difficultés par rapport à celles de l'UEH même avant la catastrophe du 12 janvier.

Au cours de notre enquête, nous avons constaté que ces bibliothèques privées sont pour la majorité ce qu'on pourrait appeler des bibliothèques embryonnaires, par rapport à l'espace, au fonds documentaire, au personnel et à la fréquentation. Ces bibliothèques comme celles de l'UEH ont été terriblement touchées par le séisme du 12 janvier 2010 qui a frappé Haïti.

Nous avons visité les sept (07) les plus importantes qui présentent des caractéristiques distinctes.

Parmi les sept (07) bibliothèques des universités privées que nous avons visité, cinq (5) ont été complètement détruites et ne fonctionnent plus jusqu'à date.

Il s'agit de celles des Universités: INFOTRONIQUE, INUQUA, CEDI, QUISQUEYA et GOC

- Parmi les cinq (05) bibliothèques détruites dans les universités privées, seule INUQUA a pu sauver son fonds documentaire quoiqu'elle n'ait pas pu encore donner accès à la documentation.
- INFOTRONIQUE, a pu récupérer à peu près 40% de son fonds.
- QUISQUEYA ne peut pas encore faire l'inventaire mais constate qu'il existe encore des livres dans ses locaux.
- CEDI et GOC ont tout perdu
- Les deux bibliothèques des universités privées qui fonctionnent sont celles des universités des Hautes Etudes et Notre Dame d'Haïti.

Si les impacts matériels du 12 janvier sont visibles dans les universités en Haïti aujourd'hui, ses impacts sur la formation et le rendement intellectuel dans le pays ne pourront être constatés que plus tard. Avant la catastrophe, les bibliothèques universitaires fonctionnaient malgré certaines difficultés. Après, la plupart d'entre elles voient leurs collections disparaître entièrement, d'autres n'ont pu en récupérer qu'une partie qui se trouvent encore dans des cartons. Les enseignants et les étudiants ont difficilement accès à la documentation.

Les besoins dans les bibliothèques universitaires sont multiples. Cela part de l'aménagement des locaux, de l'achat d'ouvrages, de la formation des bibliothécaires sur la gestion et sur la sauvegarde des bibliothèques en cas d'éventuel désastre. Tels sont les besoins communs exprimés par les responsables au cours de l'enquête. Toutefois, les responsables de bibliothèques ont déjà entrepris des démarches afin de se remettre en fonction. Ils adressent des demandes auprès des anciens étudiants, des enseignants, s'ouvrent à des propositions des universités étrangères et à des institutions engagées dans le domaine de la bibliothéconomie et de la formation continue des professionnels de l'information documentaire. Nous pouvons citer les Bibliothèques Sans Frontières, l'Université des Antilles et de Guyane, la coopération Belge, certains enseignants de l'Université Paris 8, l'Agence Universitaire de la Francophonie, qui supportent les bibliothèques d'une manière ou d'une autre. Cependant, la tâche semble encore lourde car plus d'un an après la catastrophe du 12 janvier, la majorité des bibliothèques universitaires n'est toujours pas fonctionnel.

Les perspectives

Chacune des bibliothèques que nous avons visitées exprime leur volonté de travailler à l'amélioration de la situation, elles souhaitent passer des pratiques traditionnelles à une migration vers l'informatisation. Le désir de formation et d'achats de collections ressenties est exprimé. Aussi, parmi les perspectives à court et long terme pour la reconstruction des bibliothèques universitaires en Haïti il y a celui d'une bibliothèque numérique avec les Bibliothèques sans Frontières qui sera effectif en juillet à la faculté des Sciences. Il s'agira de donner accès à plus des milliers de titres en ligne accessible via

des bases de données d'éditeurs de renom. Des bases de données qui seront divisées en trois (3) catégories

- Les livres électroniques et les encyclopédies
- Les revues universitaires en ligne
- Les bases de données bibliographiques

C'est un travail qui résulte d'un accord entre les Bibliothèques sans Frontières, le rectorat de l'Université d'Etat d'Haïti et des éditeurs, nous précise la responsable de la BSF en Haïti Marie-Hermine De Montangon

Le rectorat de l'Université d'Etat d'Haïti et la BSF travaillent sur un autre projet, mais cette fois-ci à long terme, qui consistera à créer un service commun à la documentation où tous les étudiants pourront avoir accès. Il existe d'autres projets qui n'ont pas forcément l'objectif de reconstruire les bibliothèques universitaires mais de renforcer l'accès à la documentation dans le milieu enseignant comme celui de CREFFCO que nous allons présenter brièvement.

Centre de Recherche et de Formation en Français et Communication (CREFFCO)

Le Centre de Recherche et de Formation en Français et Communication (CREFFCO), fondé en 2006 par de normaliens supérieurs et des spécialistes en didactique des langues et des cultures, a pour objectif de contribuer à la formation continue des enseignants de langues dans la capitale et dans les villes de provinces. Le Centre a le projet de créer une bibliothèque spécialisée en didactique. Cette bibliothèque portera le nom de PIERRE Vernet, en hommage au professeur et doyen de la faculté de linguistique appliquée, mort en salle de cours le 12 janvier 2010. Cofondateur de cette faculté, il s'est toujours battu

pour une formation de qualité en Haïti. La bibliothèque spécialisée de CREFFCO sera aussi un espace d'échanges et de débats sur les problématiques de l'enseignement/apprentissage en Haïti.

Le fonds de départ de la bibliothèque est constitué de quelques ouvrages en didactique des langues provenant des membres du centre. Mais nous sommes loin d'avoir un fonds documentaire satisfaisant. Nous sommes donc ouverts à toute forme de partenariat.

Pour conclure, dans le contexte de la reconstruction d'Haïti, l'amélioration des conditions des bibliothèques notamment celles des universités est indispensable pour aider le pays à avancer et renforcer son développement économique, sa politique et sa démocratie. Car, comme nous l'avons constaté, la situation est compliquée, elle nous concerne tous, nous qui sommes conscients de l'importance de telles institutions.

Le rôle des bibliothèques des « Camps de fortune » dans la réadaptation des jeunes en milieu défavorisé après une catastrophe naturelle : cas d'Haïti

Adelyne Pinchinat Mocombe

Le séisme de magnitude 7, qui a frappé le 12 janvier Port-au-Prince et sa région, a fait plus de 250.000 morts tandis qu'environ 1,9 million d'Haïtiens, soit 15% de la population totale du pays, ont été déplacés. Le soir du séisme du 12 janvier 2010, la population des zones affectées a investi les rues, les places publiques, les espaces vides ainsi que les centres sportifs dans le but d'éviter les vestiges des édifices menaçant à tout moment de tomber. Petit à petit, des camps se sont constitués. Aujourd'hui, le pays compte au moins mille cinquante-trois (1.053) camps.

Un an et demi après le tremblement de terre, les Haïtiens plus que jamais ont besoin de toits et de soins, mais manifestent toujours un immense appétit pour la culture et l'éducation comme en témoigne le chercheur Patrick Weil, spécialiste de l'immigration et président de l'association « Bibliothèques Sans frontières ».

Vu les multiples difficultés auxquelles sont confrontées la quasi-totalité des bibliothèques de la zone métropolitaine, les bibliothèques municipales [images].

Le chômage, la précarité et les problèmes d'insécurité, gangrènent certains camps comme celui de Cité Soleil (le plus gros bidonville d'Haïti). Heureusement, plus de la moitié de ces camps (les plus grands) bénéficient de cette activité de lecture et d'animation qui est financée par les ONG locales et internationales.

Comment se fait cet appui ?

Pour accompagner le processus de deuil, cet appui se fait de différentes façons à savoir :

- Le montage d'ateliers de lecture,

- Des animations culturelles et de bibliothèques légères dans les camps,
- des activités ludiques et une ouverture sur l'avenir.

Ceci constitue également une première étape vers la re-scolarisation des plus jeunes. Les symptômes de ces traumatismes comprenant : le stress, les cauchemars, la détresse psychologique, les troubles de comportement ou les déficits d'attention. Ils ne pourront être dissipés en un seul jour, mais de manière continue à travers des activités collectives et culturelles.

Plusieurs organismes se sont engagés pour aider les enfants d'Haïti. Des résultats à court, à moyen et à long terme sont attendus à la fin de cet appui psychosocial.

Ce genre d'activité permet de :

- contrer les effets du stress post-traumatique,
- favoriser l'adaptation scolaire des bénéficiaires
- favoriser la reconstruction des liens sociaux.

On présentera trois programmes d'activités de lecture organisés dans trois (3) camps représentant une forte population de jeunes.

1^{er} cas : Camp AFCA de Delmas 33

Les Editions Henri Deschamps ont entamé un programme d'appui psychosocial pour les élèves ainsi que des enseignants vivant dans des « cités des tentes » de la capitale. Comme dans une ambiance de camp d'été, les enfants ont accès à des jeux éducatifs, ils font du sport, effectuent des travaux manuels et artistiques. Une façon, indique M. Peter Frisch directeur de la Maison Henri Deschamps, de gérer leurs traumatismes en vue de les mettre dans de meilleures conditions d'apprentissage à la réouverture des classes.

Le but est d'organiser des activités avec des jeunes de 5 à 15 ans et de favoriser le travail de deuil, notamment, grâce à la lecture de livres, dont la moitié sera en créole (langue maternelle).

Plus de 200 à 250 enfants du camp Afca à Delmas 33 sont déjà touchés par ce programme mis sur pied avec des délégués pédagogiques des Editions Deschamps.

En effet, mis à part les enfants qui bénéficient de ce soutien psychologique, des enseignants reçoivent aussi des formations pour la réouverture des classes. Ceci les aide à mieux recevoir les enfants pour la reprise des classes et à être mieux armés pour gérer les traumatismes psychologiques des élèves qui seront en face d'eux. De toute façon, c'est l'enseignant qui passe plus de temps avec l'élève en salle de classe.

« Ils sont formés sur les émotions, les réactions, la résilience, les traumatismes, et ont aussi travaillé sur le langage à utiliser avec les enfants en classe pour chasser leur stress ».

Les formations pour les enseignants Les enseignants bénéficiaires de ces séances de formation, à travers des projections de films, ils auront à expliquer aux élèves la mécanique derrière les tremblements de terre, leur enseigner les précautions à prendre pour se protéger pendant un séisme. « Quelque part, démystifier le tremblement de terre, dire aux enfants que ce n'est pas une punition de Dieu ».

2^e cas : Camp de Tabarre Issa

Le Camp Tabarre Issa se trouve à Galette Greffin, une localité de la commune de Tabarre, dans la Plaine du Cul de Sac, à l'est de Port-au-Prince. Ce camp accueille environ 512 familles provenant de la Vallée de Bourdon et de ses quartiers avoisinants (à noter que ces deux zones ont été complètement touché par le séisme). Sa gestion est assurée par l'organisation humanitaire Concern

Worldwide.

La bibliothèque du camp de Tabarre Issa, a été visitée et on a pu constater son mode de fonctionnement.

Les animateurs interviennent par équipe de 2. Une équipe le matin, une équipe l'après-midi.

Un animateur parle en français et l'autre en créole. Les enfants doivent se laver les mains et retirer leurs chaussures avant de rentrer sous la tente.

La bibliothèque est ouverte de 8h-12h et de 1h à 4h. Les livres sont stockés dans un endroit sécurisé. La bibliothèque dispose aujourd'hui d'une centaine de livres et Bibliothèque sans Frontière (BSF) s'est engagé à fournir d'autres livres à toutes les bibliothèques montées selon ce modèle.

3^e cas : Camp de CFEF à Martissant

Au milieu du désespoir, le partage du savoir est là. Chaque jeudi, une équipe d'ATD Quart Monde part avec des livres, du papier, des crayons, des ardoises et des bâches à la rencontre des enfants du camp de CFEF dans le quartier de Martissant à Port au Prince, un camp où logent environ 1700 personnes (360 familles avec 400 enfants). L'activité suscite l'engagement des enfants et des adultes vivant dans le camp et de jeunes d'ailleurs.

Au milieu de ce contexte de vie très difficile à accepter, le temps de partage du savoir apporte une ouverture, permet des rencontres, des temps pour s'écouter et partager les moments difficiles, mais aussi la joie. La bibliothèque donne une nouvelle image de la vie, une image de joie, de fierté, de solidarité et de paix.

Conclusion

Au milieu des difficultés, le partage du savoir, occasion de joie, de rencontres et d'engagement. Plusieurs approches sont utilisées pour apporter un appui aux jeunes avec les outils de la lecture. Assister psychologiquement les enfants rescapés du séisme du 12 janvier est donc une priorité. Après un événement aussi traumatisant, il est essentiel d'offrir aux enfants sécurité, réconfort et counselling.

Le nouveau rôle des bibliothèques en situation de crise est d'aider non seulement à la lecture ou à l'accompagnement dans l'acquisition d'un savoir, mais aussi à maîtriser les mesures d'urgence à entreprendre sur le territoire dans des cas de sinistres ou de tragédies. Elle aide à identifier, définir, les responsabilités et les fonctions de chaque personne concernée lors de tels événements à travers des activités ludiques et des séances de formations informelles.

2. Preserving Memories, Community, and Restoring Hope

Katrina: Experiences After the Disaster

Alma Dawson

Abstract

Staffing shortages in south Louisiana libraries continue to exist as a result of damages caused to communities by Hurricanes Katrina and Rita of 2005. To address them, the Louisiana State University School of Library and Information Science, the State Library of Louisiana, the New Orleans Public Library, Southern University at New Orleans, Jefferson Parish Public School System, Algiers Charter School Association, Calcasieu Parish Public Library, Terrebonne Parish Public Library System, and the New Orleans Recovery School District formed a collaborative partnership to recruit and educate thirty new librarians for employment in the libraries of south Louisiana. Dr. Alma Dawson, Russell Long Professor at the LSU School of Library and Information Science, demonstrates how this program, Project Recovery, funded by a grant from the Institute of Museum and Library Services, is responding to the aftermath of these natural disasters. The presentation will show how library educators have been planning collaboratively with practitioners for various experiential learning opportunities for students who will fill these vacancies after graduation and aid in the recovery of the region's libraries.

Katrina: Experiences after the disaster

The Louisiana State University School of Library and Information Science (LSU SLIS) was awarded an Institute of Museum and Library Services (IMLS) grant in the amount of \$763,901 through the Laura Bush 21st Century Librarian Program. "Project Recovery" will recruit, educate, and enable thirty graduate students in library and information science to work in school, public, and academic libraries in those communities in southern Louisiana continuing to experience staff shortages as a result of the hurricanes and flooding in 2005.

Hurricanes Katrina and Rita, 2005

Hurricane Katrina struck Plaquemines Parish, Louisiana, at 140 miles an hour on the morning of August 29, 2005, and hit the Louisiana-Mississippi border later that day at nearly 125 miles per hour. The levees between Lake Pontchartrain and New Orleans gave way, flooding the city. Eight parishes were devastated (Jefferson, Orleans, Plaquemines, St. Bernard, St. Charles, St. Tammany, Terrebonne, and Washington). Less than a month later on September 24, Hurricane Rita swept through western Louisiana, hitting its Texan border. Nine parishes experienced flooding (Calcasieu, Cameron, Iberia, Lafourche, St. Charles, St. John the Baptist, St. Mary, Terrebonne, and Vermilion) (FEMA 2010a). According to the National Weather Service, Katrina was "the costliest and one of the five deadliest" hurricanes to ever hit the United States, with a death toll of at least 1200 people. It caused the displacement of another 700,000 people and the destruction of over 205,000 homes and 18,750 businesses (Dawson and McCook 2006, 292). Rita displaced thousands more and caused billions more dollars in damages (National 2009).

The libraries in these areas suffered along with their communities. Buildings had trees

fall through their windows, slime and mud cover their walls, and water rise above their lower shelves (LeBoeuf 2006b, 59) Almost immediately, people began to realize the potential for the loss of unique materials, from slave records to jazz sheet music (Traister 2005).

The libraries that were able to remain open focused on service. The biggest demand from the public was internet use. Mary Cosper LeBoeuf, Director of the Terrebonne Parish Library System, describes long waiting lists, allowing use of staff computers, and bringing in extra computers from area agencies and businesses (LeBoeuf 2006a, 3). Many evacuees were seeking information about missing friends and relatives, so library staff often took on the role of social worker, comforting those who received bad news.

In the immediate aftermath of the storms, libraries helped their patrons by providing free printing, copying, and faxing. They set up televisions for news coverage (LeBoeuf 2006a, 4). Jefferson Parish Library created “Katrina cards” that allowed anyone in eight parishes to borrow materials (Dickerson 2007, 104). As the months passed, donated computers and the purchase of several self-check stations helped them maintain services. In early 2006, returning New Orleans area residents were still seeking out libraries because—unlike their homes—they had electricity and therefore were warm places with internet (Phillips 2006).

Open libraries struggled with small and suffering staffs. Only ten of ninety-two employees of the Saint Tammany Parish Library had inhabitable homes (LeBoeuf 2006b, 59). Jefferson Parish Libraries were able to reopen three of their fifteen libraries on October 3, 2005, but were still faced with sixty-two vacant positions at the end of 2005 (Dickerson 2007, 108).

Geraldine Harris, then interim director of the New Orleans Public Library, indicated that NOPL lost 90% of its staff when Katrina struck. In its 2008 master plan, NOPL indicated that “Immediately before Katrina, there were 216 full-time equivalent (FTE) staff members, or one

staff member per 1,142 square feet of library space, or 0.55 FTE per 1,000 people served” (NOPL 2008). The need for professional staffing was critical.

Assessment of Needs

As background for the Project Recovery grant, Dawson and Thomas conducted studies of school, public, and academic libraries in Louisiana. Their findings were current to 2008 when the grant was written, but have been corroborated by e-mail correspondence and continuing conversations with current partners in Calcasieu Parish Public, New Orleans Public, and Terrebonne Parish Public library systems.

School Libraries

School libraries have been particularly vulnerable in south Louisiana, a situation exacerbated by the devastating hurricanes of 2005 and 2008. “Statistics from the ALA six months after the hurricanes indicated that in Louisiana, more than 150 school libraries were damaged or destroyed, and New Orleans Parish lost 63 percent of its 126 schools, and school libraries” (“First Lady” 2006). In September 2006, a telephone survey conducted by project investigators revealed that only sixteen of forty-five schools had fully functioning school libraries in the (New Orleans) Recovery School District, which included the Algiers Charter Schools. Again in September 2007, Orleans Parish schools reported twenty-five schools without certified or degreed librarians. The exact figures for Orleans Parish school libraries were difficult to document given the changes in the organizational structure of the now three independent school districts and numerous charter schools, a chart of which can be found in the *New Orleans Parents’ Guide to Public Schools* (2009).

The school districts do not have professionally trained library coordinators. In November

2008, a third follow-up of interviews was conducted with similar findings. Staff shortages from the hurricane-related issues continue. With its eighty-seven schools and a library media consultant, Jefferson Parish has made the most progress in library media staffing and plans to add librarians to its elementary schools to meet Southern Association Standards. Currently, there are thirty-eight elementary schools with certified staff and about twenty-eight elementary schools without certified or degreed librarians. In 2007, Orleans and Jefferson parishes combined reported shortages of fifty-nine schools without either certified or degreed librarians. Schools in Calcasieu, Cameron, Plaquemines, St. Bernard, and Vermilion parishes reported librarian shortages in 2007 and again in 2008. The Laura Bush Foundation for America's Libraries has, as of October 30, 2008, granted over \$4.7 million to public and private school libraries in Louisiana, Mississippi, and Alabama for the rebuilding of school library collections in school libraries affected by the storms of 2005 and 2008. Much of the funding went to public school libraries in the greater New Orleans area. However, the grants stipulate that funds may not be spent on staffing, but must be used for the purchase of (largely) print material, and with some training provided by the Laura Bush Foundation itself (Laura Bush Foundation 2008). These findings indicate a major need for library education for school media specialists.

LSU SLIS offers the only ALA-accredited library and information science program in Louisiana. Requirements for certification as school library media specialists are embedded in the LSU SLIS MLIS degree program. Research studies on school media programs completed in the last fourteen years in nineteen states consistently found that school libraries led by professionally trained, certified school library media specialists positively affect student academic performance and test scores (Scholastic 2008).

Public Libraries

Impacts of the hurricanes of 2005 on public libraries have been also well documented in the professional literature. The State Library of Louisiana issued online periodic assessment reports of damages and losses of buildings (with maps) due to hurricanes Katrina and Rita. After Hurricane Katrina, New Orleans Public Library initially laid off 90% of its staff, which included half of its professional staff and key administrators. Today, New Orleans Public Library is serving a population of 238,124 individuals, 70% of the pre-Katrina population. In 2007, Jefferson Parish Library System reported 33% fewer positions pre-Katrina and continuing problems with recruitment of professional staff in 2008. Calcasieu and Terrebonne parishes, impacted by Hurricane Rita, reported the need for additional staff as populations return. Louisiana libraries sustained minimum damages from the hurricanes of 2008, though the Cameron Parish Library was completely destroyed by Hurricane Gustav. For all the public libraries reporting, preliminary survey results indicate the greatest need for staff are in youth services and programming, public relations and marketing, fundraising and event planning to attract all ages, and reference and technical services.

In addition to damages to property, displaced staff, and reduced populations, smaller budgets have affected staffing. Libraries are also establishing new services such as those in New Orleans Public Library with modular structures placed in communities to serve populations struggling with infrastructure problems.

Academic Libraries

In September 2008, the Collections Committee of the Louisiana Library Network Information Network Consortium (LALINC) found that eleven of the thirteen academic libraries surveyed experienced loss of professional staff. Of the libraries responding to a November 2007 survey conducted by the project directors, 100% indicated a need for additional professional

staff. These findings corroborated the findings of the Mellon Foundation funded study (conducted by SOLINET) of academic libraries along the Gulf Coast after the 2005 hurricanes (2006). The purpose of the assessment was to measure the damage to library collections and buildings, see what recovery efforts were underway, and determine what libraries needed to complete the recovery.

In Louisiana, fourteen academic libraries sustained damage from Hurricanes Katrina and Rita. Libraries of Southern University at New Orleans and Delgado Community College received extensive damage or were devastated, while other libraries sustained moderate or minimum damage. The report identified common staff issues including layoffs by the libraries with the worst damage and strained resources due to cost recovery and loss of revenue. Given the findings, the project investigators predicted that institutions would have difficulty attracting staff for open positions. From the hurricane staffing survey, academic libraries responded indicating need for professionals in reference and technical services, systems, outreach, serials, grant writing, cataloging, and library administration.

Responses of Current Partners

Louisiana's libraries continue to experience staffing shortages in its professional ranks as a result of damages to property, displaced staff, reduced populations, and smaller budgets. According to Director Shatiqua Mosby-Wilson, the library was one of eleven buildings severely impacted by the storm when Hurricane Katrina caused massive devastation to the Southern University at New Orleans campus. As a result of the storm damage, 100% of the library's physical collection had to be discarded and a temporary library was later constructed in a FEMA trailer. Currently, the library currently operates out of three trailers with less than 50% of pre-Katrina staffing. "This is a difficult task," she said, "but we strive to deliver the best possible services to our users"

(Mosby-Wilson, pers. comm. 2010).

Project Recovery is helping Southern University at New Orleans (SUNO) as it builds a new library. It is not only building a new facility, the staff is looking at nontraditional methods of delivery of library services to the university. Mosby-Wilson said in an e-mail to the project director, "Participation in the project also allows me the opportunity to network with other libraries impacted by the storm. Together we can discuss our successes and trials. Together we can recover and provide for a new concept of librarianship that may not exist in other communities." The partnership provides an opportunity for school, public and academic librarians to work together, and this benefits "the greater educational, recreational and research needs" of all of south Louisiana. SUNO has both hosted Project Recovery scholars and provided employment for one of the first Project Recovery graduates.

Pam Edwards at Calcasieu Parish Public Library is also enthusiastic about the potential influence of Project Recovery graduates on her staff. Staffing levels were down after Hurricane Rita, she said in a March 2010 e-mail. "Rita and Katrina made us look at our staffing 'infrastructure.' We did some restructuring to address catastrophic events and any economic downturns. We had a few staff not come back after the storm and they were replaced." However, she said, the parish's "biggest loss is professional staff because of better job opportunities, retirement, and relocation to other areas. It is very difficult to replace them. People with MLIS and other degrees are finding better salaries elsewhere."

Edwards continued to say that her library system is "grateful and very proud that out of the six (6) *Project Recovery* scholars from Calcasieu Parish, three (3) are on staff at CPPL. We have never had more than 9-10 MLIS on staff; and mostly it was less. We currently have 9 (6.67 FTE) MLIS, but even more importantly we have eight in library school. This could almost

double our professional librarian number very soon.” An additional concern about her current staff is that “only one of the 6.67 FTE MLIS is under 50 years in age.”

General Overview of Project Recovery

The goal of Project Recovery is to recruit, educate, and enable thirty students in library and information science to work in academic, public, and school libraries in those communities continuing to experience staffing shortages as a result of Hurricanes Katrina and Rita. The grant period is July 1, 2009 to June 30, 2012. IMLS has granted \$763,091 to the program, and LSU has contributed matching funds of \$384,929.

Project Recovery staff has consisted of Dr. Alma Dawson, Project Director and Principal Investigator, who also provides specific expertise in academic libraries; Dr. Margie Thomas, Co-Investigator, whose focus is on school libraries, and replaced by Dr. Beth Paskoff when she retired; Dr. Robert Ward, Co-Investigator and public libraries specialist, replaced by Dr. Suzanne Stauffer when he unexpectedly passed away in February 2011; and Carol Hagy, Grants Administrator, who served a one-year appointment.

Project Recovery is comprised of three components. The first component was a public relations campaign for the recruitment and enrollment of a cohort of thirty students and for the selection and training of mentors who assist students at distance education sites and sit on an advisory board to the grant. In the second component, students complete degrees and find successful placement in school, public and academic libraries in those areas impacted by the hurricanes of 2005. This component includes establishment of service and follow-up with graduates on two-year service contracts. The third component focuses on professional development and advocacy training, which includes paid memberships in the Louisiana Library Association and the American Library Association, and participation in state and national

conferences.

Partners and Supporters

Project Recovery has a long list of Partners: Algiers Recovery School District, Calcasieu Parish Public Library, Jefferson Parish Public School System, New Orleans Public Library, New Orleans Recovery School District, Southern University at New Orleans, State Library of Louisiana, and Terrebonne Parish Public Library. Supporters include the Jefferson Parish Library System, the Jefferson Parish Public School System, and the Diversity Interest Group of the Louisiana Library Association.

LSU SLIS has worked with representatives from Partner Libraries from the beginning. Partners were certainly interested in addressing the staffing needs in their libraries, and many had staff members who would be excellent candidates for the scholar positions. Partners participated in recruitment. Most partners agreed to provide flexible scheduling for staff taking classes and to mentor staff involved in coursework.

Partners agreed to assess projects that still needed to be resolved from the hurricane damage and provide them as opportunities for field experiences or internships for students. Some partners actually plan to hire students upon receipt of the MLIS degree although public library boards normally do not allow such agreements. The State Library of Louisiana, as an oversight body for public libraries, agreed to assist with library advocacy training and help conduct interview and job search training for all Project Recovery students.

Representatives from the Partner Libraries joined with the Project Recovery Team to become the Project Recovery Advisory Board, which meets quarterly, sometimes in person in Baton Rouge and sometimes over the compressed video system used for distance education. At

these meetings, members are updated on student progress, plan upcoming activities, identify projects related to Katrina and Rita, discuss internship possibilities for students, and share information regarding the supervision and evaluation of scholars.

Support for Students

Grant funds support students by paying the tuition and fees for all thirty. The ten full-time students receive \$12,000 stipends for living expenses. Part-time students received \$100 a month for the first year to help them pay for books and other school-related necessities. All students receive paid memberships in the Louisiana Library Association (LLA) and the American Library Association (ALA). Their travel to the LLA Conference each March is paid for, and the grant funds a trip to the national conference of their choice. For example, they may attend the ALA Conference, the Association for College and Research Libraries National Conference, the Public Library Association National Conference, the American Association of School Librarians National Conference and Exhibition, or the YALSA Young Adult Literature Symposium.

Project Recovery is providing scholars with a strong academic program, collaboration and mentorship with professionals within partner organizations, and opportunities for experiential learning through volunteer hours and field experiences. Scholars are receiving advocacy and leadership training, and chances to develop their workforce skills through special activities and workshops.

Project Recovery Scholars

The first cohort of twenty-five students was selected in late 2009 and began classes in January 2010. The Project Recovery team chose twenty part-time and five full-time Louisiana residents from among fifty-four applicants. This Project Recovery cohort had an incoming

average GPA of 3.52. All met or exceeded the requirements of the LSU Graduate School. They were from nine parishes. Half (twelve) were employed in public or academic libraries and five were employees of a school system. The diversity of the cohort reflected the diversity of the applicant pool—68% identified as white, and 32% identified as minority.

The second cohort of five full-time out-of-state students began the program in August 2010. They came from Arkansas, California, Massachusetts, Virginia, Washington DC, and Washington State. This cohort had an average incoming GPA of 3.73 and all met or exceeded the requirements of the LSU Graduate School. Two students described themselves as African American, and one identified as Hispanic.

Over the course of the program, a handful of scholars have been lost due to illness, relocation, and other personal circumstances. When necessary, replacement scholars have been found.

Service Agreement

In exchange for the funding of their MLIS degree, Project Recovery Scholars completed a service expectations agreement prior to admission. All promised to work for two years post-graduation in a Southern Louisiana library that was impacted by Hurricane Katrina or Rita. While in school, students also volunteer to help in these libraries. Part-time students were required to work one-time service project assignments during their first semester. Full-time students volunteer for ten hours per week projects in partner libraries their entire two years. In addition, all students can do optional 120-hour field experiences for course credit.

Partner and supporter libraries help place students in projects that complement their existing experience and abilities. Project Recovery students have volunteered in a wide range of

situations in academic, public, and school libraries. Their placements have included youth services, programming, university archives, public services, technical services, and event coordinating.

Public Relations Campaign and Recruitment

Project Recovery began with a series of press releases announcing the receipt of the grant and the need for applicants. Press releases were posted to local and national listservs. The Associate State Librarian for Louisiana, Dorothy White, sent one out to libraries throughout Louisiana. Small towns published the news in their local newspapers, and librarians shared it wherever they could. These brought invitations for the Project Director to appear on the Mitch Lewis Radio Program (from Arizona and broadcast throughout the Southwest) and on the local television show *Around Town*, broadcast throughout Louisiana.

The Project Recovery team created a brochure for easy distribution of information and set up a website (<http://slis.lsu.edu/projectrecovery>). The website was an essential resource for general information, application procedures, and forms. As the program has progressed, photos of staff, partners, events, and students have been added, as well as reports on events, conferences, and other resources for students, partners, and the interested public. By the beginning of December 2009, the site had already attracted 1025 unique visitors, 900 of which had come more than once.

News traveled quickly and the Project Recovery team received inquiring phone calls daily, about three or four per investigator. Project Recovery was featured in the “People” section of *Louisiana Libraries* (Pope 2009). SLIS staff made announcements and presentations at professional meetings.

The Project Recovery team traveled to hurricane-impacted areas to spread the word and meet with interested parties. Co-investigator Ward held information sessions in public libraries in Houma, Lake Charles, and New Orleans. The Project Director visited academic libraries in New Orleans, and she hosted an information session at LSU after a Diversity Interest Group program, which brought students and area librarians who would eventually serve as mentors to scholars. Co-investigator Thomas met with school librarians in New Orleans and in Lafourche Parish. Each session had ten to thirty attendees, with about half taking an information packet. The packets included the standard SLIS information and application as well as a cover letter from the Project Director, a brochure, the financial aid application, the service expectations, and the student placement document.

Continued Publicity

Even after the application period was over and all of the students had been recruited, the Project Recovery team continued to distribute information about the achievements of the Project Recovery Program. The Project Recovery Fact Sheet and the website are kept up to date as new events occur.

Publicity was also a part of the Louisiana Library Association Conference program that the students planned and presented in March 2011. Their “SLIS at Work in South Louisiana” spread awareness of the volunteer projects the scholars have been doing and the staffing shortages their education will allow them mitigate.

On June 22, 2011, Dr. Dawson provided a presentation on the Project Recovery initiative to the representatives of twenty-two nations through the Foreign Service National Education Program (FNEP) at the request of the New Orleans Citizen Diplomacy Council.

Progress Report

The first full-time students graduated at the end of summer 2011, and the second cohort of full-time students will graduate in May 2012. Part-time students will graduate in August 2012. All students have volunteered service hours, attended and participated in at least one conference, and completed advocacy, leadership, and workforce skills training.

Academic Progress

At the end of the third term, first-cohort Project Recovery scholars had earned an average GPA of 3.74. Four scholars maintained a 4.0. The average GPA for all thirty-four students who began the MLIS program in January 2010 was 3.64. By the end of their fourth term, spring 2011, the first cohort had earned an average GPA of 3.65. The second cohort of out-of-state full-time students had earned an average of 3.75 at the end of their first term. By the end of their second term, the second cohort had earned 3.60. They are consistently out-performing other students who entered the program at the same time.

All Project Recovery Scholars have been accommodated in the academic program and in the distance education schedule. More online courses are now being offered, which has helped scholars plan classes more efficiently. The Project Director checks schedules at the end of each semester before each registration and continues to request updates on Career Plans for purposes of keeping scholars on track for graduation. Each scholar has an academic advisor on the SLIS faculty.

Experiential Learning: Full Time Service Projects

Scholar volunteer projects are monitored closely. Supervisors provide semester work plans and students are held to specific schedules. Volunteers sign in as other employees do. They

keep journals documenting their activities and recording their reactions and observations. These journals are turned in three times a semester. At the end of each semester, students generally rotate to a new assignment so they are able to gain experience in a variety of libraries and tasks.

Libraries have been encouraged to find projects for their volunteers that directly relate to the hurricane damage of 2005. Melony LeMay was a tremendous help in southwest Louisiana. In Calcasieu Parish, she worked at McNeese State University. There, in addition to substituting at the reference desk, weeding periodicals and microfiche, and assisting with other tasks in the government documents department, she organized and cleaned out a map collection neglected since Hurricane Rita damaged that area of the library. She disposed of maps covered in mold and disinfected their cabinets. When she returned the salvageable items to their places, she resorted and relabeled the entire collection.

Later, in Cameron Parish, Melony LeMay sorted through plastic tubs of files that public librarians had hastily filled when Hurricane Rita was headed towards the parish. She found places for everything the library still needed and ensured that the files would be findable. But her biggest project was collecting oral histories of the area residents. She planned carefully how to publicize, collect, evaluate, and preserve these stories before she began. She worked 107 hours and traveled almost 1000 miles to record local residents and hear them talk about Hurricanes Audrey, Rita, and Ike. It was a very emotional project, but she captured some valuable footage and met musicians, politicians, and genealogists who were thrilled to have their history documented. It was definitely more than the sixty hours required for her summer project, but she was totally dedicated to completing the Cameron project and received an excellent evaluation from her supervisor, Bobbie Morgan.

In Calcasieu Parish, Laura Manuel had a variety of projects and was a great help

everywhere she volunteered. She assisted at a small branch library one semester. She shelved books, worked in circulation and reference, assisted with children's programming, and taught the staff sign language so they could communicate with deaf patrons. In the summer, she moved to a larger library to help with teen programming and the children's summer reading program.

The next semester, Laura Manual was at the Calcasieu Public School Board Library Services Office, where she worked with the library consultant on various projects. She designed a brochure and helped create recommended book lists for a new program for students with emotional problems. Then she moved back to the public library to the Collections and Computing Services Division. She helped librarians there with the classes they teach to other staff members and public patrons, eventually developing and teaching her own course on e-readers. Laura also gained experience in website maintenance, as she helped her supervisor monitor comments, delete spam, and check links on a monthly basis. She helped them set policies for their Facebook page, and she designed tutorials and quizzes for the continuing education of the system's library staff.

For her last term, Laura Manual moved to the McNeese State University Library's Technical Services Department. She helped the Acquisitions Librarian update their collection development policy. Smaller projects for her included creating and editing online tutorials, subject guides, and finding aids. Laura has graduated with a rich and diverse body of experience, and she has already been a significant benefit to the libraries of her area.

Experiential Learning: Part-Time Service Projects

All part-time Project Recovery Scholars spent ten hours working in a partner library their first semester. The types of work each did varied widely depending on the library's needs.

Angelique Carson, in Orleans Parish, received incoming books, began the cataloging process for

a collection, and located books patrons had requested for faster processing. Lacey Deroche spent her time in a one-person library in Vermillion Parish. She relabeled the books in the Louisiana section, weeded nonfiction, and assisted with daily procedures. In Terrebonne Parish, Lynette Fazio worked in a library's circulation, children's, and reference departments.

Christy Duhon assisted with a local arts and humanities program's events hosted by the public library in Calcasieu Parish. Lynette Hunter, in Orleans Parish, documented the contents of individual photographs of steamboats for a database. Not only have these students benefited from the placements, but the libraries have as well. Their work has eased staffing shortages and enabled libraries to complete small projects that they could not otherwise find staff time or energy for and thus have impacted the libraries.

Professional Development

In March 2010, twenty-one scholars attended the Louisiana Library Association (LLA) Annual Conference in Baton Rouge. They introduced themselves in a session containing an overview of the program and testimonials from partner library personnel. This was the first conference experience for almost all of them, so they received information on how to approach attendance at a large conference.

This year's LLA Conference in Lafayette, Louisiana, provided a unique opportunity for students to see how a conference program is planned, scheduled, timed, and how a professional presentation is delivered. The Project Director worked with the scholars to plan and present their own presentation, "SLIS at Work in South Louisiana." It included a description of Project Recovery, examples of their own volunteer work (with photographs), and updates on staffing. It involved all of the students and was well-attended and successful.

Eight students traveled to the annual American Library Association Conference in Washington, DC, in June 2010. They wrote reports on their activities and impressions there. They shared these in person at meetings later in the summer so that their peers could benefit from their insights and observations. They were predictably overwhelmed, but very enthusiastic about the experience. Student Deborah LeBeau wrote that it gave her “a sense of belonging to a wonderful profession and a sense of renewal.” The reports were also posted on the website for other scholars or interested parties to read.

In addition to receiving funding for conference experiences, scholars have benefited from special professional development events Project Recovery staff and partners have put together. Between the end of the fall 2010 semester and the beginning of the spring 2011 semester, students were asked to complete an online Library Advocacy Training session on the Project Recovery website (developed and graded by Dr. Robert Ward). Students followed the instructions, including reading and viewing materials online, then completed a short certification exam.

On June 11, 2011, the State Library of Louisiana led a “Get Hired” Workshop for Project Recovery Scholars. The session was engaging, interactive, and informative. Topics included how to locate available jobs, write polished resumes and cover letters, and how to prepare for an interview both as a candidate and as an employer. Students were asked to come in interview dress and to bring a job advertisement with a resume and cover letter tailored for that position. The team provided sample resources for practice sessions. These included booklets, sample resumes, exercises and other resources the students could take home with them for future use. In a five-question follow-up survey, the students praised the workshop, saying that they learned a lot about resumes, enjoyed the practice interviewing, and appreciated the general humor and

practicality of the day.

Assessment

The LLA Diversity Interest Group hosted a Project Recovery Scholar meeting at Xavier University in New Orleans on July 31, 2010, which culminated the first year of their program. Those who could not attend participated in a compressed video meeting a week later. At this meeting, scholars were asked to write down their reflections on the Project Recovery experience so far, and to offer any suggestions on how to improve the remainder of the program.

Students thanked Project Recovery for such benefits as the opportunities for mentoring and conference attendance. In Jennifer Martin's words, they are "impressed w/ the professional connections, networking, & partnerships the faculty & SLIS program enjoy & maintain—feel the connection to the discipline & the libraries in the trenches—will make the transition to career much easier with the opportunities I've had thus far to network, ask questions, and learn about professional opportunities in the state."

They agree that they feel like they have begun a career surrounded by support. Lynette Hunter simply stated, "I have been immersed in a new world with many networks."

Most students were reluctant to offer any criticism, saying they thought the program was great as is. Several, however, mentioned they would like to meet in person more often. As distance students, they feel they do not have as much opportunity to socialize as they would like. Since then, they have been brought together more often. All during the spring 2011 semester Project Recovery Scholars met to plan the LLA program. A new mentor was also provided for the New Orleans group. Calcasieu mentors provided informal luncheons for the scholars in that area.

One student suggested that Project Recovery Scholars continue to meet after graduation and hoped that SLIS or Project Recovery would organize some continuing education activities for them. Some additional activities are being planned (including writing an article where all presentations will appear in the *Louisiana Libraries*) that will call for continued involvement. The Project Recovery team will provide an additional leadership development workshop to include both graduates and current scholars in spring of 2012.

The main theme of the evaluations was the value of interacting with others in the field. As Adele Marrs explained, “For me, inspiring this sense of gaining knowledge through collaboration is essential.”

Conclusion

The Federal Emergency Management Agency (FEMA) recently established new regulations in Section 403 of the Stafford Act which declare the library an essential community service, adding it to the company of police, fire protection, emergency services, medical care, education, and utilities (FEMA 2010b). This definition and support will help libraries keep serving the public in the wake of future disasters.

Many in south Louisiana already know the value of libraries in the aftermath of a hurricane, but they also know how destabilizing and disrupting of library services and staff hurricanes can be. Years later, area libraries are still feeling the financial and infrastructural burdens of Katrina and Rita. Project Recovery, through its education of future librarians committed to serving Louisianans, and through the volunteer work its scholars have already provided, is making a difference.

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Mapping disasters through the lens of library and archival resources: A Caribbean perspective

John A. Aarons

Abstract

Some disasters, especially those involving natural hazards, follow a pattern according to the geographical environment and physical structure of the particular area of occurrence. These can be traced and hence the importance of preserving records so that specific events can be tracked and analysed over time, with the resulting information used to assist in modern disaster mitigation. This paper discusses the value of archival records in providing information on past disasters in the Caribbean region. In doing this, it presents examples of historic accounts of some of these disasters in the collections of the National Library of Jamaica, the Jamaica Archives and the Library of the University of the West Indies, Mona. The objective is to see how earth scientists, among others, have used this information to assist in establishing the frequency of these events and their effects on human settlements. Their research work is not simply academic but a practical application of how the records of past events can assist modern planners in identifying potential risks faced by communities today.

Introduction

Research libraries and archives make an important contribution to disaster mitigation because the information in their collections on past disasters is critical to an understanding of the occurrences and consequences of these events. This research is not only of academic interest but has practical value for two main reasons. The first is to try

and prevent a recurrence by providing the information necessary for informed decisions. For example, the Water Resources Authority in Jamaica (WRA) has prepared, based on historic accounts of past experiences, maps of the flood plains of several rivers in Jamaica indicating the extent and depth of past flooding events. These indicate the potential for future occurrences. This leads to the second reason, which is to try and mitigate the consequences if a disastrous event, similar to one which happened in the past, were to occur again. This is the rationale of the report by Ahmad and Mason (2007) assessing the damage an earthquake of the magnitude of that in 1907 would have on the Jamaican economy if it occurred today. An extensive use is made of archival information in tsunami inundation mapping worldwide.

Resource Identification and Mapping

Although dealing specifically with earthquakes, Vogt (2004) notes the difficulties in undertaking research relating to the region. He says that it should not be forgotten that “research often must be undertaken, in not always easily accessible depositories, archives and libraries in Europe and the United States” (p. 465). He notes that, in the West Indies, archival sources are not easily available for the 18th century although the situation improves for the 19th century. Newspapers are good sources of information but unfortunately many papers have either disappeared or are not easily available. However even when materials are available they have to be sifted carefully for prominence is not often given to these events. Sources of information are widely scattered and he notes that “surprising finds are possible here and there” (p.472).

There is an aspect of the Caribbean which does not appear on tourist promotional material and which the hospitality industry would prefer to gloss over. This is that the region is disaster-prone being subject to a number of natural hazards which could easily affect a holiday in “paradise”. These occurrences are mainly hurricanes, earthquakes, volcanic eruptions, floods and landslides. Tsunamis, now very much in the news, have been known to occur, especially after major earthquakes. All of these have been costly in human life and property. It has been said that “in the period 1722 – 1990 hurricanes have claimed some 42,626 lives and earthquakes have caused about 16,000 fatalities in 8 major events over the period 1691 – 1946.” (Tomblin,1992).

Caribbean territories, like others around the globe, have their fair share of hazardous events. The spectacular landscape of the island nations have been shaped by the very same forces of nature that often negatively impact its populace. It is important to realize that “Natural disasters are not just a consequence of natural hazards, but an avoidable economic and social catastrophe. Disaster strikes when societies are unable to recognize their responsibility for the proper management of the disaster risk” (Ahmad et. al 2006). Libraries and archives can therefore assist in this by making their rich historical resources available for study and analysis.

Although not generally recognized, landslides are the most common natural hazard in Jamaica. They are often overlooked as they frequently coincide with other events. A 1999 study on landslides in the Kingston area noted that in Jamaica “historical records are indispensable for expanding the temporal window on landslide phenomenon beyond the limited period for which specific data on landslides are available in the scientific literature.” It went on to make the point that the present work was incomplete as it

“includes only those events for which the available historic data is amenable for verification” (Ahmad, 1999 p. 12). Tomblin and Robson (1977) also refer to the importance of accounts produced at the time of the event as they said “we have attempted to assign intensity on the Modified Mercalli Scale to each reported earthquake basing our estimate whenever possible on detailed contemporary word descriptions of the damage which are quoted.”

In examining examples and case histories of disasters, one has to be cautious as they may not be factual and are occasionally inaccurate especially in extent and scope. Apart from the accuracy of the person recording the occurrence, much depends on the location from which the report was made. As rural areas tended to be sparsely populated, the existence or strength of earthquakes in those areas may have been either unreported or underreported hence urban biased. There were also no established standards for measuring the intensity of an earthquake until the science of seismology developed in the late 19th century.

As there were no meteorological instruments, the occurrence of a hurricane or storm could only be proven by the damage done. Referring to cyclones, Reading and Walsh (1995) noted that “written records available for the period prior to 1871 are subjective and depend upon the observer’s perception and interpretation of weather conditions.”

They note nevertheless that there is a relatively comprehensive record of cyclones dating back several centuries and that such “comprehensive historical data are not available for any other cyclone region.” They therefore attempted to “map” these cyclone tracks over a long period in an attempt to derive a better understanding of wind and ocean circulation as these related to hurricanes.

Dates also present a challenge. In accounts up to the middle of the 18th century there is uncertainty regarding dates of events as it was not until 1752 that Great Britain and the colonies adopted the Gregorian over the Julian calendar. This means that when sources of information, originating in different countries are consulted, one had to be sure which calendar is being used at the particular time as there was a variation of several days between the two calendars.

Millas (1968) in discussing his attempt to “map” hurricanes in the Caribbean from 1494 until 1800, or as he expressed it, “clarifying all that is possible in this obscure period of the historical part of tropical meteorology” makes a statement which captures well the challenges faced by these compilers of information. He said “one tries to be sure of each case analysed by searching for, acquiring and presenting the best historical documents to guarantee the authenticity of each case and therefore its physical reality.” To prove his own point he said that he examined 308 cases of reported hurricanes from November 1492 up to November 1880 and of these 45 “were not considered sufficiently well documented or proved to insert in the final list.” Before conferring ‘hurricane status’ on a particular cyclone, he examined accounts from several sources to determine whether the occurrence met the criteria for a hurricane.

Nevertheless, in spite of the limitations, scientists and others have used the records of these events to build up a corps of data on the natural hazards which have affected the region since the 16th century. Some of these early compilations have to be examined carefully. A case in point is the list by Hall (1916) of hurricanes and earthquakes which affected Jamaica from 1504 to 1915. In reference to Hall’s work, Shepherd (1971) says

“his seismological knowledge was somewhat limited.. . since seismology was in its infancy at the time his investigations began” and this affected his intensity scale.

Nevertheless it is the earliest compilation relating specifically to Jamaica and some of his descriptions from 1880 were eyewitness accounts. He therefore laid the basis for further studies such as the catalogue by Tomblin and Robson (1977) which is the primary resource for historic seismicity as it lists 357 earthquakes and over 1000 intensity reports for the period covered. O’Loughlin and Lander’s work on tsunamis (2004) is an example of the compilation of the history of tsunami occurrences in the Caribbean based on archival research.

Modern day researchers bring to their tasks new insights into disasters and now they are assisted by the latest in digital technology. With the use of sophisticated equipment such as Global Positioning Systems (GPS) and satellite imagery they can produce instant computer models of various scenarios which can be analysed. The result of this is that the vulnerability of specific areas to disasters, based on past experiences, can be highlighted and predictions made where similar events could occur in the future. Parris Lyew-Ayee Jr. and Rafi Ahmad of the University of the West Indies have used this approach in preparing a natural hazards atlas of Jamaica.

Sources of Information

First-hand accounts of events are usually contained in letters and reports by government officials, newspaper articles, church records, ship logs, works by travellers, as well as diaries and letters kept by individuals scattered in libraries and archives in North America, Europe and in the region. At times some of the reports by government officials

are printed, for example the British Parliamentary Papers. Referring to earthquakes Vogt says that “the most informative and precise travellers are often ship’s captains describing shocks felt either in some West Indian harbour or at sea, bringing news to European or North American harbours.”

Accounts by Officials

Some of the most detailed accounts of disasters are found in the reports submitted by government and naval officials to their home offices. However as these accounts are based on reports received, they could also be initial accounts and therefore exaggerated or incorrect in details.

In 1771 Port Royal, Jamaica suffered a severe earthquake when Admiral Lord Rodney was in command of the fleet stationed there. In a letter to Philip Stephens dated 19th September 1771 he said “Since my letter of the 4th instant, giving their Lordships an account of the violent earthquake which happened the day before, which has been attended with frequent shocks till within these few days, and in the opinion of the inhabitants, done more damage than any since the great one in 1692, particularly in the towns of Port Royal and Kingston in the former of which there is not a single house that has not been damaged....there have been nine shocks since the first but as each has appeared weaker I hope we shall experience no more of them...”

. It says:

“My Lord, I am sorry to be under the disagreeable necessity of informing Your Lordship of one of the most dreadful calamities that has happened to this Colony within the memory of the oldest inhabitants.

On the morning of the 2 inst. the weather being very close, the sky on a sudden became very much overcast and an uncommon elevation of the sea immediately followed. While the unhappy settlers at Savanna-la-Mar were observing this extraordinary phenomenon, the sea broke suddenly in upon the town, and on its retreat swept everything away with it so as not to leave the smallest vestige of man, beast or house behind. This most dreadful catastrophe was succeeded by the most terrible hurricane that ever was felt in this country with repeated shocks of an earthquake which has almost totally demolished every building in the parishes of Westmoreland, Hanover, part of St James and some parts of St Elizabeth and killed members of the white inhabitants as well as of the negroes.

The wretched inhabitants are in a truly pitiable situation - not a house standing to shelter them from the inclemency of the weather, not cloaths to cover them, everything being lost in the general wreck – and what is still more dreadful, famine staring them full in the face”.

Some later writers have tended to downplay the magnitude of this event particularly the extent of the storm surge. However, within the past decade, researchers from the Unit for Disaster Studies ((Ahmad, Rafi, 1998 and the Marine Geology Unit at the University of the West Indies have argued for tsunami research and Robinson et. al (2005) found strong evidence of two or three submarine landslides off the coast near Savanna-la-mar in about 300 meters of water.

The significance of this is that tsunamis can result from submarine land slippage.

Research in dating the age of the landslide would help determine whether the landslide was a contributing cause of the disaster 230 years ago and provide answers about its triggering mechanisms. More importantly, it would provide information on the state of

the undersea terrain and the vulnerability of the area to a similar event in the future.

Given current human settlements and economic infrastructure, a recurrence would have such devastating consequences to that part of the island that the 1780 event would pale in comparison.

Accounts by Residents and Travellers contained in letters, diaries and books

From the earliest day of European conquest and settlement of the Americas, there have been accounts of disasters in the writings of persons living or visiting the colonial possessions of the European powers. Some persons recorded their experiences in letters sent to family or friends in the metropolitan country and some of them ended up in publications. What these letters have in common is that they are very personal accounts and written at times with compassion and feeling. The region attracted many travellers who recounted their stories in books and other publications.

One of the earliest of these writers was Bartolomé de las Casas, the 16th-century Spanish historian, social reformer and Dominican friar. Some of the early accounts of hurricanes in the region are by him and contained in his many writings. One of the most interesting of these is his account of a hurricane on July 11 and 12, 1502 what Millas describes as the “first great sea disaster that occurred in the New World”. He says “there came such a rare tempest and so violent, that in many years men sailing on the seas of Spain and in other seas had not seen one equal or so sorrowful. Twenty ships perished with the storm, without any man, small or great, escaping and neither dead nor alive could be found.

And in the city (San Domingo) on the other bank of the river, as the houses were of wood and straw, all came down to the ground ...it seemed as if all the army demons had escaped from Hades.”

This hurricane occurred during Columbus' fourth and last voyage of discovery.

Sir Hans Sloane, the British physician and botanist, whose collection of natural history specimens later became the nucleus of the British Museum lived in Jamaica from 1687 – 1688 and recorded details of the first documented earthquake in the country's history which occurred in February 1687. He says

“On Sunday at eight in the morning, an earthquake was felt throughout Jamaica. Some houses were severely cracked and others had tiles stripped off their roofs. Few houses escaped some injury’ He spoke about earthquakes in general and said that “they are too frequent in Hispaniola where they have formerly thrown down the town of Santo Domingo so they are too common here also; the inhabitants expect one every year and some of them think they follow their great rains.”

The Port Royal earthquake of June 07, 1692 is one of the most famous natural events in Caribbean history, not only because of the nature and magnitude of the event, but also because of the association of Port Royal with buccaneers who gave the town the dubious distinction of being called the ‘Wickedest City in the World’. There are many eye witness accounts of this disaster which have been closely studied by scientists as they try to understand what happened.

One of the most gripping of these accounts is contained in two letters written aboard a ship in Port Royal harbour, by the Anglican Rector at Port Royal, Rev. Edmund Heath. The Rector in the first letter dated 22 June, 1692 says that while he was “having a glass

of wormwood wine with the president of the Council ” he found “the ground rowling and moving under my feet. ” He went on to say that “I saw the Earth open and swallow up a multitude of people and the sea mounting-in upon us over the Fortifications.” In the second letter written six days later he says that “ever since that fatal day, the most terrible that ever I saw in my life, I have lived on board a ship: for the shaking of the earth returns every now and then. Yesterday we had a very great one, but it seems less terrible on shipboard than on Shoar.” He gives vivid accounts of his work in comforting the survivors and seeing to the burial of the dead.

Of particular value to earth scientists are contemporary accounts of sea and land movements as from these accounts they can reconstruct the events and the likelihood of them recurring again. During the 1692 earthquake, Sloane said that “at Liguanea all the houses were destroyed, and in the vicinity water was ejected from wells up to 40 feet deep. At Liguanea and at Yallhouse (Yallahs) the sea withdrew several hundred yards and then returned to flood the shore.” Both Lander (1997) and Wiggins-Grandison (2005) refer to these events in their articles on tsumanis.

Sloane made another invaluable contribution to the understanding of land movements occasioned by that earthquake when he said “As to the mountains in Leguacee, they fell in several places, and in some very steep; but the steepest mountain that we heard fall was that at Gallowes, which occasioned much damage.” It is of interest to note that modern maps prepared by the Geological Survey of Jamaica show landslips in the same area identified by Sloane over 300 years ago. Of concern is the fact that today, upper-income

housing is increasingly taking place in this area in spite of warnings by geologists (Ahmad, 1999).

Hurricanes were so fearsome and occurred with such regularity that there are many eyewitness accounts of them. Detailed accounts of them are important in that they help to build up a body of information on the paths they follow, their strength etc. One of the most comprehensive accounts of not one but three hurricanes is contained in a letter “from a gentleman in Dominica to his correspondent in London” dated September 1, 1787. The hurricanes struck the island on August 3, 23 and 29. Referring to the last hurricane the writer says “and to complete the ruin of this island, it was attacked a third time on the 29th at four o’clock in the morning much severer in this quarter than the former, destroying and carrying away everything before it... all the barracks and buildings and Morne Bruce entirely blown away and destroyed”

Maps and Plans

As noted earlier, landslides are frequent occurrences in Jamaica. Historical maps play an important role in understanding early landslides. An example is an 1827 map by De La Beche showing landslides and land forms in the St Andrew and Port Royal mountains.

Historic maps and plans have also been useful in mapping flood prone areas

Newspaper Accounts

Although newspapers in the English speaking Caribbean date from the 18th century it was not until around 1812 that they became more widespread in the region. These newspapers are excellent sources of primary information on disasters. After 1880 the

reports become more comprehensive. As Tomblin and Robson noted, “newspapers quoted verbatim reports published in newspapers of neighbouring islands and excellent accounts of quite minor earthquakes are available.” Therefore the Barbados Mercury and Bridgetown Gazette of January 12, 1813 reported on the hurricane in Jamaica in 1812. The report said that “Almost every house was injured. All the New Barracks and the inside wall of the Kingston Church were destroyed. Several people killed.”

The Jamaica Morning Journal reported on an earthquake in Santiago de Cuba on 26 November 1852. The account said that “no houses remained undamaged and many rendered useless. A very heavy table was moved 2 yards”. The 1907 earthquake in Jamaica is covered by numerous accounts in newspapers of the period. These accounts have been used by Ahmad (2005) among others in their reconstruction of the event to determine areas of risk. Of particular value are newspaper reports from local correspondents of wave actions on the north coast of the island, such as at Annotto Bay and Buff Bay. These have been used by Lander (1997) and O’Loughlin and Lander (2005) and others in their ‘mapping’ of tsunamis-like events in the region.

Conclusion

For purposes of mitigation, the value of historical accounts of disasters in the Caribbean region can be ultimately assessed by their application to current situations. It is clear that earth scientists have used historical records (some examples of which have been given in this paper) to derive a better understanding of present day hazard management. The fact that many of their reports and studies have been sponsored by national governments, the regional university and international agencies, demonstrate the shared concern regarding

the vulnerability of the region. The University of the West Indies through its Seismic Research Centre (<http://www.uwiseismic.com>), the Unit for Disaster Studies in the Department of Geography and Geology (<http://www.mona.uwi.edu/uds/index.html>), the Earthquake Unit (<http://www.mona.uwi.edu/earthquake>), and Mona GeoInformatics Institute (<http://www.monagis.com>) has played a significant role in research in this area as testified by the output of staff members. The Virtual Disaster Library at Mona (http://mona.uwi.edu/cardin/virtual_library/searchlibrary.asp) promotes importance of archival information and its use in the management of natural hazards and reducing associated vulnerabilities.

There is now an urgent need not only for continued research into past disasters and the dissemination of these findings, but the incorporation of this information into the decision making process as it relates to disaster reduction programmes. As the Caribbean Community Regional Programme Framework 2005-2015 states, the countries of the region recognizes, "the inextricable link between poverty and disasters and accepts that poverty alleviation and sustainable development cannot gain traction without a strengthened commitment to disaster reduction at the regional, national, community and individual levels in each member country".

It is clear that where historical disaster records are concerned, no detail is too small or apparently insignificant, as each may provide some insight to past events. It is the reconstruction and extrapolation process which has led researchers to new vistas of sustainable development, land use potential and priority response mechanisms.

NOTES

¹ Godfrey Mundy, *The life and correspondence of the late Admiral Lord Nelson*, 1830, p 115

¹ Jamaica Archives ref. 1B/5/18

¹ Bartolome de las Casas, "Historia de las Indias" in *Biblioteca de autores espanoles* vol 95 – 96, Madrid, 1957

¹ Hans Sloane, "A letter from Hans Sloane MD with several accounts of the earthquake in Peru, Oct 20, 1687 and at Jamaica, Feb 19, 1687-8 and Jun 1692" in *Philosophical Transactions*, vol. 18 78 – 100

¹ Edmund Heath, 'A full account of the late dreadful earthquake at Port Royal in Jamaica written in two letters from the minister in that place from aboard the Grenada in Port Royal Harbour, June 22 1692'

¹ Sloane. Ibid.

¹ Sloane, ibid.

¹ "A short account of the hurricane that pass'd thru the English Leeward Caribbean Islands on Saturday the 30th June 1733 with remarks in a letter from an Inhabitant of His Majesty's Island of Nevis to a Gentleman in London, 1733" (reproduced in Millas)

¹ Judith Tomblin & Geoffrey Robson, *A catalogue of felt earthquakes for Jamaica, with references to other islands in the Greater Antilles, 1564-1971*, Kington, Ministry of Mining and Natural Resources,

Ibid

xi Lander,(1997) for instance, notes that although the history of the Caribbean is the longest in the Western Hemisphere, the tsunami history has not been studied in detail. He says that the "varied colonial past and the number of political divisions make such a study difficult and needing local involvement". He states that "reports of 50 tsunamis of varying certainty are listed for the Caribbean beginning with an event off the coast of Venezuela in 1530. Fifteen of these have reports of damage associated with them and six have reported fatalities." Wiggins-Grandison (2005) has said that "A news release from the Seismic Research Unit states that there have been only 10 earthquake-generated tsunamis in the Caribbean over the past 500 years and these killed a total of about 350 people." She notes however that the "history of tsunamis in the Caribbean by Lander et.al tells of two certain events occurring in Jamaica over the past 300 years."

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The Role of Digital Libraries in Disaster Preparedness and Mitigation

Laurie Taylor and Brooke Wooldridge

Introduction

The role of digital libraries in disaster preparedness and mitigation is multifaceted. In order to properly address the topic, we are using the term “digital library” inclusively as the term to refer the structures that support digital access and preservation: digital archives, digital repositories, and related technologies and tools for digital preservation. Preservation is similarly defined in an inclusive manner, with a consideration of the overall digital supports for preservation and with preservation understood as the assurance that materials will continue to exist in something close to its original form. With this broad view of the technologies supporting preservation and preservation itself, we approach preservation from a long-term perspective where preservation is a process within the ongoing lifecycle of information and artifacts, and not as an endpoint. In order to address the role of digital libraries in disaster preparedness and mitigation, we also want to emphasize that the role is both technical and social or communal. Digital libraries, like their non-digital counterparts, utilize technology for specific purposes. The purpose for the technology defines libraries, and not the technology itself. For digital libraries, technology serves to support access and preservation as well as the communities for the digital libraries. In this paper, we review how access to library collections informs digital library technical operations. We then turn to focus on the communities surrounding digital libraries which serve as the most critical supports for disaster

preparedness and mitigation. This critical support is explained in context with several examples:

- digital library communities working to provide reference resources to assist first responders after a disaster;
- digital library communities utilizing other library communities to restore materials lost in disasters;
- new digital library communities developing in response to a disaster for disaster mitigation; and,
- new communities emerging in relation to their work on particular materials, that then seek out and connect to digital libraries in support of shared goals for disaster preparedness and mitigation.

These examples illustrate the many roles and importance of digital library communities in disaster preparedness and mitigation.

Technical Considerations

As the *Final Report of the Blue Ribbon Task Force on Sustainable Digital Preservation and Access* states, “Without preservation, there is no access.” The reverse is also true for digital libraries: without access, there is no preservation. The Committee For Film Preservation and Public Access before The National Film Preservation Board of the Library of Congress notes this in speaking about film preservation, stating: “Preservation without access is pointless.” For digital libraries, preservation concerns must also be access concerns because of the scale of the work involved in digital preservation.

The scale of this work creates many demands that can only be supported through supporting access. Clay Shirkey, in the *Library of Congress Archive Ingest and Handling Test (AIHT) Final Report*, explains:

Scale is a mysterious phenomenon - processes that work fine at one scale can fail at 10 times that size, and processes that successfully handle a 10-times scale can fail at 100 times. [...] Institutions offering tools and systems for digital preservation should be careful to explain the scale(s) at which their systems have been tested, and institutions implementing such systems should ideally test them at scales far above their intended daily operation [...] to have a sense of when scaling issues are likely to appear. (Page 26)

More simply stated, “Scale changes everything” (Owens; Page 28). Digital preservation work demands access to files as a necessary part of that testing and validation for scale. Access is thus an ever-present workflow requirement. Access is required to support digital preservation as an ongoing process for the lifecycle of digital information and materials. Even for a relatively small set of materials, the work to support digital preservation is a perpetual process within the information lifecycle.

The scale of the work is measured by the quantity of materials with an infinite timeline for digital preservation processing. Because of the ongoing timeline, the scale of the work continues to grow beyond the simple quantity of materials. The unending timeline for digital preservation work must be able to adapt to technological changes. For specific technologies as they relate to the overall preservation processes for the lifecycle, see Mark Sullivan’s “Digitization is Not Enough” (ACURIL 2011). In it, he similarly stresses that specific technical concerns are secondary and defined in support of digital preservation as an “active, constant process, exponentially multi-tiered, about ensuring continuing accessibility” and that it is still “relatively new and somewhat in its infancy.”

Digital libraries thus perform ongoing and changing work in order to support digital preservation. Because digital libraries must continually adapt to new technologies and conduct ongoing work to support digital preservation processes, digital libraries face challenges that require a community for support.

Digital Library Communities

Digital library communities support disaster preparedness, immediate response, and mitigation. The simplest and most obvious supports are the digitization of materials as part of disaster preparedness and the restoration of preserved materials after a disaster as part of disaster mitigation. Digital library communities follow other library communities in their support of disaster preparedness and mitigation by sharing copies of materials for preservation and access. Before digital libraries shared digital copies, libraries performed this work with print copies, microfilm, and other analog formats. Digital library communities provide many less obvious supports for disaster preparedness and mitigation through their communities.

Digital libraries follow and extend traditional library supports for disasters in the manner that they:

- provide reference services and resources to assist first responders after a disaster;
- utilize library communities to restore materials lost in disasters;
- support the development of new communities to respond to disasters for disaster mitigation; and,

- support new communities that emerge based on new needs in relation to their work on particular materials and that require library collaboration to support shared goals for disaster preparedness and mitigation.

In addition to ongoing preparatory work, through sharing, disseminating, and preserving copies of materials, the digital library community provides support for the full spectrum of needs related to preparedness and mitigation. This includes support immediately following disasters, serving as a resource for the community as a whole.

Digital Library Communities and Disaster Preparedness, Response, & Mitigation

Immediately after the January 2010 earthquake in Haiti, the Federal Emergency Management Agency (FEMA) contacted the University of Florida (UF) Libraries to request copies of topographical maps of Haiti not held elsewhere. FEMA needed access to the maps for their first responders to use in Haiti. The UF Libraries immediately provided the maps and offered to provide any possible additional assistance.

The UF Libraries' holdings included these maps in the physical and digital collections because the UF Libraries have traditionally been a preservation partner for institutions throughout the Caribbean. This role in the community emerged in part because of the UF Libraries' location, which is landlocked in the middle of Florida. The location affords a degree of protection from hurricanes and storms which are of greater concern when closer to the coast. The UF Libraries embraced the preservation role, preserving materials through local holdings in print, microfilm, and digital.

The highly engaged and collaborative community to which the UF Libraries belong created the Digital Library of the Caribbean (dLOC) to meet shared preservation and access needs. In dLOC, the UF Libraries serve as the technical partner supporting the computer servers, software applications, and technical needs for digital preservation to support the community. In addition to the UF Libraries, the Florida International University (FIU) Libraries serve as the administrative host, and dLOC has over 20 additional partners. The partners “work together to preserve and provide access to enhanced electronic access to cultural, historical, legal, governmental, and research materials in a common web space with a multilingual interface” (*dLOC Fact Sheet*).

In addition to serving first responders and immediate needs following a disaster, digital library communities can provide mitigation for prior disasters. For instance, the *Windward Islands’ Opinion* is a culturally and historically significant publication from St. Maarten. The archives of the *Windward Islands’ Opinion* were preserved in paper in the archives in St. Maarten. The print copies of the *Windward Islands’ Opinion* were lost to a fire in the publisher’s collection in St. Maarten. Fortunately, the existing library communities had ensured the *Windward Islands’ Opinion* was preserved through microfilm. The microfilming was conducted by the UF Libraries, with copies of the film held by both St. Maarten and the UF Libraries. While preserved, microfilm is a poor medium for local access and a very problematic medium for general access because of the need to physically use the film and because of the need to use a microfilm reader, which is specialized and not casually available equipment. Because of the historical significance of the *Windward Islands’ Opinion*, it was selected for digitization through dLOC’s Caribbean Newspaper Digital Library project. By digitizing this title, the digital

library community is mitigating the loss of the print materials and supporting the overall needs for preservation and access through free and open access online.

Once digitized, the *Windward Islands' Opinion* will be available online for anyone from anywhere using a computer with internet access. This free and easy access is necessary to provide full support for the materials. The materials themselves are preserved already on microfilm, but the difficulties with microfilm inhibit both preservation as an ongoing process and access. Further, the limited access hinders the preservation of contextual materials and information. In fact, OCLC's WorldCat lists the UF Libraries as the only holding institution for the *Windward Islands' Opinion* (WorldCat). Using a general web search for the *Windward Islands' Opinion* generates insufficient results in terms of quantity and quality of information given the significance of this title. The digital library community is currently digitizing this title to mitigate the prior disaster with the loss of the printed materials. The community is simultaneously working to mitigate the future disaster that would take place if the information and materials providing historical context for the title were to be lost. This loss could occur simply from the lack of recognition of their importance, which could occur as a result of a lack of access to the primary materials. Partners in dLOC have already noted that Wikipedia currently lacks a listing for the *Windward Islands' Opinion* and the community is making plans to create a Wikipedia entry once the materials are digitized to provide the prerequisite primary documentation.

After the 2010 earthquake in Haiti, the Law Library Microform Consortium (LLMC) called on its existing community to work together to provide disaster mitigation and generate new resources for future disaster preparedness. LLMC is a non-profit

cooperative of libraries that is dedicated to two core goals. The first is preserving legal titles and government documents, and the second is making the content accessible and searchable. LLMC began its work using microform and has since added digital technologies. In 2010, LLMC responded to the earthquake in Haiti by bringing together many partners to establish the *LLMC Haiti Legal Patrimony Project*. The *LLMC Haiti Legal Patrimony Project* combines the strengths of collections and resources in many law libraries around the world, locating, digitizing, and providing central access to these resources. All materials for the *LLMC Haiti Legal Patrimony Project* are available through LLMC (for subscribers with paid access) and all resources are also freely available through dLOC.

Previously, LLMC had undertaken many projects to digitize legal documents. In all of the prior projects, access was only available for paid subscribers to LLMC. With the *LLMC Haiti Legal Patrimony Project*, LLMC sought to go beyond their existing model to ensure free and full access for all in Haiti and working with Haiti following the disaster. This meant worldwide, free access was needed. As an institution, LLMC also had to support the costs for this project. In working with their community, participating libraries provided access to physical content for digitization, digitized files, and financial support. LLMC thus initiated a new project model which responded to a disaster not only to mitigate loss but to actually improve overall access to and preservation of materials. In doing so LLMC provided mitigation for the present concerns, furthered preparedness for the future, and expanded the possible models to support the overall lifecycle as a whole.

With this project, one of LLMC's goals was to build the worldwide network. As stated on the LLMC website:

The real potential behind the Haiti Legal Patrimony Project is the opportunity to combine the scattered resources of law libraries around the world. To get that process going, over 13 libraries have agreed to sponsor the project by canvassing their collections to see if they have unique titles to contribute. (LLMC)

In working on the LLMC project, partners learned more about their own collections and about the materials themselves. The initial “master title list” included all materials that were thought to be wanted for the project. As the project continued, new entries were added to the master list each month because new materials critical to the project goals, but that were previously unknown, were discovered. Many of the items being added to the list had already been digitized. The project itself thus: digitized materials to preserve and provide access, increased access and findability for already digitized materials by locating them within a central collection, and enhanced the available contextual information about the materials which enhances the overall usability and support for understanding the materials. As with the *Windward Islands’ Opinion*, the LLMC project shows the importance of curatorial work for providing the level of access necessary for immediate disaster mitigation and future preparedness. This curatorial work requires a great deal of research and effort. In fact, the curatorial work itself is recognized as a highly important and rigorous form of academic scholarship within the digital humanities. Finding materials, creating context, locating the materials together, and locating the materials within the proper context is necessary for disaster preparedness and mitigation. Digital library communities are called upon to respond and must do so as full communities in order to meet the demands for curatorial work given its complexity and sheer quantity.

In order to support disaster mitigation and preparedness, LLMC expanded their library community and project models. The Association for Cultural Equity (ACE) similarly did so for a project with the Alan Lomax recordings. Unlike LLMC, ACE began by preserving and then digitizing primary materials not held by libraries and without the initial involvement of library communities.

The ACE project for the Alan Lomax recordings is an example of how digital libraries support new communities that are initially outside of the digital library communities and that eventually become part of the digital library communities because of the need for collaboration with libraries to support shared goals for disaster preparedness and mitigation. The Alan Lomax recordings led to the emergence of ACE, which was created to support the preservation and access needs of the recordings. As the immediate needs for the materials were satisfied, new needs emerged. These new needs included the repatriation, distribution, and promotion of the materials as well as preservation and access support for secondary materials. In this case, the secondary materials are thousands of photographs taken by Alan Lomax when he was also creating the audio recordings.

Alan Lomax made his recordings in the Caribbean beginning in 1935 when Lomax sailed to the Bahamas. Lomax was supported by a budget of \$198 from the Library of Congress, garnered thanks to support from Zora Neale Hurston. He traveled to Nassau, Cat Island, and Andros Island. There, he recorded sailors, sponge fishermen, farmers and dockworkers. His recordings capture African and New World styles and traditions intertwined in boat-pulling songs, shanties, anthems, and old story songs. The old story songs are a cross between Jack tales and African Anancy tales of trickster lads

outwitting the devil. One of the songs in this collection, the "John B. Sail" was a popular hit, sung by many artists including Pete Seeger, The Beach Boys, and Johnny Cash. In 1936–1937, the Library of Congress sponsored Lomax for an extensive recorded survey of Haitian music. For this collection, Lomax made fifty hours of recordings documenting early Rara, combite, children's game songs, Voodoo, antique French ballads, and legendary composer Ludovic Lamothe (1882-1953). The audio recordings for this collection are accompanied by archival materials: a diary, correspondence chronicling the trip, diagrams, drawings, and film footage. These rich resources were unavailable and in danger for 70 years before ACE reformatted and restored the recordings.

In 1962, the Rockefeller Foundation provided funding and the University of the West Indies provided sponsorship for Lomax to record the music of the Lesser Antilles. During this six month project, Lomax made 1,859 field recordings and 1,093 documentary photographs. This collection features recordings and photographs from twelve islands, including: Anguilla, Dominica, Carriacou, Grenada, Guadeloupe, Martinique, St. Barthelemy, St. Kitts and Nevis, St. Lucia, and Trinidad and Tobago. Later in the decade, Lomax made recordings in St. Eustatius and the Dominican Republic.

Lomax's many thousands of recordings and photographs required reformatting for preservation and access. ACE provided the necessary support for this work. With the materials reformatted for preservation, providing access was the next step. Because the Lomax recordings and photographs were made as field research, the people captured for posterity did not grant permissions for their work or likeness to be used in any sort of wide manner. Further complicating the situation is that these recordings capture not only

the work of individual artists, but also the work and heritage of different cultures with the folk tales and traditional music. In order to provide general access, ACE first had to provide access to the countries of origin and patrimony. ACE identified collaborative partners to facilitate repatriation across the Caribbean. In the case of Haiti, ACE worked with the Green Family Foundation to repatriate copies of recordings to the country of origin and to promote the recordings as resources locally. In April 2010, members of the Green Family Foundation and ACE traveled to Haiti to initiate repatriation of Lomax's Haiti recordings and widespread outreach that so far has reached over 250,000 people.

The Green Family Foundation is also supporting a dLOC project for an online exhibit on Haiti's history entitled "Haiti: An Island Luminous." The Green Family Foundation served as a collaborative bridge to connect ACE and dLOC. While some of the Lomax recordings have been repatriated, more remain and are in process. . ACE also needed to find a method for supporting online access to the photographs because their site was designed to support the recordings as the primary goal, with the photographs as a future concern. While the Lomax recordings did not begin with a digital library community, ACE joined the dLOC community and the two are collaborating to share the Lomax photographs openly online, promote the Lomax recordings, and conduct outreach to artists and their heirs to further share the recordings that are rich examples of cultural heritage and individual artistic work. The evolution of the Lomax project shows how digital library communities can aid in disaster preparedness and mitigation for existing projects that originate outside of library communities.

Conclusion

In digital libraries, technology is always in service of the overall goals which include preservation and access. Because of the scale of digital library work and the evolving technologies in use, digital libraries are best defined by the shared goals of their communities as they work together. For disaster response, digital libraries have continued and expanded upon traditional library roles. Digital libraries have developed new project models and new collaborations. Further, digital libraries continue to develop new methods and means to support preservation and access as part of the ongoing support for the lifecycle of information. In doing so, digital library communities are active participants in all aspects of disaster preparedness, mitigation, and the development of new ideas to better support the entire process. Many digital library communities also provide information resources on the role of libraries in disaster preparedness and mitigation, as with Caribbean Disaster Information Network (CARDIN) and dLOC.

Existing needs include supporting both the preservation and access. The needs related to access are not yet fully defined. For instance, the Lomax project is particularly striking because its materials were in danger of being lost through the disaster of being unknown. Digital library communities serve a pivotal role in disaster preparedness and mitigation for both commonly considered disasters and the unexpected disasters that will occur from neglect and a lack of remembering. The Lomax recordings could have been lost, despite their status as cultural treasures, from a lack of knowledge about the recordings. The role of digital library communities in curatorial work will continue to expand. For materials in need of preservation, all too often their histories need to be found and documented. This contextual information provides the necessary means for understanding and using the primary documents. Without the historical context and

supports, the materials can be rendered inaccessible from the lack of connection, even if the primary materials are openly and freely available online. Digital library communities provide the libraries in their communities with needed connections and supports so, too, must digital libraries provide connections and supports for the primary materials they contain.

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Reflections on Researching Haitian Libraries from Outside Haiti

Curtis Small

Introduction

This paper will describe some of the steps I went through while researching Haitian libraries from the United States, and some of the results of this research. As with most topics, I began by focusing on print and electronic scholarly articles, but I was forced to branch out to other, less traditional sources and to fill-in the gaps as best I could. Many questions remain, hopefully to be answered as my work continues. It has been reported that there are approximately twenty trained librarians working in Haiti (Pierre-Louis, 2010), and a much larger number of paraprofessionals. Given this, it should not be surprising that there is a small amount of literature of the traditional sort. I will describe some high points of my adventure as it unfolded, and end with some thoughts about why I believe it is important to do research on Haitian libraries, despite the challenges.

Genesis of the Project

A couple of years ago I wanted to undertake a research project on Haitian libraries, but was prevented from doing so by the small amount of peer-reviewed material I was able to locate. This was in an LIS foundations course in which I was a student, and in which we had to use a certain number of peer-reviewed articles for research projects. However, in a recent course on international and comparative librarianship, there were no such stipulations about sources, so I decided to begin the work on Haitian libraries.¹ For

¹ The course was conducted at Simmons College Graduate School of Library and Information Science (GSLIS West), in South Hadley, Massachusetts.

earlier phases of the research, I proceeded in the usual way, searching for literature on the National Library, library legislation, library associations, and training. Sources were generally scarce, and I soon realized this project was going to call for resourcefulness. However, there were fascinating finds all along the way, as I hope to make clear.

Overview of Libraries in Haiti

Unlike the United States, Haiti has an official National Library that administers a system of 16 municipal libraries in various cities and towns. There are also two important patrimonial libraries: the Bibliothèque des Frères de Saint Louis de Gonzague, and the Bibliothèque Haïtienne des Pères du Saint Esprit, both in Port-au-Prince. The Monique Calixte Library, also in the capital, is run by the Haitian organization FOKAL (Fondation Connaissance et Liberté). In addition, there is a network of about 30 community libraries, and ten Reading and Cultural Activity Centers (CLAC). The community libraries and the CLAC centers will be discussed below. The Université de l'Etat d'Haiti has a system of twelve libraries, and libraries are maintained by private institutions of higher learning, high schools and other schools. The Alliance Française also operates several libraries in the country. The Institut Français of Haiti and the Institut Franco-Américain have libraries, as well.²

The National Library of Haiti

² The damage suffered by these libraries during the earthquake is detailed elsewhere in this volume. Below I will refer to the response to damage suffered by the Monique Calixte Library, certain community libraries, and a few CLAC (Reading and Cultural Activity) centers.

One interesting print source I found early on was Max Bissainthe's (1957) descriptions of the origins and history of the Bibliothèque Nationale d'Haïti, published while he was director. Here I learned that the National Library is the bibliographic agency of the country, and I also discovered Bissainthe's substantial *Dictionnaire de bibliographie haïtienne* (1951).

Bertrand (1981) points out that the first Haitian national library was actually established in 1825, during the presidency of Jean-Pierre Boyer (1818-1843). This was little more than 20 years after Haitian independence. Very little information is available about this library, which may have been destroyed during the 1860s, when political clashes saw the destruction of many items of cultural significance in Haiti, including "the richest libraries," whose books were "torn apart and sent away" (Bertrand, 1981, p. 118). The National Library that exists today was organized in 1940. In his brief article on the institution, Bissainthe (1957) described the library's acquisition of Haitian historical and cultural materials in the mid-1950s. These included rare books from the colonial period, maps and lithographs, and several important literary journals such as *La Ronde* and *Haïti Littéraire*. He reported that the collection contained 8300 books and pamphlets (Bissainthe, 1957). However, sometime later three-fourths of the items "mysteriously" disappeared (Bertrand, 1981, p. 122). This may have happened during the dictatorship of François Duvalier, which began in 1957. Perhaps the unfortunate development can be explained by noting the observation of Jean-Euphèle Milcé (2002), who stated that, in the past, certain elite Haitians have been willing to despoil public libraries in order to enhance their own private collections. The most recently available figures put the library's collection at 26,000 volumes (Haiti, 2011).

Issues Arising in the Literature

The most substantial study I consulted was published in the early 1980s by Mr. Jean Bertrand, who serves as director of the Haitian National Archive to this day. His article (“A plea for the reorganization of Haitian libraries”) is a broad overview of the history of the National Library and of the situation of Haitian libraries and library professionals as of the time the piece appeared. It also contained recommendations for organizing and improving services. Also important was a 1996 article by Mme Françoise Thybulle, director of the Bibliothèque Nationale d’Haiti. Although both these articles raised many issues that could and should be the starting point for further research, the thread that led most clearly to the present day involved library policy, as will be seen. Issues such as acquisitions budgets and training will be mentioned in passing, based on observations by Mr. Bertrand and Madame Thybulle, but will not be explored further in this article. They deserve more study, nonetheless, and I will address them at a later time.

Bertrand’s article presented an interesting snapshot of the state of Haitian libraries thirty years ago and before. The study (Bertrand, 1981) pointed out that, with the exception of the original national library, all libraries then existing in Haiti had been set up in the 20th century. The author counted 23 public libraries in the country, of which eight were not state-run (Bertrand, 1981). He added that in about 1940 when the present National Library was established, public libraries were also set up in Jacmel, Saint Marc, Jérémie, Cayes and Port-de-Paix, “each controlled by the local municipal administration” (Bertrand, 1981, p.118). With regard to training, he reported that only nine of the 149 persons working in Haitian libraries had professional qualifications. Also, an infinitesimal amount of the national budget was devoted to libraries (Bertrand, 1981).

The National Library “received no legal deposit copies” (Bertrand, 1981, p. 119) and had no purchasing budget from the state. (Laws of legal deposit would be instituted later, in 1984). The most striking sentence of the article revealed how much importance Bertrand (1981) attributed to library policy in Haiti, which was lacking at the time he wrote: “We must decide the kind of Haitians we want or must create” (p.120). Mr. Bertrand’s piece provided a model of the type of scholarship I was seeking to carry out in my own work, but it was thirty years old and, therefore, was largely of historical interest. By necessity, however, the article formed a large part of my knowledge base in regards to some of the above-mentioned aspects of the library situation in Haiti.

Like Mr. Bertrand’s article, Madame Thybulle’s piece was an overview of things up to that time. It offered additional interesting facts. For example, the author wrote that in 1994, ten years after the establishment of legal deposit, the bibliographic service of the country noted 247 titles produced for that year, which represented more than double the usual annual literary production (Thybulle, 1996).³ She added that the number of publications had noticeably increased since the lifting of the censorship laws imposed under the Duvalier dictatorships of 1957-1986 (Thybulle, 1996). Madame Thybulle (1996) also reported that the five required copies of each book published in the country were being received by the National Library.

Her article also discussed the small number of librarians traditionally working in the country. She mentioned a national study done in 1988 by ASSOBIH (Association of

³ The National Library of Haiti became autonomous in 1986, although exactly what this autonomy meant in practice is unclear, since it does not appear to have involved the allocation of funds for book purchasing. Bertrand (1981) had argued that an autonomous National Library should have its own budget.

Haitian Librarians), which projected that by the year 2000, the country would need 921 professionals and paraprofessionals to meet the information needs of the Haitian people (Thybulle, 1996). At the time of the study, ASSOBIH reported that 269 people were working in a professional or paraprofessional capacity in a library or document center, including eleven librarians. Madame Thybulle (1996) lamented the lack of a training institution in Haiti that would produce the needed library personnel.

Madame Thybulle (1996) also stated that, as of the time she was writing, there was no governmental or national plan for library development. She reiterated Mr. Bertrand's earlier call for such policy, adding that the Ministries of Culture and Education had drawn up a development plan that they intended to put into application beginning with the national budget of 1996-1997. Madame Thybulle (1996) strongly recommended this step, but it was unclear if it ever took place. These sorts of details were precisely what I needed to take the research deeper, but I had to drop that line of inquiry at the time, due to the absence of further relevant sources.⁴

Library Policy: CLAC centers and the Direction Nationale du Livre

A concrete "lead" regarding library policy came from another source, and lead in another direction. A year before starting the Haiti research, I discovered an article about the CLACS (Reading and Cultural Activity) centers that were established in various member countries of the International Francophone Organization (IOF) beginning in 1986. Interestingly, the centers are conceived as sites that would reach out to both

⁴ Mr. Bertrand's (1981) and Ms. Thybulle's (1996) articles were among the few that dealt with Haitian librarianship in a broad, historical manner while also assessing the situation in place at the time the pieces were written.

literate and non-literate members of the community, thus deviating from the concept of the library as a place dedicated solely to reading (Weber, 2007). The stated goal of the CLAC centers was to be relevant and useful to the entire community, not just a particular segment (Weber, 2007).⁵

In his article, Weber (2007) explained that in 2003, the IOF began encouraging each host country to develop legal frameworks so that public reading would become an element of the country's cultural policy⁶ Each country was also asked to develop a national office dedicated to implementing the policies governing the CLAC centers. The goal was to ensure that the centers would be a function of the "political will" of the host countries, with regard to public reading (Weber 2007, p.14). While CLAC centers were found in 18 countries total, Mr. Weber wrote that, by 2007, only Haiti and three other host countries had put in place legal frameworks and mechanisms for creation of the national offices.⁷ This detail caught my attention, but Weber's article gave no further information. I did try to reach Mr. Weber with questions about the program, but was unable to establish contact.

Shortly before starting the Haiti project, I attended a talk by Elizabeth Pierre-Louis, director of library programs for the Haitian NGO FOKAL (Fondation Connaissance et Liberté)⁸ The talk was an overview of the various types of libraries functioning in Haiti, followed by a description of the effects of the earthquake and the status of reconstruction

⁵ Weber (2007) points out the centers are often located in rural areas, which would otherwise have little or no library coverage. The first CLAC centers opened in Benin in 1986.

⁶ At the time his article appeared, Mr. Weber was also director of the program governing the CLAC centers, which are found in countries in Africa, the Indian Ocean, the Caribbean and the Middle East.

⁷ The other countries were Burkina Faso, Madagascar and Mauritania (Weber, 2007).

⁸ The presentation was given at the Haitian Studies Association (HSA) conference at Brown University.

and restoration efforts (Pierre-Louis, 2010). In her presentation, Dr. Pierre-Louis (2010) explained that the CLAC centers were administered by the Direction Nationale du Livre (DNL), which was an office of the Haitian Ministry of Culture. Later, after I started researching Haitian libraries in earnest, I realized that the creation of the DNL must have been a result of the policies that Haiti had put in place, as Weber (2007) had explained.

Once I had made the connection between Weber's reference to library policy and the creation of the DNL, I pursued information about the DNL and the CLACS centers through Google searches, since I had not located relevant print sources in databases. It did not take long to find material, however. I learned that the Haitian DNL was created in 2005.⁹ Despite the small number of even electronic sources that refer to the centers, one can infer the financial problems that must have faced the DNL even before the quake. For example, an article from the Alterpress news service reported on a press conference at which Emmelie Prophète (director of the DNL) and Mr. Weber announced a plan to open 30 new CLAC centers in Haiti (*Réseau culture Haiti*, 2007). These centers have not appeared, however. At present there are ten centers, as there were in 2007. Speaking after the quake, Elizabeth Pierre-Louis (2010) mentioned plans for the creation of four new ones. A much more recent article mentions once again a plan for 30 new CLAC centers (Jacquet, 2011), which would be part of a broader campaign to encourage public reading in Haiti.

An online article from the Haitian newspaper *Le Nouvelliste* (Meyers, 2010) nicely describes the activities of Haiti's CLAC centers. Besides aiming to meet the reading needs of local students and teachers, the centers also advance the educational situation of

⁹ Haiti's first CLAC centers were established in 2000.

young people who are outside the school system (Meyers, 2010). They offer literacy training as well as workshops on community health and protection of the environment (Meyers, 2010). They encourage the expression of local and popular culture, while providing access to the media and to newer communications technologies (Meyers, 2010). The description does indeed correspond to Weber's(2007) earlier discussion of a type of center that would seek to be relevant to the entire community.¹⁰

The most interesting part of what I found regarding the DNL and the CLAC centers concerned developments since the earthquake. For example, in a videotaped interview Ms. Prophète explains that, after the earthquake, the DNL was forced to take up residence in a temporary structure in the courtyard of ISPAN, the Institut pour la sauvegarde du patrimoine national (Institute for the Protection of the National Patrimony) (Réseau culture Haiti, 2010). As of the time of the interview (summer 2010) the DNL remained in its temporary lodgings.

In Dr. Pierre-Louis's Haitian Studies Association talk (2010), she stated that the CLAC centers in the towns of Gros Morne and Cabaret experienced severe damage in the quake.¹¹ In her interview Ms. Prophète described new programs that have been put in place in response to this damage (Réseau culture Haiti, 2010). For example, facilitators are being sent into schools and relocation camps to conduct story hours, writing

¹⁰ In 2007 Weber wrote that each center is equipped with the following:

- a collection of 2,500 books suited for lending purposes [...]
- local and international newspapers, journals and magazines
- more than 50 board games and educational tools
- pedagogical kits including books and published works on teaching methods for teachers
- audio and audio-visual materials including televisions, satellite receivers, audio and videoplayers/recorders (p.8)

Each center is conceived as part of a network, so that there will be at least ten centers in each country. This arrangement is thought to offer benefits in terms of sharing and emulation (Weber, 2007).

¹¹ The Cabaret community library served 2500 to 3000 users per month (Pierre-Louis, 2010).

workshops and other activities for young people. Another new program seeks to provide books to youth in areas that have no library. The program is called “Un livre à la maison” (“a book in the home”). Fifty to one hundred young people in a particular community are selected to receive one or two books. They sign a contract according to which they will read the books and lend them to friends who are also enrolled in the program. In this way the books will circulate among members of the group, giving each child access to more than the books he or she receives initially. The *Nouvelliste* article states that the program began in the town of Cabaret, whose CLAC center was severely damaged in the quake, as mentioned above (Meyers, 2010). In the short term, a housing container was also to be set up so lending services could recommence in the town (Meyers, 2010). Echoing what was being heard from many sectors of Haitian society at the time, Ms. Prophète stated during the interview that the promised aid money had not yet arrived (*Réseau culture Haiti*, 2010).

The preceding narrative gives a sense of the various avenues I had to pursue to go deeper into the topic, with regard to library policy in this case. I started out with the National library and, ended up looking into the CLAC centers, based on the information I was able to piece together. While I first used databases such as Library Lit, LISTA and Academic Search premier, I soon ended up Google, once the other sources were exhausted. A key point here is that there were not sufficient professional sources to give me a basic understanding of the development of the DNL and the CLAC centers in Haiti. Weber’s was the only article that discussed the centers at all, and it only mentioned Haiti once. The same type of situation can be found with other aspects of LIS in Haiti. In this case I had to engage in a treasure hunt that included Google searching and attending

conferences. I also began to contact individuals who were in charge of various programs. While none of this is unusual for a researcher, it was the latter strategies that helped me begin to get a sense of the big picture, rather than articles or books. Nonetheless, what I ultimately found was encouraging, and even inspiring, as should be clear.

The Fondation Connaissance et Liberté (FOKAL)

Early on in the research I also attempted to get a sense of the degree of automation that was to be found in libraries in Haiti. One of the libraries I looked at was the Monique Calixte Library, run by FOKAL in Port-au-Prince. I soon discovered that, even before the earthquake, automation was virtually non-existent in Haitian libraries.¹² I eventually contacted Elizabeth Pierre-Louis, FOKAL's director of library programs. She directed me to the organization's blog, which proved to be the most valuable source of recent information on FOKAL and its many programs. Given the sort of information I found there, I moved away from concerns about automation to look more closely at

¹² Marshall Breeding's international directory *Lib-web cats* identifies two missionary school libraries in Haiti that have OPACS and perhaps other automated features. The two libraries are at the Cowman International School and the Emmaus Bible Seminary. Both are located in the north near the city Cap-Haïtien. Other information regarding automation came from an unsuccessful grant request submitted to the Elsevier foundation by Brooke Woolridge and other project staff of the Digital Library of the Caribbean (dLOC), based at Florida International University (Florida International University Libraries, 2009). The request sought funding for the introduction of OPACS at the two most important patrimonial libraries: the Haitian Bibliothèque Nationale and the Fathers of the Holy Spirit Haitian Library (Bibliothèque Haïtienne des Pères du Saint-Esprit). The grant sought \$23, 973 for the project, which would have allowed the first steps toward automation (Florida International University Libraries, 2009). This grant request was submitted within the year preceding the earthquake. Ms. Woolridge states that she still hopes to see this automation project become a reality (personal communication, March 29, 2011).

FOKAL's emphasis on children and youth, who represent at least one third of the country's population, (Haiti, 2009).¹³

FOKAL directs programs to support childhood and youth development, youth civil society organizations, and women's and peasants' groups.¹⁴ The Monique Calixte Library is located at FOKAL's cultural center. The library has about 5,000 members, many of whom are children. It charges a small fee for membership and borrowing privileges. The building that houses the library and cultural center was damaged but not destroyed in the quake. However, it was forced to close temporarily. Tents were set up in the courtyard, and the library continued to serve patrons while providing shelter for staff. It re-opened in January of this year.

Besides running the Monique Calixte library, FOKAL also supports a network of about thirty community libraries, most of which are located outside the capital. The majority of the libraries were not established by FOKAL, but the organization has been offering support since 1996. In the words of FOKAL Executive Director Michèle D. Pierre-Louis, "these small libraries play a central role in the promotion of democratic values" (Pierre-Louis, 1996, p. 58). In looking at posts from FOKAL's blog, I was particularly moved by the description of the trips FOKAL staff members make to some of these isolated libraries. The visits take place every two years for each library, and may

¹³ The FOKAL web site recently informed readers that Monique Calixte Library will be using PMB, an open source software, for an OPAC that will soon go on line (Catalogue PMB, 2011). An article by Dr. Pierre-Louis (2004) explains that, in the absence of a library school in Haiti, FOKAL established a training program that taught management skills and simplified training in cataloging and classification. The blog offers updates on the training staff members receive. For example, In March of this year five staff members went to France to receive additional training in the use of the PMB software (Toussaint, 2011)

¹⁴ FOKAL is part of a network of national foundations established in various countries by George Soros, for the "promotion and development of open societies around the world" (Pierre-Louis, 2004, p.48).

represent the only hands-on contact with these establishments, on the part of FOKAL staff members. The bi-annual visits permit FOKAL staff to assess the state of things at the sites, to bring books and equipment, etc.

In January of 2011 FOKAL staff visited sites in the northern part of the country, in the towns of Dondon, Quartier Morin, Vallières, and Carice (Bibliothèques: Visite dans le Nord, 2011). The description of these tiny libraries (accompanied by a few photos) reveals the challenges they face, as well as the great energy and dedication of the personnel. From the substantial blog post describing the visits, it is clear that these libraries focus their efforts on children. At Flamm Lespwa de Liancourt library in the Artibonite valley, a staff of four serves thousands of young people (Bibliothèques: Visite dans le Nord, 2011). The tiny establishment in Carice houses the library, a youth association and a community radio station (Bibliothèques: Visite dans le Nord, 2011). The reading room is detached from the library, and serves as a meeting place for youth clubs and associations. It should be emphasized that the libraries probably provide the only space available for these important activities.

The blog post in question also describes an exciting technology project called Mini-Labs Mobiles, run by FOKAL (Bibliothèques: Visite dans le Nord, 2011). The program allows for the establishment of internet connections and local networks at these small libraries. Ten community libraries per year receive four Classmate PCs, a laptop, a projector, and a wireless router (Bibliothèques: Visite dans le Nord, 2011). The use of the Classmate PCs indicates that the program is oriented toward younger users. The equipment is brought to each library during the staff visits described in the FOKAL blog. In some isolated communities the demands of these devices surpass the capacity of the

local electrical systems (Bibliothèques: Visite dans le Nord, 2011). FOKAL is working with an electrical company to overcome this problem. It is impossible to overstate the transformative potential of such a program in communities where there is little or no internet access.¹⁵

Haiti Soleil and Bibliothèque du soleil

In 2005 Haitian scholar and writer Nadège Clitandre undertook to help improve the situation in her homeland when she founded the NGO Haiti Soleil, which runs the community library Bibliothèque du soleil.¹⁶ This library is also a part of the network that receives support from FOKAL. Like the larger NGO, Haiti Soleil integrates its library into a center that provides space for social and cultural activities geared toward children and youth. In this way, young Haitians are encouraged to associate the library and reading with other aspects of life.

Located in Carrefour-Feuilles near Port-au-Prince, Bibliothèque du soleil emphasizes literature and the arts (Starkey, 2010). There are also afterschool programs for children. Teachers from the community come to teach literature, poetry, and music. The library had about 400 members before the earthquake. Right before the disaster, a small computer lab was set up. Unfortunately this community library was one of those

¹⁵ There was sad news from April 2011, in a post titled *Une bibliothèque qui brûle* ("A burning library"). In Carice the Jacques Roumain Library and the Tet Ansam community radio station and Center for Culture were destroyed by fire (*Une bibliothèque qui brûle*, 2011). Not only did this mean the destruction of the library, books and Mini Mobil Lab equipment that the library had received, it also meant the loss of the space used by youth groups and students preparing for exams (*Une bibliothèque qui brûle*, 2011). The blog posting denounced this act, that has been attributed to individuals who were unsatisfied with the results of legislative elections that had just taken place (*Une bibliothèque qui brûle*, 2011). The author of the post remarked: "A ten-year collaborative effort has been reduced to ashes in an area where the citizens already have great difficulty gaining access to information"(translation mine) (*Une bibliothèque qui brûle*, 2011).

¹⁶ Dr. Clitandre's father, writer Pierre Clitandre, founded the library.

that was destroyed during the quake. Fortunately, however, the computers were able to be salvaged (Starkey, 2010).

In an email communication (April 19, 2011), Dr. Clitandre provided an update on the library's situation. Bibliothèque du soleil has not yet been rebuilt. However, last year it received two generous grants toward reconstruction. One was a matching funds award of \$25,000. Dr. Clitandre indicates that the NGO is currently in discussion with the Architectural Design Department at the University of San Francisco, regarding the new library building. They are also seeking contractors for the job. Despite the destruction of the library, Haiti Soleil's Summer Camp program took place in 2010 and is also happening in August 2011.

Why Do Research on Haitian Libraries?

In a videotaped interview (Starkey, 2010) Dr. Clitandre observes that libraries do not exist in Haiti in the way they are understood in the US. In a similar vein, a Haitian colleague at the recent ACURIL conference in Tampa expressed the view that library science "does not exist" as a profession in his country. Both of these individuals are attempting to improve the state of libraries and information access in Haiti, but their statements acknowledge the challenges presented by the current situation. The relative "absence" of library science in Haiti could be attributed to the small number of librarians and the lack of a training institution, among other factors. However, given this, one might question the wisdom of conducting a study that attempts to look at Haitian libraries using traditional research methods. Few researchers have undertaken to do so, in any event. However, I believe that scholarly work can and should be done that attempts to

assess the Haitian library situation in as much depth as possible, and as concerns the past, present, and the future. This is the sort of work that Madame Thybulle and Mr. Bertrand, for example, have conducted. Such work has also been presented at the recent ACURIL conference. The information presented in the present article will be supplemented by future research. Naturally, much more is needed than the publication of articles. The activities of the National Library of Haiti, DNL, FOKAL and other organizations clearly represent some of the most urgent and visionary work being done. The DNL's and FOKAL's emphasis on children seems like a response to Bertrand's distant call to create the "kind of Haitians" who can serve as the backbone of the Haitian society of the future.

Conclusion

Speaking soon after the earthquake, Dr. Pierre Louis (2010) suggested that one thing people could do was to speak about Haiti in a positive way. Despite the depressing accounts of damage and destruction that followed the disaster, the positive developments described above should indeed be advertised and promoted. This is another reason for undertaking research on Haitian libraries and reading centers, even from outside the country. My experience has showed me that a researcher needs to look beyond the usual sources of LIS information, in order to do this. Those I gradually came to rely on for this work-in-progress (blogs, online videos and newspaper articles, social networking sites) are now a necessary complement to more "old fashioned" sources. However, I do not see these newer informational tools as a replacement for the older ones. The newer sources need to be supplemented by work that is more likely to be seen by information professionals consulting professional literature in print or electronic form. In this way

“speaking positively” about Haiti can become more of a practice within the international library and information science community.

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3. The Roles of Libraries and Archives in Disaster Research

Marielena Bartesaghi

[Final version of paper due 12/19/11 to Ardis Hanson]

From Construction to Conceptualization: Catastrophe across Three Occasions

John Barnshaw and Lynn Letukas

Abstract

This paper explores the process of developing and refining the conceptualization of catastrophe utilizing the extant literature collected following the Chernobyl nuclear reactor leak, the Indian Ocean tsunami, and the BP oil spill. A catastrophe is different from a disaster in that most or all of a community or area is impacted, many local individuals are unable to undertake their usual roles, the community undergoes a period of prolonged inoperability, media plays an increasing role in the construction of the public perception of the occasion, and the political arena shifts from a local or regional issue to a national or international issue. The distinction between disaster and catastrophe is not simply an academic one, as national and international policymakers have recently become sensitized to differences between these occasions, and emergency management professionals and policymakers have asserted that more academic research is needed to empirically falsify conceptualization distinctions. This paper offers additional conceptual clarification on catastrophe and emphasizes the benefits of utilizing specialized disaster research collections to access high quality data on catastrophe across social and geographic boundaries.

From Construction...

For more than a half century, disaster and crisis researchers have struggled to define and conceptualize their central object of study. In 1950, when the first team of social science disaster researchers assembled at the National Opinion Research Center (NORC) at the

University of Chicago, one of those scholars, Robert Endleman (1952), defined disaster as: —an event, concentrated in time and space, in which a society, or a relatively self-sufficient subdivision of a society, undergoes severe danger and incurs such losses to its members and physical appurtenances that the social structure is disrupted and the fulfillment of all or some of the essential functions of the society is prevented.||

Although the Endleman definition was not published for nine years, it encapsulated many of the central concepts and concerns of the earliest disaster researchers (Quarantelli, 2006). Endleman's definition of disaster gained considerable attention among sociologists with the publication of Charles Fritz's chapter in Robert Merton and Robert Nisbet's widely read *Contemporary Social Problems* (1961). More than 45 years later, Tierney (2007:505) acknowledges that the Endleman/Fritz definition of disaster remains —highly influential|| in how many researchers understand disaster.

Although the Endleman/Fritz definition is the most cited definition of disaster in the social sciences, there are several methodological, theoretical and substantive issues that make its use problematic for disaster researchers (Tierney, Lindell and Perry, 2001). The Endleman/Fritz definition is methodologically problematic because the short term—event concentrated in time and space|| that disrupts the —essential functions of the society|| was reinforced by a methodological approach that emphasized the importance of gathering short-term observations and data that were deemed ephemeral (Fritz, 1961:655; Natural Hazards Application and Information Center 2011; Stallings, 2002). Although some outstanding quantitative surveys (Bolin and Bolton, 1999; Brodie et al., 2006; Moore, 1958), and some long-term ethnographic work has resulted from these initial quick response research trips (Oliver-Smith, 1999; Picou et al. 1992), the vast majority has been

qualitative interviews that are post-hoc and limited in generalizability beyond the initial impressions of those impacted. This is not to say that these data are not important, indeed we believe that they have been essential to the development of the field of disaster research. Our point in drawing attention to the post-hoc approach is to note how the methodological approach has influenced the findings and theorizing that conceptualizes disaster as an aberrant disruption of the social system.

Tangentially related to the methodological focus on —event|| is that when findings generated from quick response or ephemeral data are reported, they are often contextualized in a theoretical approach that is often a theory of the middle range that is limited in scope and generalizability (Blau, 1995; Stallings, 1998; Tierney, 2007). Thus, by focusing on broader methodologies and more inclusive data collection processes that allow for broader theoretical development beyond theories that are narrowly tailored to explain phenomenon such as how individuals perceive warning messages or how organizations adapt in disaster may lead to more robust sociological inquiry and theory development.

Substantively, there are also two problems with the Endleman/Fritz definition of disaster. First, the use of —event|| focuses both the researcher and the research on one singular event as the genesis of a particular disaster, which often, is not the case. Quarantelli (1998) and Perry (1998) have both pointed out that since disasters are social constructions, rather than purely physical phenomena, agents, social systems and societies influence disaster. Therefore, although certain moments may play a larger role in disaster than others, even what may appear to be the most singular event is actually the product of a longer history of preconditions for disaster. For example, Oliver-Smith

(1999) demonstrated that the devastation resulting from the Peru earthquake on May 31, 1970 was the product of nearly five hundred years of South American settlement location, planning and building techniques.

The second substantive problem with the Endleman/Fritz definition is that one runs the risk of ontological gerrymandering, which is the illicit insistence on defining a term in a way that is favorable to one's own understanding of a phenomenon (Blackburn, 1996; Woolgar and Pawluch, 1985). For example, in a search of disaster definitions, Westgate and O'Keefe (1976) found that the majority of previous definitions were programmatic declarations that were useful for politicians and policymakers in declaring an area as a disaster rather than offering definitive criteria that would be useful for systematically defining or establishing boundaries of the phenomenon. Ontological gerrymandering does not appear to be simply a political problem as Dombrowsky (1998:20) notes that among disaster researchers —we see what we want to see.||

Thus, by focusing only on issues that are germane to the politician, policymaker, or disaster researcher, one runs the risk of creating favorable definitions that support one's own understanding of disaster while potentially excluding substantive findings that are deemed —problematic.|| For example, consider the classical Endleman/Fritz (1961:655) definition where disaster is seen as generating —severe danger|| to a community resulting in destruction of —physical appurtenances|| and —losses to its members.|| This definition easily conjures up images of what most people traditionally consider the domain of —natural disasters|| such as floods, earthquakes, hurricanes, tornadoes, and tsunamis. However, consider for a moment research by Klinenberg (2002) on the 1995 Chicago heatwave where 521 people died with almost no

destruction or devastation to physical appurtenances. Should the Chicago heatwave, clearly a —natural|| meteorological occasion generating exceptional disruption to the community be excluded from the definition of a disaster because it did very little damage or destruction to physical appurtenances?

A potential solution to the methodological, theoretical and substantive problems of the Endleman/Fritz definition is to develop a conceptualization of disasters based upon social occasions and exceptions. In contrast to definitions that purportedly offer a definite, or final account of a phenomenon, a conceptualization is a process that sensitizes the researcher to certain ongoing aspects of the social world (Neuman, 2003).

A major advantage of sensitizing concepts is that they can be used to draw attention to important social features that otherwise may have been missed, thereby limiting the influence of ontological gerrymandering (Charmaz, 2003; Padgett, 2004; Bowen, 2006).

Although sensitizing concepts are generally used in an inductive manner (Glaser and Strauss, 1967; Strauss and Corbin, 1990), we think that deductive approaches can be applied to sensitizing concepts in a study. For example, there are numerous observations and propositions developed by prior scholars about behavior in general and also specifically in disasters. We follow this convention in an attempt to determine whether or not behavior in catastrophe is similar or different from prior research.

The potential solution to the problem of the Endleman/Fritz focus on the —event|| concentrated approach is to avoid the determinism associated —event|| and focus on projects, social occasions, and exceptions. Dynes (1998:113) notes that —event|| can imply a determinism that if an earthquake, hurricane or terrorist attack is going to take place, there are few measures agents or social systems can take to prevent it. To avoid

this pitfall, Dynes (1998:113) recommends the concept of —occasion,|| which offers a more effective organizing concept. Occasion provides a socially defined process that is contextually bound beyond the fixed temporality of —event|| into a —before,|| —during|| and —after.|| Thus, the occasion serves as the catalyst that —generates|| exceptions, or social disruption, that is part of a larger historical project of —before,|| —during|| and —after|| disaster (Kreps, 1998). In our view, this advancement over the traditional understanding of disaster is not without its own issues and greater clarification is necessary in what is meant by project, exception, and scale, which is where we turn next.

Projects, Exceptions and Scale

Retrospectively constructing the past is hardly novel in sociology or disaster research. The French sociologist Emile Durkheim (1897) retroactively gathered data about suicides in France and drew inferences about his subject to better understand how social solidarity, or a lack thereof, influences the likelihood of suicide. Moreover, for more than a century in American sociology, race scholars have developed rather sophisticated conceptual schemes for retrospectively constructing the racial history of individuals and societies (DuBois, 1920; Feagin, 2010; McKee, 1993). In disaster research, the Canadian sociologist Samuel Prince (1920) retrospectively studied the individual and community response to 1917 Halifax explosion to better understand catastrophe and social change.

This current research offers an expanded conceptualization of projects to emphasize their social construction as well as their composition of fields, structures, agents, and arrangements to construct a conceptualization that attempts to take each of these intersecting processes into account through operational means. Central to the use of projects is to understand how they exist at a current period of time and how they change.

Historically situated projects will continue into perpetuity until a social exception occurs. An exception is a substantial deviation from the constructed project. Exceptions differ from fluctuations in that they substantially alter the field, structures, agents and/or arrangements of the constructed project.

There are two general propositions consistent with all types of exceptions. First, exceptions generate uncertainty. No matter how small, large or complex an exception, there is a period where the substantial deviation is undefined or unknown. Second, irrespective of the type of exception, some action will occur. At any given time, some individuals, organizations or subsets of society will have an interest in developing new possibilities brought about by the exception or attempting to restore some of what was previously constituted by the exception. Thus, once an exception has occurred, it is not possible for inaction to result in a constructed project but rather, a new project is in the process of formation or reformation. This is not to say that all fields, structures, agents or arrangements must participate in some type of action, it simply indicates that some fields or structures, agents, or arrangements will engage in action in an attempt to resolve the exception. Disaster is an ideal context for studying exceptions because they are often behaviorally observable rather than asking about lines of action constructed solely in the mind (Mead, 1934). Thus, by focusing on disasters as exceptions, researchers are able to assess social change in the historically constructed before, during and after disaster. Immediately before, during, and following a disaster, routine patterns of action are significantly disrupted as well as the social structures and built environment. In an effort to better understand what has been lost and what has been retained from a project, our view is that it is essential to understand the scale or size of an exception. To measure

scale, we attempt to understand exceptions in their impact on the routines or rituals of individuals, organizations, communities in the social and physical fields they inhabit. Therefore, within the context of an exception exists a continuum of based upon the scale of the exception. Figure 1.1 describes a continuum of social exceptions ranging in scale from emergency (smallest level of exception) to extinction level occasion (largest level of exception).

First, an emergency is an exception involving first responders that is often resolved with little disruption to larger communities and social structures in the project. Second, a mass/complex emergency is a complex exception such as a large traffic accident or plane crash that is often resolved through complex responses that do not constitute significant disruption to communities and social structures. Third, a disaster is an occasion generating exceptional social and structural disruption. Fourth, a catastrophe is an occasion generating exceptions where most or all of the community is impacted, local officials are unable to undertake their usual work roles and the community undergoes a period of prolonged inoperability. Finally, an extinction level occasion is an exception generating substantial challenges to all communities and social structures in a region.

Figure 1.1 – Continuum of Exception Occasions

Emergency

Mass/Complex Emergency

Disaster

Catastrophe

Extinction Level Occasion

A complex emergency, such as a plane crash, may result in exceptions to routines, but

not to the extent that the exceptions constitute a significant disruption to communities and social structures. Thus, authorities and emergency professionals are able to respond in such a way that most members of a community and social institutions are not adversely impacted. Conversely, a disaster is not sufficiently as large as a catastrophe. Given our understanding of disaster and the level of exceptions generated, we hypothesize that our current project of analysis, the Gulf of Mexico oil spill emanating from the Deepwater Horizon is a catastrophe rather than the smaller exception of a disaster. However, a better understanding of the difference in scale of exceptions between disaster and catastrophe is necessary, which is where we turn next.

Data and Methods

This paper utilizes a case study methodology (Yin, 2009). Case study methodology is a research design that focuses on one or more specific instances, institutions, or occasions (cases) for the purpose of exploring a process that may not necessarily be generalizable in a statistical sense. The case study methodology is ideal for examining contemporary events when behavior cannot be manipulated because it allows for a blending of various data sources to provide greater explanatory power than the historical method (Yin, 2009). Although a case study methodology may include up to six sources of evidence (documents, archival records, interviews and surveys, direct observation, participant observation and physical artifacts), this paper utilized documentary and archival records (Yin, 2009). Documentary sources of evidence included memoranda, administrative information, Congressional testimony transcripts, after action reports by private and public sector entities as well as annual reports of several of the parties involved such as British Petroleum, Halliburton and Transocean for a total of 19 documents. Archival

records included three newspapers including two national newspapers (The New York Times; The Washington Post) and one newspaper located in the impacted region (The Times-Picayune – New Orleans, LA). These two national newspapers have the highest circulation in the United States, and in particular, the Washington Post provides detailed coverage of political and governmental involvement in national issues and events. Since two of our propositions of catastrophe include the national media increasing role in the construction of the occasion, and the extent to which the event receives national and international political coverage, we concluded that the New York Times and the Washington Post would be ideal sources to examine the extent to which the oil spill was the subject of national media attention. We also examined one local newspaper The Times-Picayune because it provided detailed coverage of how local communities were impacted by the oil spill. Our time period of analysis included April 20, 2010, the day of the Deepwater Horizon oil rig explosion in the Gulf of Mexico, to September 10, 2010, two days following the release of the internal report from British Petroleum (BP) detailing the cause of the explosion, which allowed for a detailed analysis of the media construction of the short-term response and recovery efforts as well as coverage of the BP investigation (Tierney, Lindell, and Perry, 2001).

We used Lexis-Nexis Academic to conduct a full-text database search using two search terms that were determined to be the most frequently used to describe the oil spill by the mass media, after preliminary examination of articles in all three newspapers: —BP oil spill,|| —BP,|| and —Deep Water Horizon.|| The Lexis-Nexis search identified a total of 2,342 newspaper articles, all of which were subjected to three selection criteria (duplication, relevance, content), following which a combined total of 2,252 articles

remained. Finally, we selected a sub-sample of every tenth article resulting in 62 New York Times, 45 Washington Post and 119 Times- Picayune articles (N=229).

In order to explore and attempt to falsify the conceptualization of catastrophe as developed by Quarantelli (2006), this research utilized a deductive methodological approach in its analysis of news content. The software program ATLAS.ti 6.0 was used for the coding and analysis of these articles. After the initial coding, all codes, notes and memos were read through and analyzed. Representative quotations were then selected, some of which have been used in the presentation of our findings, which is where we turn next.

We used this existing knowledge and understanding of what has been established goes on in disasters by contrasting it with what we think we can see in catastrophes. For this purpose, we selectively drew mostly, but not exclusively, from the social features of the Chernobyl nuclear plant radiation fallout, the 2004 Indian Ocean tsunami, the Northeast blackout in 2003, and Hurricane Katrina. These four occasions were used for several reasons. Even the initial press reports of their occurrences left a strong impression that they were considerably beyond typical disasters. There is also a substantial literature, popular and scientific, easily accessible for all four occurrences. Finally there are some diversities, not only in terms of the hazards and risks involved (e.g. radiation fallout, tsunami, hurricane and flood, critical infra structure accident) but also what parts of the world were affected including rather different political and social systems as well as cultural and lifestyle frameworks.

Catastrophe as a Social Exception

Although there are a number of recent summaries and reviews of the literature on

disaster (Tierney, Lindell and Perry, 2001; National Research Council, 2006; Rodriguez, Quarantelli and Dynes, 2006) prior research by Quarantelli (1982; 1993; 2006) has suggested that catastrophes may be fundamentally different from disasters in several important ways. A catastrophe is a social occasion that generates exceptions where most or all of (1) the community structure is impacted, (2) the community rituals or routines are disrupted and local officials are unable to undertake their routine work roles, (3) help from nearby communities cannot be provided due to the scale of the exception (4) the community undergoes a period of prolonged inoperability, (5) the mass media socially construct the occasion, and (6) the political arena emerges as increasingly significant in dealing with the response. Figure 1.2 provides a chart of the conceptual characteristics of catastrophe of we shall describe below.

Figure 1.2 – Conceptual Characteristics of Catastrophe

[paste figure]

First, in a catastrophe most or all of the community built structure is heavily impacted. For example, in the 2010 Haiti earthquake, at least 230,000 persons were killed and more than one million—nearly ten percent of the entire country--were left homeless (British Broadcasting Corporation, 2010). In contrast, in the 1985 Mexico City earthquake, considered a disaster, less than two percent of the residential housing structure stock was lost, with only 4.9 percent of the population reporting great damage to the building in which they lived in and around Mexico City (Quarantelli, 2006).

The radiation fallout from Chernobyl fell not only in the northern parts of the Soviet Union such as Belarus, but in the center of Europe such as in Germany, and as far north

as in the Arctic Circle in 11 Sweden and Finland. Apart from these locations and sites where the fall out created a real threat, the radiation cloud circled around the globe (although as was later found out, it did not create a real risk in that lengthy journey). The tsunami differently impacted at least a dozen nation states around the Indian Ocean in a circle extending from southeast Asia to the coast of Eastern Africa.

Finally, because of mass media focus on the city of New Orleans, it is not well known that

Hurricane

Second, in a catastrophe most or all of the community rituals or routines are disrupted and local officials are unable to undertake their routine work roles. Sociologist Randall Collins (2004) has argued that individuals use symbols to form the basis of interaction and routines, which, in turn, form ritual chains of interaction. These micro-level interactions form the basis of social structures and much of what is found in the meso- and macro-levels of society. Thus, when a socio-historical project experiences an exception, social change is often experienced at the interactional micro-level. Related to this observation, when a catastrophe occurs, local personnel specializing in catastrophic occasions are often unable to carry out their formal and organizational work roles (Quarantelli, 2006). This is because some local workers are either dead or injured, and/or are unable to communicate the knowledge or skills they routinely provide (Barnshaw, Letukas and Quarantelli, 2008). For example, in the 2004 Indian Ocean tsunami practically all government officials were killed by the impact, fisherman were unable to fish, health professionals were unable to provide routine assistance in hospitals and thousands of foreign tourists were stranded (Letukas, 2008; Letukas, Olofsson and

Barnshaw, 2009). In sharp contrast, in disasters routine patterns for large sections of society are maintained as following the 1994 Northridge earthquake in Los Angeles 12,000 people went to the horseracing track the afternoon of the earthquake (Barnshaw, Letukas and Quarantelli 2006).

Third, in a catastrophe most or all of the help from nearby communities cannot be provided due to the scale of the exception. In many catastrophes most of the residents in a particular community affected, but often, those in nearby localities are also impacted. In 1986, many areas around Chernobyl after the accident at the nuclear plant were unable to respond for risk of contamination (Porforiev, 1998). In short, catastrophes affect multiple communities, and often have a regional character.

Fourth, in a catastrophe most or all of the community undergoes a period of prolonged inoperability. In addition to most assistance coming from distant individuals, organizations and communities, the impacted communities are often inoperable or unusable for a period of time (Quarantelli, 2006). For example, following the 1986 nuclear accident at Chernobyl almost the entire community has been displaced and most have not returned nearly 25 years after the occasion (Swiss Agency for Development and Cooperation, 2010).

Fifth, in a catastrophe the mass media system, especially in recent times, socially constructs the occasion. All disasters evoke at least local mass media coverage. Some disasters can attract attention from outside the local community media, to draw regional, national and at times, international attention. However, this disaster coverage rarely lasts beyond the first few days, or at most, the first month depending upon competing news cycles (Hilgartner and Bosk, 1988). Even media coverage following the September 11,

2001 attacks of the occasion dropped off considerably after the first few weeks except in the impacted metropolitan areas of New York and Washington. In contrast to disasters, mass media coverage of catastrophe differs in that there is generally much more and longer coverage by regional and national mass media than local media. This is partly because local coverage is reduced, if not totally displaced, during and following the exception.

In the Northeast blackout it was only 20 seconds between a last major mistake in a Michigan control room and the initiation of a cascading electric grid power failure in the US East Coast and south east Canada. While the Soviet government tried to keep secret the radiation fallout from the accident at Chernobyl, radiation monitors located in Sweden identified a serious problem within hours. In the instance of Hurricane Katrina and the Pacific tsunami, at the very time of physical impact, it was clear to victims and affected communities just from visual perceptions that there were going to be serious consequences. In the Soviet Union some occurrences probably were catastrophes (see Oberg, 1986 for cases), but it was not until the Chernobyl nuclear radiation fallout crossed international boundaries that forced a reluctant official public admission about a catastrophe.

Finally, because of the previous five processes, in a catastrophe the political arena becomes even more important in dealing with the impact and response. All disasters involve, at a minimum, local political considerations. However, it is a radically different occasion when the national government and elite officials become directly involved (Quarantelli, 2006). Even with the most socially prominent disasters, such as the September 11, 2001 attacks, a symbolic presence is often all that is necessary. However,

in catastrophes, that symbolism is not enough, particularly for larger society. Part of this stems from the fact that catastrophes often force larger society to deal with the most fundamental constructions of the previously constituted project.

For example, as the levees were breached and the floodwaters rose in New Orleans following Hurricane Katrina, television images of thousands of citizens trapped outside the Louisiana Superdome and New Orleans Convention Center, without adequate food and water, caused many Americans to —rediscover|| the urban underclass as well as racial and ethnic differences that are papered over during routine occasions (Barnshaw, 2006).

The Soviets had no system in place for warning distant localities about a radiation risk from an accident at the Chernobyl nuclear plant. There seems to have been a mostly untested and therefore mostly unknown plan in place for alerting the surrounding population. While there were a number of technical monitoring mechanisms in place within the nuclear plant complex itself to indicate serious malfunctions or danger, as far as is known, they were mostly misread or ignored although plant personnel in the control room knew rather quickly that something very bad was happening and accelerating. On top of everything else, most of the authorities, local and otherwise, tried to keep the developing risk as secret as possible. Thus, for all practical purposes, there was little by way of a warning system.

However, catastrophes typically involve multitudes of organizations in different formal jurisdictions. That compounds the problem of coordination. Hurricane Katrina, the Chernobyl nuclear accident, and the Indian Ocean tsunami abound with incident after incident where there was lack of interorganizational coordination. Wolshon (2008) in a recent publication suggests and implies that in recent and upcoming megadisasters that

are somewhat regional in nature, there are many coordination problems because of the multiplicity of responding groups involved that operate in often different governmental jurisdiction, and a cutting across of bureaucratic boundaries.

Another reason the political arena is increasingly important during and following a catastrophe is that it is easy to take partisan political advantage of such times as organizational weaknesses of responding organizations becomes obvious. For example, following the 1986 Chernobyl nuclear reactor accident, the Soviet government initially tried to keep the the catastrophic failure secret, but when this was not possible due to radiation monitors in Sweden, the political cost had to be paid by Soviet actors and institutions (Porforiev, 2006).

Given our understanding of catastrophe, we hypothesize that our current project of analysis, the Gulf of Mexico oil spill emanating from the Deepwater Horizon, is a catastrophe rather than the smaller exception of a disaster. First, however, a better understanding of our methodological approach and data utilized is necessary, which is where we turn next.

Finally, there is a question if the conception of a catastrophe necessarily requires high death tolls and extensive property damage. It might seem that if there are rather high casualties and large property damage in a given occasion, it is likely to be a catastrophe. That would especially follow if high or large numbers are used as differentiating criteria for that kind of occasion.

However, even rough numbers from Chernobyl on those initially killed and injured as well as property damage are surprisingly low (Russian disaster researchers have told us that despite the dubiousness of most statistics from the Soviet Union, the post Chernobyl

numbers are reasonable —ballpark figures)). The possible later radiation poisonings that may have been resulting in child birth defects, a rise in cancer rates and other health problems seemed to surface more than a decade later. On the other hand, there is no doubt that in the immediate aftermath of the nuclear plant explosion there were very major social disruptions in parts of Russia and nearby countries, very similar to what happened in the immediate aftermaths of Hurricane Katrina and the Pacific tsunami. Therefore, it seems reasonable to classify Chernobyl when it happened as a catastrophe. Whatever may have surfaced a decade later is hardly what should be used for classification purposes, although from a research viewpoint it might suggest the need and value of studying longer run as well as shorter run quantitative outcomes of collective crises.

Findings

Previously, Quarantelli (1993; 2006) has asserted that catastrophe is a social occasion that generates exceptions where most or all of (1) the community structure is impacted, (2) the community rituals or routines are disrupted and local officials are unable to undertake their routine work roles, (3) help from nearby communities cannot be provided due to the scale of the exception (4) the community undergoes a period of prolonged inoperability, (5) the mass media socially construct the occasion, and (6) the political arena emerges as increasingly significant in dealing with the response. Based upon our analysis of archival sources and documentation we generally find support for these claims.

INSERT FIGURE 1.3 HERE

First, in a catastrophe most or all of the community built structure is heavily impacted.

The Deepwater Horizon explosion is relatively unique to the study of catastrophe in that in most catastrophes the heavy physical loss of community structure is readily observable. However, in some catastrophes such as the 1986 nuclear reactor accident at Chernobyl the community built structure was heavily impacted in that it was deemed inoperable or unusable although still largely intact. Similarly, following the Deepwater Horizon explosion, we find substantial evidence of community built structures being heavily impacted, most notably along the Gulf of Mexico, with the largest economic costs in the urban centers such as New Orleans.

In our analysis of the BP Deepwater Horizon Accident Investigation Report (2010) there is no mention of individuals, organizations or communities being impacted or heavily impacted by the accident (British Petroleum, 2010). However, in the Report to the President by the National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling (2011), we found numerous instances of community destruction and impact. First, and most directly impacted was the community on the oil rig Deepwater Horizon, where 11 of the 126 crew were killed and 16 others were seriously injured (National Commission on the BP/Deepwater Horizon Oil Spill and Offshore Drilling, 2011). Approximately 36 hours after the initial explosion that led to the explosion on the Deepwater Horizon intensive fire-fighting efforts were unable to save the \$560 million oil platform, which sank to the bottom of the Gulf of Mexico (Transocean, 2010). The explosion on the Deepwater Horizon set off a cascading explosion resulting in an estimated 52,700 to 62,200 barrels of oil spilling per day into the Gulf for a total of approximately 4.9 million barrels, by far the largest maritime oil spill in United States history (National Commission on the BP/Deepwater Horizon Oil Spill and Offshore

Drilling, 2011).

The spill is estimated to cover a concentrated area of 2,500 miles and a diffuse area of 68,000 square miles with more than 600 miles of shoreline being fouled in five states (Norse and Amos, 2010). This tremendous oil spill has long-term implications for the ecological sustainability of the Gulf of Mexico and similar to Chernobyl, the full impact will not be realized for years.

Second, in a catastrophe most or all of the community rituals or routines are disrupted and local officials are unable to undertake their routine work roles. In the aforementioned commission report (2011), there was evidence of substantial disruption to environmentally sensitive ecologies that have dramatically impacted the seafood and tourism industries, two of the largest components of the regional economy (National Commission on the BP/Deepwater Horizon Oil Spill and Offshore Drilling, 2011). In 2008, Gulf Coast fisheries harvested 1.27 billion pounds of fish and shellfish generating \$659 million in revenue (National Oceanic and Atmospheric Administration, 2010). In addition to the commercial fishing industry, there were an estimated 3.2 million fishers in the Gulf Coast region who took 24 million trips (National Oceanic and Atmospheric Administration, 2010). Following the Deepwater Horizon spill, approximately 33 percent of all federal waters were closed extending as far away from Louisiana as Panama City Beach Florida.

Tourism generates an estimated \$19.7 billion annually in the Gulf Coast region, with approximately 50 percent of the total coming from Florida (United States Census Bureau, 2007). In addition to the disruption of employees of the fishing and tourism industries the impact of the oil spill has also adversely impacted the health of many Gulf residents.

While the long-term effects of contamination may not be known for years, the disruption in loss of jobs and income due to the spill is salient in the 25 percent increase in clinical depression among Gulf facing counties since the oil spill (National Commission on the BP/Deepwater Horizon Oil Spill and Offshore Drilling, 2011).

Third, in a catastrophe most or all of the help from nearby communities cannot be provided due to the scale of the exception. Within moments of the Deepwater Horizon explosion it was apparent that the necessary resources to resolve the exception were not readily available. Within hours, BP began hiring vessels to skim oil off the surface of the water and began ordering boom in an attempt to surround and contain oil that was rapidly gushing from the blown out well (Resnick-Ault and Klimasinska, 2010).

Although BP was initially reluctant to use outside international assistance, four weeks after the explosion, they began accepting skimmers, boom and technical assistance from international partners with experience in cleaning up oil disasters (Eilperin and Kessler, 2010).

Fourth, in a catastrophe most or all of the community undergoes a period of prolonged inoperability. Following the Deepwater Horizon explosion, large areas of the Gulf Coast were deemed inoperable for human activity. On May 2, 2010, the National Oceanic and Atmospheric Administration (NOAA) National Marine Fisheries Service began closing an area of approximately 6,817 square miles, roughly three percent of the entire Gulf of Mexico federal fishing zone and continued closing areas and by one month later, on June 2, 2010, it prohibited 37 percent of the entire federal Gulf fishing zone (National Commission on the BP/Deepwater Horizon Oil Spill and Offshore Drilling, 2011). Later, in May and July 2010, President Barack Obama issued a moratorium on offshore drilling

for an indefinite term that was later clarified as six months (National Public Radio, 2010). At the local and state level, much of the fishing and tourist communities have remained closed due to the impact of the Deepwater Horizon spill and some jobs, businesses will never recover (Alpert, 2010b).

Fifth, in a catastrophe the mass media, especially in recent times, socially constructs the occasion. With the proliferation of twenty-four hour cable news, the Internet, blogs and citizen reporters, perhaps the greatest changes have come in how catastrophe are understood by those who experience the impact and the broader public. Since the Deepwater Horizon oil spill was constructed as an exception that was facilitated largely through rational-technical means, this sensitized the media, the public, and policymakers to hold BP accountable for all damages related to the impact.

A frequent source of discussion in the media was the flow rate of oil into the Gulf of Mexico emanating from the Macondo oil well. Although initial estimates from BP were that 1,000 barrels per day might be flowing into the Gulf of Mexico, at a press conference on April 28, 2010, Coast Guard Rear Admiral Mary Landry stated that the flow of oil entering the Gulf could be as much as 5,000 barrels per day, a number that was later deemed highly speculative (National Commission on the BP/Deepwater Horizon Oil Spill and Offshore Drilling, 2011). As was later acknowledged in the national commission report to the President, over the next four weeks, the media frequently repeated the number and it remained the official estimate of the spill size. However, once video from the feed of the blowout became publically available, it soon became apparent that the size of the exception was far larger than reported. More recent official estimates place the low number at more than ten times those initial estimates with 52,700 to 62,200 barrels of

oil spilling per day into the Gulf for a total of approximately 4.9 million barrels, by far the largest maritime oil spill in United States history (National Commission on the BP/Deepwater Horizon Oil Spill and Offshore Drilling, 2011). Another aspect of the Deepwater Horizon oil spill that was socially constructed by the media, albeit to a lesser extent, was the lack of specificity of who, and where was being impacted. Many Floridians, particularly those living and working south of the Panhandle, expressed frustration that national media was not informing the public that their beaches and tourist attractions were open and that little tar or oil had washed ashore, especially during the peak of tourist season (National Commission on the BP/Deepwater Horizon Oil Spill and Offshore Drilling, 2011). These sentiments were perhaps best expressed by Keith Overton, Chairman of the Florida Restaurant and Lodging Association who stated:

These losses have occurred in our area in the Tampa Bay area, without a single drop of oil ever reaching our beach and that is true for most of Florida. Pensacola has had some oil but the rest of the panhandle is in pretty good shape right now. But you wouldn't know that if you looked at the national news media or you read the newspaper each day. ||

Finally, because of the previous five processes, in a catastrophe the political arena becomes even more important in dealing with the impact and response. As noted previously, all disasters of course involve, at a minimum, local political considerations. However, it is a radically different occasion when the national government and the elite officials become directly involved in the process (Quarantelli, 2006). Following the Deepwater Horizon oil spill, local, state, national, and international media played an important role in attempting to deal with response. At the local level, particularly in Louisiana, government officials frequently reported being stretched beyond capacity,

which is common in catastrophe, given the scale of the exception as evidenced by Jefferson Parish (Louisiana) President Steve Theriot who stated, —We don't have enough assets in the world to take care of the Gulf Coast (Rainey, 2010:1).||

At the state level, politics played a very important role in shaping responsibility for the recovery. Louisiana Governor Bobby Jindal repeatedly blamed BP for the oil spill and repeatedly requested funds to protect the Louisiana shorelines (Alpert 2010a). Jindal told national media that —We're in a war here to fight to protect our way of life|| and repeatedly requested for more help from the federal government, specifically Jindal asking that Coast Guard officers be assigned to each affected parish who could immediately OK requests for additional boom or other assistance (Alpert, 2010a). At the federal level, President Barack Obama made numerous trips to the impacted Gulf Coast region and held a high profile prime-time press conference, the first in months, to address problems with the federal response to the BP oil spill (Obama, 2010). On cable news networks, television pundits such as James Carville critiqued President Obama calling him —naïve|| for entrusting BP with command over a spill they created (Basset, 2010:1). Many in the national media began to wonder if the lackluster response amounted to —Obama's Katrina|| (Macmanus, 2010). Such framing of responsibility and failure is indicative of the problem partisan politicians in facing a catastrophe, a scale of exception that adequate planning and preparation is often too complex to execute prior to the exception.

Discussion and Policy

This paper has explored how disaster and catastrophe are rooted in social exceptions that generate change to socio-historically constructed projects across space and time. We

have also attempted to draw a conceptual distinction between disaster and catastrophe. Catastrophe is different from a disaster in that most or all of a community or area is impacted, many local individuals are unable to undertake their usual roles, the community undergoes a period of prolonged inoperability, media plays an increasing role in the construction of the public perception of the occasion, and the political arena shifts from a local or regional issue to a national or international one. This paper explores the Deepwater Horizon explosion and subsequent oil spill and finds substantive support for that occasion as a catastrophe.

The distinction between disaster and catastrophe is not simply an academic one, as national and international policymakers have recently become sensitized to differences between these distinctions, and emergency management professionals and policymakers have asserted that more academic research is needed to empirically falsify conceptualization distinctions (Blanchard, 2008). Perhaps the most important consideration for policymakers is the scope of the catastrophe exception. Catastrophe is such a large, cascading exception that it is exceedingly difficult to preposition enough resources prior to the occasion and even if it were possible, the severity of the exception would likely damage many of the prepositioned resources further exacerbating the exception. Catastrophes also often sensitize the public and policy to flaws in the existing social projects such as along age, race, class and gender and geography as the most socially vulnerable are often at greatest risk (Wisner et al., 2004).

Catastrophes also require the effective coordination of a variety of emergency management professionals, technical experts, and policymakers, often for the first time, to confront an occasion that is often the most challenging most have ever encountered.

To combat these considerable challenges, we suggest that policymakers develop a model of network governance. A network governance model is ideal for dealing with complex problems that require shared oversight with partners from diverse networks to ensure that the network goals are met. Network governance begins with a focus on incorporating diverse individuals and diverse knowledge through the establishment of linkages across social frontiers. A social frontier is any place where two or more social worlds meet and where people of one kind meet people from another kind (Burt, 1992). For example, emergency management professionals, technical experts, and policymakers frequently compose three separate social worlds, often with little connection to one another. Although a lack of connection between social worlds is not inherently problematic, sociologists have known for some time that different social worlds often have access to different forms of knowledge and when information is shared between worlds, problems can more effectively be resolved (Granovetter, 1973).

Connections across social frontiers offer the possibility that those with diverse knowledge about catastrophe will have better access to policymakers and those policymakers in a position to do something about reducing the size of exception may be more inclined to do so. However, transmitting knowledge does not necessarily ensure that the underlying problems associated with catastrophe can be avoided. Policymakers, or those in a position to do something about the problem, must be willing to take effective measures to resolve the catastrophe as soon as possible after impact.

Another important policy aspect of catastrophe, particularly in light of anthropogenic catastrophes such as the Deepwater Horizon oil spill, is that traditionally, policymakers govern by focusing on whether individuals, organizations or institutions are in

compliance with the existing law, and hold hearings as to whether the current law is effective. In contrast, governance is the process of monitoring and surveillance of individual or institutional behavior to ensure the continuity of the overall system (Eisenhardt, 1989). Governance does not necessarily mean an absence of law or regulation or that compliance no longer needs to be met, but rather, focuses policymaker's attention toward monitoring the overall goals of the an industry.

Since our contemporary socio-historical project is one of rapidly expanding innovation leading to profit opportunities, effective risk management and surveillance are important aspects of this process that may not necessarily require regulation but oversight.

Therefore, in some sectors of the private sector, particularly in new or emerging areas, monitoring and oversight may offer ample protection against adverse risk, provided policymakers have access to knowledge from diverse viewpoints about how new areas are developing within the private sector. Thus, by linking networks of academics, technical experts, and policymakers across social frontiers into a framework focused on governance, it may be possible to reduce the severity and duration of future anthropogenic catastrophes.

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Caribbean Disaster Information Network – A Free Access Resource

Beverley Lashley

Abstract

Through initial funding from the European Community Humanitarian Office (ECHO) in June 1999, CARDIN (Caribbean Disaster Information Network) was established with the major objective of strengthening the capacity within the Caribbean Community for the collection, indexing, dissemination and use of disaster-related information while serving as a sub-regional disaster information centre. The presentation will focus on how the major players within the Caribbean disaster community have collaborated to form CARDIN – a multidimensional network and its accomplishments over the years of fulfilling its mandate of providing free access to Caribbean disaster resources.

The Caribbean – Against the Odds

The Caribbean islands form a broad arc that extends for approximately 4,000 km north to south from Florida (U.S.A.) to Venezuela. The size of the islands vary, based on the *The World Factbook 2011*, Anguilla has 91 square km and has a population of 15, 094 (July 2011 est.) when compared to Cuba which has 110,860 square km and has 11, 087,330 (July 2001 est.) inhabitants. All these islands share a tropical climate.

The region, however has been plagued with natural hazards of which all types exist in the Caribbean. The most common being the geological and hydrometeorological. The geological hazards include earthquakes, tsunamis, volcanoes and landslides while the hydrometeorological hazards include hurricanes, tropical storms, landslides, droughts and floods. However in the region the primary natural hazards, are those caused by hurricanes and floods rather than earthquakes. The Atlantic Oceanographic and Meteorological Laboratory has recorded that between 1886 – 2005 approximately 1,519 tropical storms and 932 hurricanes have been recorded in the North Atlantic. What is noticeable is that the frequency with which hurricanes affect any one island is low resulting in a lack of consciousness among the population as to the real risks to their own lives and property. All the islands are vulnerable to the effects of natural hazards but the seriousness of each impact is affected by the levels of physical and socio-economic factors of each island at the time of impact.

Hurricane David (September 1979) caused great devastation to Dominica which left 80% of the population homeless. Many considered this the turning point as Caribbean nationals began taking the matter of disaster management more seriously. More recent hurricanes that have affected the region include Ivan (2004) which caused 124 deaths

throughout the Caribbean and the Eastern United States. In August 2008 Gustav caused extensive damage of over 6.62 billion US dollars to the Cayman Islands, Cuba, the Dominican Republic, Haiti, Jamaica and sections of the USA.

Disaster Preparedness and Response Mechanism

Most countries in the Caribbean have government agencies that have the responsibility of coordinating the activities of disaster preparedness and management – before, during and after such events. However since hurricanes are low frequency events it has been a difficult task to persuade policy makers to consider disaster management as a high priority. Since a hurricane may occur once in fifty years, and most Caribbean governments have a maximum life span of five years before elections become due, it is hard to get governments to consider hurricanes as a real priority.

Some governments have adopted mandatory building codes as a response mechanism while others take an ad hoc approach to building. The assumption here is that the builders and developers would in fact meet the correct building standards. However it was as a result of Hurricane David (1979) that the Pan-Caribbean Disaster Preparedness and Prevention Programme (PCDPPP) based in Antigua as a regional initiative was established. The project contrived the development of a specialized group of professionals who recognized the need for a Caribbean commitment to regional disaster management.

In 1991 the Caribbean Disaster Emergency Response Agency (CDERA) was formed by an Agreement of Heads of Government of the Caribbean Community (CARICOM) The main function of this agency was to provide an “immediate and coordinated response” to any disastrous event which has affected any Participating State. On September 1, 2009

CDERA was transformed to CDEMA. The Caribbean Disaster and Emergency Management Agency's website highlights that they "fully embrace the principles and practice of Comprehensive Disaster Management (CDM) which is an integrated and proactive approach to disaster management". Presently there are eighteen (18) Participating States covered by CDEMA.

In the Caribbean many regional and international agencies such as the International Federation of the Red Cross and Red Crescent Societies (IFRC) and the Pan American Health Organization (PAHO) have supported local efforts through the implementation of new programmes and the development of new policies.

Disaster Documentation Centres in the Caribbean – early initiatives

The San José Disaster Documentation Centre (CDD) was formed in 1990 by the PAHO/WHO with support from the International Decade for Natural Disaster Reduction (IDNDR) now the International Strategy for Disaster Reduction (ISDR) and the Costa Rica National Emergency Committee. By 1997 six organizations sponsored the creation of the Regional Disaster Information Centre (CRID) for Latin America and the Caribbean thus building on these early initiatives.

Caribbean disaster agencies are more concerned with their mandate of disaster relief and response. Therefore the information needs are often not seen as "core" to the work of these organizations. In fact apart from CARDIN, only the Office of Disaster Preparedness and Emergency Management in Jamaica and CDEMA have computerized databases on Caribbean disaster information.

The DIPECHO Strategy

The Disaster Preparedness Programme of the European Commission's Humanitarian Aid Office (DIPECHO) has three principal types of action which includes the development of human resources and the strengthening of organizations and institutions and community-oriented pilot projects. The sub-programme funds disaster preparedness projects in countries outside of the European Union.

Under this sub-programme the First Action Plan for the Caribbean was initiated in 1998 followed by the second in 1999 that emphasized the importance of "establishing regional links and strengthening national and regional-based institutions". DIPECHO recognized the need for utilizing synergies between the various disaster agencies both at the national and regional level. A proposal was submitted by the University of the West Indies (UWI) to ECHO and by June 1999 funds became available for the establishment of the Caribbean Disaster Information Network. ECHO provided funding for CARDIN up to 2004 and since then the UWI Mona Library. Other agencies such as CUSO have provided resource personnel and in recent years the Disaster Risk Reduction Centre at the UWI Mona Campus, Jamaica.

The Experiences of the Caribbean Disaster Information Network

The original idea of developing CARDIN as a node of the Regional Disaster Information Centre for Latin America and the Caribbean (CRID) gave way to a more Caribbean focussed Disaster Information Network providing linkages with Caribbean Disaster related organizations. CARDIN was formally established in June 1999 but its origins can be traced to a meeting in Jamaica in December of 1997 between the International Decade for Natural Disaster Reduction (IDNDR), the Pan American Health Organization (PAHO) and the University of the West Indies Main

Library at the Mona Campus. These early initiatives resulted in the formation of CARDIN as it known today. The activity of gathering disaster related information throughout the Caribbean region which is the main focus of CARDIN is of most recent development.

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CARDIN's mission is to develop a comprehensive database on disaster related information within the English, Spanish, Dutch and French speaking Caribbean with a view to providing wider access to and coverage of disaster information in the region.

The early development of the CARDIN database was accomplished as part of the Caribbean Disaster Mitigation Programme supported by USAID, OAS. Through funding from OAS the Unit for Disaster Studies, Department of Geography and Geology, UWI, Mona was able to collaborate with CARDIN in producing the Natural Hazards and Disaster database (NATHAZ). This database along with another in-house database at the Science Branch Library, UWI, Mona provided the nucleus for the CARDIN database. The early success of the CARDIN project was made possible through the assistance, co-operation and expertise of Regional Disaster Information Centre for Latin America and the Caribbean (CRID), Disaster Preparedness Programme of ECHO (DIPECHO), Caribbean Disaster and Emergency Management Agency (CDEMA), PAHO, Office of Disaster Emergency and Preparedness in Jamaica, the Department of Geography and Geology and UWI, Mona Campus Library.

Network Model

A network model was established to accomplish this aim. The model as illustrated in Figure 1 demonstrates the structure of the network with the UWI Library as the hub. The UWI Library was selected as it is a regional institution and offers distance education to most of the Caribbean islands. Partners forming the nucleus of the network are identified as focal points on the basis of technical capability and expressed interest. All persons /organizations who have disaster related information can become members of the network by contacting the CARDIN Secretariat and initiating and maintaining a link with it.

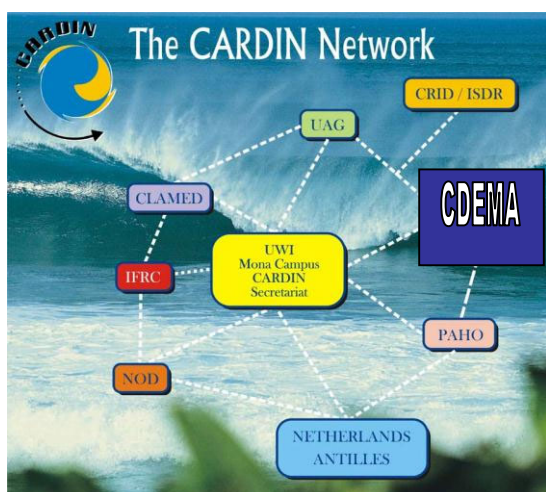


Figure 1 – Network Model

The model is unique in that it incorporates all the language groups and involves the major players in Caribbean disaster management. The agencies involved with CARDIN include the Caribbean Disaster and Emergency Management Agency (CDEMA), the Pan American Health Organization (PAHO) where the regional office is responsible for collection of records pertaining to the health sector across the Caribbean, the International Federation of the Red Cross and Red Crescent Societies (IFRCS) representing National Societies within the Caribbean, the Université Antille Guyane (UAG) representing the French

CDEMA -Caribbean Disaster and Emergency Management Agency

CLAMED -The Center for Latin America Disaster Medicine

CRID -Regional Disaster Information Center for Latin America and the Caribbean

ISDR -The International Strategy for Disaster Reduction

Speaking Caribbean, the Center for Latin America Disaster Medicine (CLAMED) which is based in Cuba and within CARDIN is responsible for Cuba and the Dominican Republic.

Bridging the gap in Caribbean Disaster Management

The structure of CARDIN clearly illustrates the ability of the network to function effectively using limited resources. Each disaster agency brings its unique quality and operation to strengthen the network, CDEMA is able to organize the collections within its mandate to incorporate this information into the CARDIN database. PAHO can readily provide health data, CLAMED assist with training in the Spanish speaking Caribbean, the IFCRS assists in organizing seminars at the community level. It is these synergies which makes CARDIN able to achieve its goals and objectives.

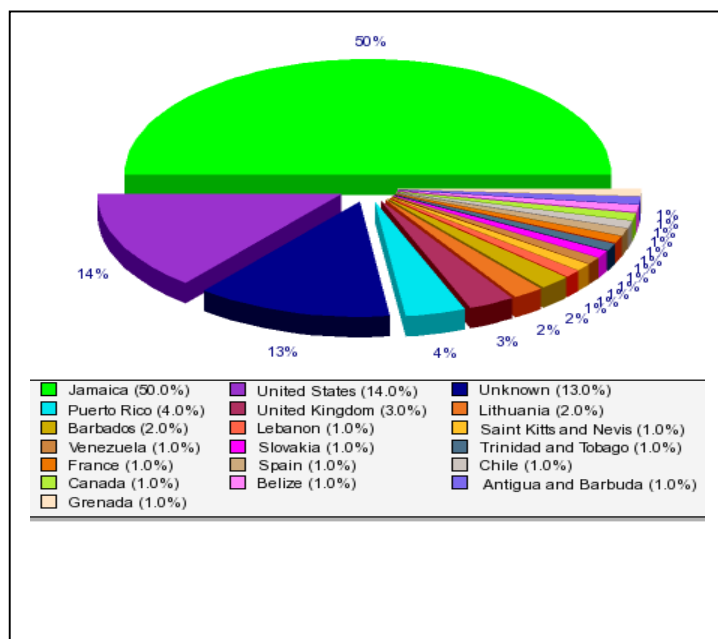
The major goals of CARDIN have been tied into its services. Its goals are:

- To provide wider access to and coverage of disaster information in the region.
This has been achieved through its website at <http://www.mona.uwi.edu/cardin/home.asp>
- To create a database of disaster related information available on the Internet, CD's and in print format which will provide an essential resource for policymakers, practitioners, researchers and the general public. In 2000 CARDIN's bibliographic disaster database was made available on the internet. This was a great accomplishment during this period as most organization did not have online records. Through contacts with the Latin-American and Caribbean

Center on Health Sciences Information (BIREME) based in Brazil we were able to secure the software free of cost. This software makes the ISIS databases accessible on the internet.

- To facilitate the dissemination of disaster related information to the general Caribbean public on the internet, through the newsletter and document delivery services.
- To establish and maintain relationships with other agencies for effective coordination of disaster information activities within the region. An online directory of the main stakeholders in Caribbean disaster management was created as a resource tool.
- To create full text documents and scanned images on disaster related information making these available on the internet. In January 2006 CARDIN launched its Virtual Disaster Library. The virtual library is a collaborative effort between CARDIN, the Unit for Disaster Studies (UDS), Department of Geography and Geology, UWI and the Regional Disaster Information Center for Latin America and the Caribbean (CRID)

Figure 2 – Usage of the Virtual Disaster Library May 2011



This virtual library offers full text documents as well as presentations, maps, audio and video clips related specifically to the Caribbean region, making it truly one-of-a-kind resource.

Challenges

Organization of Caribbean Disaster Documentation Centres

A key challenge for the future will be the organization of documentation centres in the Caribbean. This initiative will have to be addressed by the governments of each islands or agencies such as CDEMA or CARDIN who have already started this initiative in some countries. Funds have to be sought to devise responses to rise to this challenge. Once these collections have been organized the sharing of resources and the formation of structured document delivery services can be initiated and fee-based services where agencies repackage information which is then made available commercially can be introduced.

Development of a strategic plan

There is need to develop a strategic plan to improve the services with integrated information in the Caribbean. Such a plan should address the following concerns:

- Identifying who are our present users
- Identifying who are our potential users
- Identifying the information needs of government and non-government users
- Identifying disaster information sources which can be utilized for future development and economic growth
- Development of a marketing plan to make the public aware of the services being offered. This can be accomplished with the collaborative efforts of the Caribbean disaster agencies.

Government Advocacy

Winning the support of the Presidents and Ministers in the region will be another challenge. Most countries have now adopted a national policy, which recognize the importance of disaster reduction, but the significance of information and the need to manage this resource adequately is yet to be recognized and actively supported.

Training

In depth training will have to be a main focus of CARDIN. CARDIN has developed a *Training Manual* for its network participants but the challenge here is to provide continuous training. The proposal has been made for the development of “online training links” but disaster agencies will have to identify personnel and incorporate the information skills into the job descriptions of their workers.

Sustainability

The activities of CARDIN have provided the avenue for persons within the community to become self sufficient .Through its Public Education Programme persons are given hands on practice of finding Caribbean disaster information on the internet, exposure to in-depth training on disaster information management and to be equipped with computers and organized collections. What is lacking however is the long term funding to undertake extensive training to ensure that all the agencies are at an optimum functioning level. CARDIN will have to secure long term funding as well as reach a level of self sustainability where it can provide services to recoup the overhead cost for its functioning.

Conclusion

Education and the adoption of prevention measures can considerably alleviate the damage caused by natural disasters in the region. CARDIN is playing a pivotal role in disaster information by providing a centralized location for Caribbean disaster information. It is hoped that eventually more members will join the network as active and enthusiastic participants and CARDIN will become the “*Resource Sea of the Caribbean*“ for disaster information.

Poster Abstracts

Flood, hurricanes, fires and storms...**a look at disaster preparedness in the Open Campus Libraries**

Kisha Sawyers

The poster explores training of staff, identification of emergency exits and management perspective on the subject. The poster illustrates: the variety of roles that librarians can assume in emergency and disaster planning, preparedness, response, and recovery; phases of preparedness to avoid unnecessary loss of collections and equipment, and the type of damages that library properties can sustain in periods of disaster.

The Impact of Disaster-Preparedness Efforts by Archives and Libraries in the Republic of Indonesia

Reema Mohini_ and Vickie Toranzo Zacker

The Republic of Indonesia is sadly no stranger to disasters, having suffered from multiple tsunamis, terrorist attacks, earthquakes, volcanoes, and flooding since the year 2000 alone. The sheer number of disasters, along with the knowledge that future disasters are likely, has led to a focus on disaster-preparedness within this country. Disaster-preparedness and response efforts are government led in Indonesia but have become increasingly localized following the 2001 decentralization of government services. Following the decentralization, archives and libraries play an important role in disaster-preparedness efforts in local regencies and municipalities by providing information, assisting with research, and otherwise meeting the needs of local communities. By looking at the official disaster-preparedness efforts of archives and libraries, and the

affect of these efforts during and following disasters, the impact of disaster-preparedness efforts by archives and libraries can be better understood. More specifically, this poster presentation focuses on three geological disasters that took place in Java and their impact on this region's disaster-preparedness.

Survival ! The 2005 floods, University of Guyana Turkeyen Campus

Simmons La Rose and Ms. Gwyneth George

Disasters have no face and come in varied forms, but this presentation is focused on the 2005 floods, which was experienced by the University of Guyana Turkeyen Campus.

Library services at the University Library are critical since it is said that a library is the gateway to the University. However, in 2005, it was faced with a major natural disaster- a flood, which severely affected the university as a space and also its population. Great inconvenience was suffered, for example, staff and patrons had to be accommodated and operated at split locations.

This paper is informed by research literature, drawing on published literature, on present models and draws on the Turkeyen Campus experiences. Questionnaires form part of the method to be used , to gather information on the library operations and practices regarding the management and management challenges, all in all, seeking to find the gaps in the whole process “ the before , the during and after the floods”. Added to this, the findings will highlight the changing needs of individual's everyday work situation at all levels. These include effective educational communication and programmes, which are necessary as well as to relate the effects of the environmental forces on the library. In conclusion, ever present is the presence of the threat taking into consideration our position to the sea walls. The library nevertheless has to continue its quest to be prepared

in the event of another. Highlights will also be of the best practices, the challenges and showcasing the activities that helped to overcome them; identify the lessons learnt that will influence the way the library operates, key drive of change how we use this experience to prepare in the event of another. Added element of photographs depicting real life scenes to bring the presentation alive will also be included.

Cultural Preservation Projects as the Basis for Community Building in Post-Earthquake Haiti

Bertram Lyons and Brooke Wooldridge

One of the goals of the Association of Cultural Equity (ACE) is to ensure that the work of ethnomusicologist Alan Lomax is preserved, disseminated and repatriated to the Caribbean cultures where it was originally produced. While the plans for digital repatriation of the Lomax recordings across the Caribbean (Trinidad and Tobago, Grenada, Saint Lucia, Martinique, Dominica, Guadeloupe, St. Kitts and Nevis, Netherlands Antilles, St. Barthelemy, Anguila, Puerto Rico, Dominican Republic, Bahamas) are well underway, the return of these recordings to Haiti after the devastating earthquake on January 12, 2010, illustrates the potential for preservation and digitization of cultural heritage as both mechanisms for disaster preparedness and active factors for social rebuilding after the disaster. Lomax's 1936 Haitian recordings—1,500 audio recordings and six films—are the earliest major set of audio and audiovisual recordings of cultural expression to have been made in Haiti, and the largest to-date. ACE began to digitize and catalog these materials in 2004. Working with NGOs (the Green Family Foundation and the Clinton Global Initiative), Haitian government ministries, the

FOKAL cultural center (The Fondation Connaissance et Liberte/ Fondasyon Konesans Ak Libete) and ISPAN (Institute de Sauvegarde du Patrimoine National), ACE has begun an effort to repatriate digitized copies of these intangible cultural assets of Haiti to be made available to the Haitian people through access in diverse Haitian repositories, reintegration into school curricula, representation via local media, and reuse by living artists and traditions. What does it mean to have these recordings suddenly available to the people of Haiti? What might the impact of such a project be in a country struggling to sustain its population and to rebuild its infrastructure after a massive natural disaster such as an earthquake? This poster will link digital repatriation of intangible cultural heritage with community building efforts currently underway in Haiti.

METS Editor & Viewer Tool for Libraries, Archives, Museums, and More

Laurie Taylor and Mark Sullivan

Disaster preparedness and recovery is dependent on resources and planning that facilitate restoration. Finding aids and other metadata about collections are essential documentation resources for recovery activities because they provide information on the contents and locations of collections. These metadata resources can only be useful if they are preserved and accessible following a disaster. This poster explains the development, functionality, and use of the open source METS Metadata Editor & Viewer used by the State University Libraries throughout Florida and by the Digital Library of the Caribbean. The METS tool can be freely downloaded and used. It best serves those working on digital projects or working with multiple metadata formats. The METS tool runs as a simple windows application and allows the creation of METS from a folder of

items. It additionally allows the user to enter all of the bibliographic information, and assign page names and divisions to the structure map. The METS tool was designed to support the metadata needs of libraries, archives, and museums. Because of this key focus on interoperability, the METS tool already supports METS/MODS, MARC, Dublin Core, and EAD metadata formats. The METS tool also allows users to create metadata in all of these formats by importing a spreadsheet with labeled columns for the different metadata elements. The METS tool was created by the University of Florida to meet the State University Libraries' complex needs for working with multiple types of metadata standards. The tool has evolved and is now used by libraries, archives, museums, and other institutions.

Disaster Mental Health: Building a research level collection

Claudia J. Dold and Ardis Hanson

The University of South Florida Library System (USF) supports collection development for the FMHI Research Library Disaster Mental Health Collection. This disaster mental health initiative is one of several initiatives to build additional collections of distinction at USF. We built a conceptual framework for the collection and its subsequent development, using these definitions and premises. Disaster should be viewed within the “all-hazards” model of emergency preparedness. In the all-hazards model, the term “disaster” is broadly defined to include “any event, real and/or perceived, which threatens the well-being of citizens.” The scope of this collection should properly include titles pertaining to the nature, causes, prevention, mitigation of, and response to, different types of disaster threats (with a particular focus on their psychosocial aspects), and to the

nature, causes (including perpetrators), prevention, mitigation of and response to mental, emotional, health-related and behavioral conditions that are associated with or arise from disaster events and their affected populations (e.g., first-responders, refugee, migration, and diaspora). The proper reach of a collection focused on these issues should include/draw content broadly from the social/behavioral and medical sciences to address such areas as services delivery, law & policy, population, health status, epidemiology (prevalence and incidence data), structural factors, and security. This suggests that criteria for discovery and inclusion of relevant titles must extend beyond those that include the specific phrase “disaster mental health.”

We believe this approach to collection development allows us to quickly target and develop collections in response to the changing nature of disaster services, particularly within a public health/mental health perspective. It also allows us to code older materials in our collection to capture the scope and depth of our collection.

Reaching Across Maryland to Come Together

P.J. Grier and Debra Berlanstein

An Express Planning and Assessment Award was received by the University of Maryland’s Health Sciences and Human Services Library from the NNLM - SE/A Region to plan and organize a conference of representatives from across Maryland to discuss the role of libraries in emergency preparedness and disaster recovery. The goal of the one-day conference was to bring together and introduce people from various types of libraries and from first responders and emergency coordinators to begin a statewide effort to define the library’s role and establish regional partnerships. Setting: Campus Center,

University of Maryland, Baltimore, Maryland. November 2010. Participants: Librarians from Health Science Libraries, Public Libraries, Academic and Special Libraries from across Maryland as well as state and county emergency personnel and state public health workers in the field. Program: Contributed agency expertise included the State Library of Louisiana, the Maryland Emergency Management Agency, the US Homeland Security Digital Library, the National Library of Medicine's Disaster Information Management Research Center and the UMB Center for Homeland Security. Afterwards time was allowed for the expression of participants' ideas on future collaboration, impressions from emergency personnel, followed by breakout sessions to foster regional networking and goal setting. Main Result: The one-day conference was a starting point for further planning in the event of local and/or regional disasters in Maryland. Follow-up meetings were planned to continue the process. A follow up questionnaire will be administered 9-12 months following the conference to assess continued progress across the state. Conclusion: Bringing librarians, first responders and public health workers together to discuss how libraries can contribute to the State's Emergency Preparedness plan will foster partnerships and open discussion in advance of the need occurring, as well as highlight the role that libraries can play in providing continuity of information during a disaster. This was the first step in a new ongoing partnership with different libraries and emergency personnel across Maryland.

WORKSHOPS

(To be provided by Luisa Vigo-Cepeda.)

REPORTS AND DOCUMENTS

Reports from ACURIL General Assembly and Special Interest Group meetings.

(To be provided by Luisa Vigo-Cepeda)

BIOGRAPHIES

Biographies of Contributors

John A. Aarons

John Aarons is University Archivist at the University of the West Indies, Mona, a position he has held since January 2009. Prior to that, he was Government Archivist, Jamaica Archives and Records Department, 2002 – 2008 and Executive Director of the National Library of Jamaica, 1979 – 2002.

A graduate of the University of the West Indies, Mona, he holds an M.A. degree in Heritage Studies and Post Graduate Diplomas in Library Studies as well as Archives Administration (University of London).

He has written extensively on disaster preparedness and response in relation to library and archive collections and has made presentations at numerous local, regional and international conferences. These include the ILFA Preconference on Disaster Preparedness in Berlin, 2003 and the ACURIL/IFLA Preconference on Disaster Planning in Port of Spain, Trinidad and Tobago, 2004.

James Andrews

James Andrews is Associate Professor and Director at the University of South Florida, School of Information. His research focus is within the interdisciplinary field of biomedical informatics, where he has interests in clinical research informatics, controlled terminologies and other standards, and information seeking behaviors in various health contexts. Dr. Andrews works collaboratively with researchers from USF Health, within the School of Information, and elsewhere.

John Barnshaw

John Barnshaw is a Post-Doctoral Fellow in the Department of Sociology at the University of South Florida where his research focuses on the cultures and consequences of risk in a variety of contexts ranging from infectious disease, to disasters, to financial crises. Dr. Barnshaw received his Ph.D. in Sociology from the University of Delaware, where he was Projects Coordinator at the Disaster Research Center (2006 – 2009) and a University Dissertation Fellow (2009 – 2010). Currently, his research blends behavioral finance, public policy and social problems theorizing to explore how financial risk-taking led to the recent economic crisis. Dr. Barnshaw also has ongoing research in understanding how disasters exacerbate social inequality over time at the individual, organizational and societal levels. His research has been recently published in *Health Sociology Review*, *Social Forces*, *Annals of the American Academy of Political and Social Science*, and *Contemporary Sociology*.

Marielena Bartesaghi

Dr. Bartesaghi is a faculty member of the Communication Department at the University of South Florida since 2005. Weaving together talk and text, her work on discourse highlights the connections between talk-in-interaction and the larger institutional and social framework within which talk is situated, enabled, and constrained. Her research will continue to explore power dynamics in conversation, institutional and social

narratives and linguistic constructions, and using a discourse approach to reveal the power of the taken for granted in our everyday communication. At the 2005 National Communication Association convention in Boston, Dr. Bartesaghi was awarded the Outstanding Dissertation Award from the Language and Social Interaction Division.

Debra Berlanstein received a Bachelor's degree in Sociology from Brooklyn College and a Masters of Library Science from Long Island University and serves as the Head of Reference & Research Services and Library Liaison to the School of Public Health at the Health Sciences and Human Services Library at the University of Maryland, Baltimore. Debra was a Reference Librarian for over 20 years at Towson University, Towson, Maryland, where she was the Liaison to the Nursing and Psychology departments. She joined the University of Maryland from her previous position as the Head of Information Services at the Hirsh Health Sciences Library at Tufts University in Boston. She serves on the Institution Review Board for the School of Medicine at the University of Maryland and her main areas of interest include evidence based practice and medical informatics.

Alma Dawson

Alma Dawson is the Russell B. Long Professor in the School of Library & Information Science at the Louisiana State University. She is also the director of Project Recovery from the Louisiana State University. She holds a Ph. D. in Library Science & Higher Education from Texas Woman's University and an A.M.L.S, in Library Science, University of Michigan-Ann Arbor.

Claudia J. Dold

Claudia Dold is Assistant Librarian in the Florida Mental Health Institute (FMHI) Research Library.

Iramène Destin

Born in Dessalines, Haiti, Iramene Destin is a French professor. She obtained a doctorate in Teaching Languages and Cultures from the New University of Sorbonne (Paris). Her interests are in the field of teaching methods and societies and the reform of educational policies. At the present time, as part of her dissertation, she is pursuing an evaluation of an experimental competencies approach in Haitian education. Ms. Destin is the coordinator of the Center of Research and Formation in French and Communication (CREFFCO), which she has co-founded with other educators more than five years ago. She is also a co-founder of the Haitian French Teachers Association (APROFH.) In addition to her academic activities, Destin is a comedian who has performed in different places around the world, such as France, Africa, Haiti, and the Caribbean region.

Gwyneth George

Mrs. Gwyneth George, University Librarian of the University of Guyana Library, has worked at that institution for the past sixteen years after working at the National Library, Guyana, for nineteen years. She has also lectured on Guyanese history at the University of Guyana for three years on a part-time basis. She graduated with a Bachelor's degree (hons) in Library Science from the University of the West Indies, Mona Campus, where she won the Faculty prize and a Masters degree in Guyanese and West Indian history

from the University of Guyana. Other awards received were the ACU Fellowship and the Commonwealth Fund for Technical Cooperation (CFTC) Scholarship. Mrs. George's published works include: "The impact of modern information technology in the Caribbean: exploring the challenges for the Technical Services Division" in Caribbean Libraries in the 21st century: changes, challenges and choices and "The Schomburgk bibliography and the Schomburgk Literature" in essays in honour of an explorer and natural scientist. She is also a frequent contributor to the History Today Series, a series of historical articles on Guyana published in the Stabroek News newspapers of Guyana.

P.J. Grier

PJ Grier represents the National Network of Libraries of Medicine in the Southeastern Atlantic Region based at the Regional Medical Library at University of Maryland, Baltimore. He is the Outreach and Access Coordinator providing consulting services in e-licensing, resource sharing, emergency planning & response, teaching, grants administration, and membership relations for 13 southeastern states, including Puerto Rico and the U.S. Virgin Islands. Previously he served as the library and information services director at The Delaware Academy ("Academy") of Medicine in Newark, DE, as a senior consultant to Johnson & Johnson pharmaceuticals in Spring House, PA and various positions at Verizon Communications. He is Jesse Ball duPont Fund Executive Institute graduate and a member of the Medical Library Association's Academy of Health Information Professionals. PJ has an information technology background and holds master's degrees in public administration and library & information science. He expects to earn his certificate in clinical informatics from Johns Hopkins in August 2011.

Ardis Hanson

Ardis Hanson was ACURIL President 2010/2011, former director of the Florida Mental Health Institute (FMHI) Research Library, and a university librarian.

Simmone La Rose

Simmone La Rose is attached to the University of Guyana, Berbice Campus Library. She holds a BA and a post-graduate both from the University of Guyana Turkeyen. Ms. La Rose commenced her stint at the Berbice Campus Library (2003), in the Technical Services area with charge for the Cataloguing department. Presently, she is responsible for the overall Berbice library operations. Her stay in the Library field saw her leading many successful library outreaches, researching and presenting papers at national and international library gatherings. She was awarded the Alma Theodora Jordan Conference Scholarship, (2005) for the English speaking countries. She also presented at the IFLA conference in Milan, Italy, 2009.

Beverly Lashley

Beverly Lashley is the Head, Science Branch Library at the University of the West Indies, Mona Campus. She has been the Coordinator of the Caribbean Disaster Information Network since its inception in 1999. She holds a MBA from Nova Southeastern University, USA and a BA (Hons) in Library Studies from the University of the West Indies, Mona Campus, Jamaica.

Ms. Lashley was the recipient of the Central America/Caribbean Special Fulbright Research Program and was assigned to the Department of Preservation and Collection Maintenance, Cornell University, USA – April – August 2003. In 2006 CARDIN received The Albertina Pérez de Rosa Information Units Alliances and Collaborative Projects in the Caribbean Award. ACURIL, Puerto Rico Chapter Award for its contribution in the region.

Recent publications include *Cooperative planning and disaster recovery strategies: Collections of the comprehensive research libraries of the state of New York*. (2010) and “Disaster mitigation to protect cultural heritage: the Case of Cuba” (2009) in *International Preservation News*.

Lynn Letukas

Lynn Letukas is a PhD student in the Department of Sociology and Criminal Justice at the University of Delaware. She received a B.A. in geography from Millersville University of Pennsylvania. As an undergraduate, she was a research assistant for two years at the Center for Disaster Research and Education (CDRE) where she worked on several projects including a super computer tsunami data sharing project, a community response and preparedness program and quick response research to the Gulf Coast after Hurricane Katrina. She also participated in the Research Experience for Undergraduates (REU) program at the Disaster Research Center in 2005. Lynn joined the DRC in September 2006. She earned her Masters in Sociology from the University of Delaware in 2008. Her masters thesis examined the international humanitarian aid response after the 2004 Indian Ocean tsunami. Her areas of interests include: environmental sociology, environmental justice, social science research methods, race, class and gender, social construction and sociology of disaster.

Alicia K. Long

Alicia K. Long is a graduate of the Master in Library and Information Science program at the University of South Florida, School of Information. Alicia Long is an American Library Association (ALA) 2009 Spectrum Scholar and a 2012 Emerging Leader. Ms. Long’s research interests encompass international librarianship and library services to multicultural populations, especially Spanish-speaking communities in the United States. Ms. Long is an active member of REFORMA (National Association to Promote Library and Information Services to Latinos and the Spanish Speaking) as the Recording Secretary for the Florida chapter. She is currently employed at the State College of Florida Libraries.

Bertram Lyons

Bertram Lyons works as a folklife specialist (digital assets management) with the American Folklife Center at the Library of Congress in Washington, DC. Previously he served seven years as a project manager and collections manager at the Alan Lomax Archive (Association for Cultural Equity) and two years as a media-preservation specialist at the University of Kansas libraries.

Kathleen de la Peña McCook

Kathleen de la Peña McCook is Distinguished University Professor, School of

Information, University of South Florida in Tampa. She has also been director and USF and Dean at Louisiana State University. She holds the PhD from the University of Wisconsin-Madison; the M.A. from the University of Chicago and B.A. from the University of Illinois-Chicago.

Dr. McCook received the Beta Phi Mu Award for distinguished service to education for librarianship in 2003; she has been President of the National Association for Library and Information Science Education; 2002 Latino Librarian of the Year and recipient of the several national awards from the American Library Association including the Catalyst for Change Award; Equality Award; and Diversity Research Award. She is Visiting Scholar at Valdosta State University and was Scholar-in-Residence at the Chicago Public Library in 2003.

Recent publications include *Introduction to Public Librarianship* (2011) "Human Rights, Democracy and Librarians" in *Portable MLIS; Public Librarianship; A Place at the Table: Participating in Community Building; Ethnic Diversity in Library and Information Science; Library Services to Youth of Hispanic Heritage; and Women of Color in Librarianship*.

Adelyne Pinchinat Mocombe

Adelyne Pinchinat Mocombe is responsible for the Media Center for the Student at the French Institute In Haiti. She studied information sciences and acquired the degree of engineer in DESU TIC and local development from the University of Limoges. She is currently pursuing a degree in Engineering and workplace systems from the University of Toulouse.

Reema Mohini is pursuing an MLIS degree at the University of South Florida where she is also a graduate assistant in the School of Information. She is an active member of the student chapter of the American Library Association, serving as the current chapter president. She also graduated with honors from American University in Washington, DC with a BA in International Studies.

Kisha Sawyers

Kisha Sawyers is the Librarian, Caribbean Child Development Centre, Consortium for Social Development and Research, University of the West Indies, Open Campus. Kisha holds both the MA and the BA (Library and Information Studies) from the University of the West Indies, Mona, and a Diploma in Business Administration from Excelsior Community College, Jamaica. She received the ACURILEAN Star 2008 for 'excellence services for special communities'.

Curtis Small

Mr. Small is a student in the Masters of Library Science at the Simmons College Graduate School of Library and Information Science.

Mark Sullivan

Mark Sullivan is responsible for the software development of the digital library management system of UF. He leads the development of the deployment and customization of an enterprise-level open source digital library management system.

Sullivan authored the dLOC metadata submission toolkit that enables Caribbean and U.S. partners to send images and metadata to a centralized processing system. Sullivan plays an integral role in the application of all existing and new technological innovations to improve accessibility and usability of resources.

Laurie Taylor

Laurie Taylor is the Interim Director of the University of Florida's Digital Library Center. Her current projects include supporting new forms of digital scholarship and digital humanities work in and through the UF Digital Collections (UFDC), continued development of UFDC in support of the Library collaboration on digital scholarship, and digital production. She is the Technical Director for the Digital Library of the Caribbean, an international collaborative with over 20 partner institutions, as well as Technical Director for the Florida Digital Newspaper Library and Co-principal Investigator on *America's Swamp: the Historical Everglades*, a project to digitize six archival collections. Her research is within the digital humanities field and focuses on contextualizing digital materials in digital collections from academic and cultural heritage institutions. She has published articles on collaborative and international digital libraries, digital media, open access, and video games and other forms of literature; and co-edited a collection on digital representations of history and memory, *Playing the Past: Video Games, History, and Memory*.

Brooke Wooldridge

Brooke Wooldridge is the Project Coordinator, Digital Library of the Caribbean, Latin American and Caribbean Center at Florida International University. Brooke has worked with the Digital Library of the Caribbean (dLOC) since 2008, and is currently focusing on two major projects: to develop an online, open access Caribbean Newspaper Digital Library and to support the dLOC Protecting Haitian Patrimony Initiative (PHPI). Since the earthquake on January 12, 2010, PHPI has led the effort to provide assistance to the libraries and archives in Haiti and directly secured over \$50,000 in direct and in-kind assistance. Brooke has also shared information and advocated for the needs of the partner institutions with colleagues in related fields and at many academic conferences. As the coordinator for dLOC and a member of the Board of the Haitian Studies Association, Brooke continues to work with various local and international partners to provide assistance and support for the libraries and archives through dLOC's on-going partnerships. Brooke received her Master of Arts in Latin American & Caribbean Studies from Florida International University and a Bachelor of Arts in Spanish & Business Administration from Greensboro College. Her prior professional experience includes work with the International Organization for Migration in Colombia, the FIU Colombian Research Institute, secondary education and international sales.

Pat Young

Pat Young is Resource Collection Coordinator at the University of Delaware's Disaster Research Center. She holds an M.A. from the University of Delaware and a B.A. from Nazareth College in Rochester, New York. She also holds a Certificate in Museum Studies from the University of Delaware.

Pat is a founding member of both the Delaware Disaster Assistance Team (DDAT) and the University of Delaware's Emergency Response Working Group (ERWG). She also currently serves as Vice Chair of both organizations.

Pat's presentation is based in part on her paper, *Objects of Value: Addressing Emergency and Disaster Mitigation, Preparedness, Response and Recovery Issues in Collections*, which was published by the Disaster Research Center as Preliminary Paper No. 364 in 2009.