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Coastal Communities Resiliency Project NOAA Bibliography

Shirley Laska
University of New Orleans

Bob Gramling
University of Louisiana at Lafayette

Steve Kroll-Smith
University of North Carolina

Brenda Phillips
Oklahoma State University

Walt Peacock
Texas A & M University

See next page for additional authors

Authors
Shirley Laska, Bob Gramling, Steve Kroll-Smith, Brenda Phillips, Walt Peacock, John Pine, Pam Jenkins, Pat Stukes, Gregory Button, Nicole Buras, Richard Krajeski, and Kristina J. Peterson

Coastal Communities Resiliency Project NOAA Bibliography
(Including Louisiana Coastal Bibliography)

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Contributors:

Dr. Shirley Laska, *University of New Orleans*
PhD, Professor of Sociology
Director, Center for Hazards Assessment, Response and Technology (CHART)
CERM Bldg. Room 339
University of New Orleans
New Orleans, LA 70122
slaska@uno.edu
504/616-3846

Dr. Bob Gramling, *University of Louisiana at Lafayette*
Robert Gramling, Ph.D., Professor of Sociology
and Director of the Center for Socioeconomic Research,
University of Louisiana at Lafayette
Room 220 Mouton Hall
Lafayette, LA 70504
gramling@louisiana.edu
337-482-5375

Dr. Steve Kroll- Smith, University of North Carolina
Steve Kroll-Smith, Ph.D. Professor of Sociology
Head of Department of Sociology
University of North Carolina –Greensboro
Greensboro, NC 27402
s_krolls@uncg.edu
Editor, *Sociological Inquiry*
sociological_inquiry@uncg.edu

Dr. Brenda Phillips, Oklahoma State University
Brenda Phillips, Ph.D., Professor
Center for the Study of Disasters & Extreme EventsFire & Emergency Management Program

Department of Political Science
Oklahoma State University
536 Math Sciences Building
Stillwater OK 74078 USA
(405) 744-5298
Fax (405) 744-6534
brenda.phillips@okstate.edu

Dr. Tony Oliver- Smith, University of Florida
Anthony Oliver-Smith, PhD,
Munich Re Foundation Chair of Social Vulnerability,
Institute for Environment and Human Security of the
United Nations University
Bonn, Germany
Professor of Anthropology, University of Florida,
Gainesville, FL 32611
aros@ufl.edu
352-392-2253x251

Dr. Walter G. Peacock, Texas A and M
Walter Gillis Peacock, Ph.D.
Professor Urban Planning and Sustainable Coastal Margins Program
Director, Hazard Reduction and Recovery Center
Texas A&M University
College Station, Texas 77843-3137
979.845.7853 or 979.845.7813
fax: 979.845.5121
peacock@tamu.edu

Dr. John Pine, Louisiana State University
John C. Pine
Interim Chair, Department of Geography & Anthropology
Director, Disaster Science & Management
Louisiana State University
Baton Rouge, LA 700803
(225) 578-1075
jpine@lsu.edu
http://www.risk.lsu.edu
http://www.katrina.lsu.edu

Dr. ***Pam Jenkins University of New Orleans***
PhD, Professor of Sociology
Faculty Associate, CHART
Department of Sociology
University of New Orleans
New Orleans, LA 70148

504/491-1321
pjenkins@uno.edu

Pat Stukes, Texas Woman's College
Patricia Ann Stukes MA
Doctoral Student of Sociology
Instructor: Texas Woman's University
University of North Texas
Disaster Research/Consultant
JUSBCAS@aol.com

Dr. Gregory Button, University of Michigan
Gregory V. Button, PhD
School of Public Health
University of Michigan at Ann Arbor
Ann Arbor, MI 48109
734-663-5576
gvbutton@umich.edu

Nicole Buras, CHART, University of New Orleans
Nicole Buras
University of New Orleans
Sociology Graduate Student
Graduate Research Assistant: CHART
CERM Bldg., Room 339, UNO R&T Park
New Orleans, LA 70148
nicoleburas@uno.edu

Rev. Richard Krajeski, Community Resource Management,
Richard Krajeski
Sr. Research Analyst
Community Resource Management
2057 Havers St.
Houma, LA 70360
krajeskipeterson@msn.com

Rev. Kristina J. Peterson, CHART, University of New Orleans
Kristina J. Peterson
University of New Orleans
College of Urban Planning and Administration
Graduate Research Assistant: CHART
CERM Bldg., Room 339, UNO R&T Park
New Orleans, LA 70148
krajeskipeterson@msn.com

Coastal Communities Resiliency Project NOAA Bibliography
(Including Louisiana Coastal Bibliography)

Introduction to the Bibliography

Dr. Shirley Laska, Center for Hazards Assessment and Risk Technology,
University of New Orleans

U.S. coastal communities are located in topographic, water and weather environments that impact their existence, perhaps more than these qualities impact inland communities. It is comfortable for us to think of the risks as caused by "natural" processes. Land is low, water rises over it in tumultuous ways and winds blow violently and destructively when major storms strike. We can see, hear and feel these threats. Thus, they are what people talk about when referring to coastal risks. We even have a television channel devoted exclusively to them--the Weather Channel.

However, dramatic catastrophic events such as occurred with hurricanes Katrina and Rita (fall, 2005) are beginning to bring to our collective attention the social dynamics and cultural aspects of the impacts which these physical events have upon coastal communities.

The first way we can look at the social/cultural is to think about where we decide to build our communities (how far inland, how high the land is, how stable it is, how close to a river bank). The draw of the coast is magnetic—60% of the U.S. population lives within 50 miles of the coast. And increasingly coastal populations are becoming urban (World Bank, 2005).

The second is to consider the nature of the infrastructures we build on the coast—how well they incorporate environmentally sound technology or invade coastal wetlands, how high our buildings are, how storm resistant they are as well as our coastal roads and other community structures and how we protect them with healthy coastal marshes and physical protection where appropriate. With the threat of sea level rise from global warming these concerns become even more urgent.

The third way to blend the social/cultural with the physical is to consider the ways in which we use our coasts—beaches and estuarine marshes--for recreational, eco-tourism as well as fishery and hunting activities and what these human actions do to the natural environment--and then how those environmental changes affect the coastal communities.

But, we can move even further in our social/cultural thinking to view the impacts which the physical environment "visits" upon humans as being more caused by the human decisions or almost all caused by what the society and the coastal residents do. For example, it is becoming very common to hear people agree that hurricanes Katrina and Rita were not natural disasters but rather "socially-induced" ones.1 Communities placed in risky locations, residents experiencing abject poverty and organizations that failed in their commitment to appropriate technologies and their diligence in inspecting their functioning. It would never have been imagined that such a shift in thinking

[1] We are using the term "social" as an umbrella term for social, cultural, economic and political processes and characteristics.

could become so universal within the world culture, but such a conclusion has been represented widely through the national and international media. Unfortunately it took the devastation of such storms and in their aftermath the findings of the public investigations to bring about such a major cultural shift in thinking.

This bibliography was created by a team of social scientists who have been doing research, each for at least two decades, on the social/cultural aspects of natural hazard risk. They come principally from universities located in coastal states. The project was conceived before hurricanes Katrina and Rita. These researchers think and live intellectually with the belief that "natural" coastal risks are almost exclusively socially/culturally induced. They believe that the nature of human and community dynamics put certain groups of residents at greater risk than others to the physical risks, to the ensuing social/economic risks and provide differing resources—social, economic and political--to deal with them. The researchers are sociologists and anthropologists and environmental scientists. Their subspecialties will be evident when you read their section introductions and the references sited within each section.

In addition to sharing the belief about the power of the social/cultural they also believe that it is possible to alter the ways in which communities and societies interact with their environment so that they will be less threatened by the physical elements. They believe that actions, reactions and mitigation (focusing specifically on protecting against the elements in social as well as physical ways) are possible. They also deeply believe that the social groups--from families to communities to the society-- can strengthen themselves and be helped to grow more resilient to these natural hazard risks. These efforts are loosely defined in the term –community resiliency.

Bibliography Content Overview

The bibliography begins with a sizeable list of social science studies conducted on coastal Louisiana. This section demonstrates the array of research available to stakeholders within one coastal area as they inform themselves to assist on coastal community resiliency. It also reflects the belief of the group of scholars working on this project of the importance of all levels of knowledge. Frequently called the Traditional Ecological Knowledge (TEK) when applied to local natural resource users such as fishers, traditional knowledge about the coast, the environs and their own communities is the best knowledge upon which to base the efforts to improve community resiliency. By reviewing articles in the Louisiana bibliography it is possible to glean such knowledge and lessons.

The second level of knowledge is that of comparable locations, communities that share similar characteristics, have had similar experiences and have evolved responses that may have contributed to more resiliency or may not have. The third level is the analysis of useful concepts connected by theories about how families, communities, coastal areas "work." We provide the reader with each of these beginning in Section I with the local (i.e. Louisiana studies) and moving in section II to the conceptual.

It is very much the position of the researchers who created this bibliography that a mixture of levels and a respect for the local knowledge is the best approach to enhancing resiliency. National and international experts can bring to the local resiliency conversation fresh ideas that might push the local thinking; but without partnership with the local residents, the national perspective may fall short in assisting the local needs. Outside scholars must respect and spend the time to learn if and how the national ideas will benefit an area. This conclusion has come from each of the team members' involvement with specific disasters. There is no "cookie cutter" approach to resiliency, even from the most famous researchers, that can simply be laid over the local human landscape and made to "work miracles."

The final section of the bibliography is directed toward references that provide direct applied "how to" efforts. That is, how not only to think in a fresh, new way about resiliency to coastal risks but how to take actions that will support such resiliency. It has been prepared by two practitioner/stakeholders who themselves each have several decades of experience with strengthening communities. One of these, Kristina Peterson, is the project manager for this bibliography.

Supplementary to these documents will be maps of the coastal areas that NOAA has prepared. Additional images and other visual material will also be added as the bibliography builds.

This bibliography is not comprehensive. It is a cluster of topics which the group believed are relevant to scholars and stakeholders thinking about the social/cultural dimensions of coastal community resiliency. Each specialist focused upon how their specialty "views the world." It is hoped that this bibliography will evolve by the addition of other scholars to the team and thus other relevant sections of literature. For example, a section on planning research is warranted and hopefully will be added in the next iteration.

We ask the readers of this document to send suggestions both to chart@uno.edu and _____.noaa.gov and the suggestions will be added to further iterations. Also, if a reader finds an article particularly useful, it is important for the project and for the writers to know about that. We will have a section within the website where the comments of users will be added; something like the reviews one sees of books on the Amazon web site. These evaluations will help to direct other users to those articles. Please send those comments likewise to: chart@uno.edu and ___.noaa) and we will post them on the site. We ask the support of the reader in improving and expanding this effort.

This selected bibliography has been compiled with the intention that it should contribute to orienting, stimulating, assisting, supporting action and policy to develop resilient coastal communities in light of their risks. It includes previously published or printed NOAA publications supportive of the above-described goals. The disciplines from which the references are drawn include all of the social sciences and a small selection of research by physical scientists relevant to the social.
The substantive topics and place targets (communities, regions) that are included encompass both international (third tier society) experiences as well as American experiences that did not happen on the coast such as the floods of Grand Forks, ND and the upper Mississippi. While our Western intellectual orientation has rarely accepted that the lessons learned can come to the U.S. from research on traditional communities in third tier countries, what has happened to New Orleans and the coastal communities stretching across the entire northern Gulf of Mexico has challenged that assumption. We therefore argue for inclusion of international references.

Finally, each subsection of the Bibliography has an introduction discussing the theme in a broad way and many of the articles have been annotated. These text sections should facilitate selection of appropriate items in the bibliography for additional review.

Introduction References

World Bank. (2005). "The Natural disaster hotspots: A global risk analysis." Geneva: World Bank.

I. Social Research about Coastal Areas

Introduction: *Dr. Bob Gramling, University of Louisiana at Lafayette*

Dr. Shirley Laska, CHART University of New Orleans

The first section of this bibliography presents a review of social science research about coastal Louisiana and some references pertaining to other coastal areas.2 This section acts as a example of the research available about a local area that can be useful in working toward enhanced resiliency of its coastal communities. The stakeholder/applied researcher interested in pursuing enhanced community resiliency on a coast should try to become familiar with the body of social science research that has been conducted on it. As this bibliography is made available publicly via the NOAA website, it is hoped that researchers who have made contributions to this literature that are not yet entered here will contact NOAA/CHART to submit their contributions (CHART@uno.edu and _____.NOAA).

A.) Louisiana Coast Research

(2.) Allens, T. (2005). Louisiana water resources town hall meeting report. *FEMA*, 1-64.
This report is from the meeting held on November 23, 2005, and discusses a brief history of Louisiana and the importance of Louisiana's natural resources. The text focuses on the effects of Hurricane Katrina and Rita, post-hurricane water recovery, and the efforts to move forward. This area is of noted importance need for it provides for recreational activities, commercial, and transportation needs. The topics examined are hurricane protection, flood damage reduction, wetlands and coastal restoration, flood plain management, flood insurance, water quality recreation, and navigation and commerce. The text also outlines each organization and the tasks for which it is responsible, and where each individual parish stands and where it is headed in restoration. It is concluded that in addition to levees, specific input by each parish is needed to develop a statewide plan to assist in returning to those recreational and commercial activities.

Ancelet, B. J. (1989). The Cajun who went to Harvard: Identity in the oral tradition of south Louisiana. *Journal of Popular Culture*, 23(1), 101-114.

Since the 1960's there has been a rehabilitation of Cajun culture in it becoming more fashionable. In 1755- the Cajuns immigrated after exile from Nova Scotia and lived in isolation; Cajun culture exhibits some rebelliousness against theocracy; Americanization forces: reach peek in the 1930's and 1940's through discovery of oil in 1900; Mandatory education act of 1916- most Cajuns had not gone to school before this and had difficulty do to language barrier; WWI Draft; Mass Media; Modern transportation; Influence of Texas was strong in 30's and 40's; and Learning English was the prerequisite. In oral tradition that stories in French better represent the Cajuns than those in English which deride them

Ancelet, B.J. (1994). *Cajun and creole folktales: The French oral tradition of south Louisiana.* New York: Garland Publishing.

From 1765 through 1785, six thousand Acadian exiles arrived in South LA.;1803: LA purchase; 1812: Statehood; In the begging of the 20th, more immigrants came and an Americanization trend began; 1901: oil was discovered near Jennings at Evangeline field increasing the flood of Anglos; Rise of American nationalism and local school boards followed the State Department and only educated in English; 1930' and 40' the French language became a stigma for the Black Creoles and Cajuns; 1955: the bicentennial of Cajun exiled was celebrated encourage by Politicians, Dudley LeBlanc and Roy Theriot, to encourage a cultural revival; 1968: the establishment of the Council for the Development of French in Louisiana (CODOFIL). Official recognition of the LA French renaissance movement; CODOFIL was at forefront in promoting French on political, educational level.

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[2] Some references for this section were identified through a CHART project entitled "Louisiana Coastal Communities" funded by the U.S. Housing and Urban Development, grant #343-85-4103, University of New Orleans.

Bates, F.L., Fogleman, C., Parenton, V., Pittman, R. and Tracy, G. (1963). *The social and psychological consequences of a natural disaster: A longitudinal study of Hurricane Audrey.* Washington, D.C., National Research Council.

Brasseaux, C. A. (1983). *Acadian education: From cultural isolation to mainstream America*. 133-143.

Cajuns became the target of constant pressure by Anglo-American to accept the educational system and the values that produced it; Acadian farmers saw formal education as having no practical value; Cajuns viewed education as a function of the Catholic Church; Education was also continued at home where elders transmitted folklore and customs and history; Lack of interest in education was consolidated by the lack of opportunity in the Anglo commercial world for Cajuns; In the progressive movement the equation of Cajun with ignorance increased and in 1916 the state legislature approved a mandatory education bill; Expanded economic opportunity in the area required emphasis on education.

(1.) The Bureau of Applied Research in Anthropology, (n.d.). Katrina in context: understanding impacts in light of southern Louisiana's social and environmental landscape. Retrieved Nov. 13, 2005 from Southern Louisiana--Bureau of Applied Research in Anthropology Web Site: http://sola.bara.arizona.edu/4-concerns.htm.

Coastal land loss has not only been attributed to natural disasters such as hurricanes, it is also the result of man's interference. With the industrial advancements such as levee systems, canal dredging, and extraction of natural resources, such as natural gas and petroleum, humans have assisted in the drastic land loss in coastal Louisiana. This fluctuation in population can be attributed to a number of catalysts, including, but not limited to, erosion. The lack of traditional manual labor jobs like commercial fishing, boat and net construction, and employment in the oil fields people are seeking work elsewhere. This decline in population correlates with reduction in the oil industry's investment resulting in a slump in price and demand during the 1980's.

Davis, D. (1979). Wetlands tapping in Louisiana. *Geoscience and man XIX*, 81 92.

Louisiana marsh is the leading fur producer in the country; 1870: Muskrat pelt becomes popular; 1938: Nutria introduced from Argentina- 30 years latter it is the principle animal being trapped; Types of Marsh: saline, brackish, intermediate brackish, fresh brackish is best for fur; trainasses- a trail cut through the marsh; pirogue- principle watercraft of the marsh; 1975-76: 24million dollars generated from fur trapping; "Trapping Wars of 1920's" – lead to commercialization; by 1940 all marsh was controlled and trapped; land owners initiated an agreement to lease; system of lease and licensing evolved; avg lease is 40-121 hectares.

Detro, R. (1979). Transportation in a difficult terrain. *Geoscience and man XIX*, 81 92.

Post WWII marsh buggies become predominant. Petroleum firms began producing them for their own use. A conflict arose between the trappers and geological surveyors over use of the buggies because of the damage it caused, especially those with rubber tires. 1960 all buggies were tracked which was less damaging.

Cutter, Susan L. (Eds). (2001). *American hazardscapes: The regionalization of hazards and disasters*. Washington, D.C.: Joseph Henry Press.

(3.) Forstall, R. L. (1995). Louisiana population of counties by decennial census: 1900 to 1990. Retrieved Oct. 24, 2005, from http://www.census.gov/population/cencounts/la190090.txt.

Drastic declines are shown in the population of certain parishes. For example, in the 1990s, the population of Plaquemines Parish, the Southernmost of all Louisiana's parishes, dropped close to what it was in the 1970s, 25,575; in contrast, the 1980's population was 26,049.

(2.) Freudenburg, W. R. & Gramling, R. (1998). Linked to what? economic linkages and an extractive economy. *Society and Natural Resources* 11:569-586.

Coastal communities are vulnerable in many ways, not the least of which is in terms of their economic development. This article demonstrates how the growth of one extractive activity (offshore petroleum development) can come to dominate and shape a coastal region's social and economic activities while exposing the region's fortunes to the vicissitudes of the global commodity market. (See also Gramling and Freudenburg, 1990 below.)

(3.) Freudenburg, W. R. & Gramling, R. (1994). *Oil in troubled waters: Perceptions, politics, and the battle over offshore drilling*. New York: State University of New York Press.

While coastal and offshore petroleum development has been welcomed in Louisiana and Texas, the expansion of development off California's coast has met with bitter opposition. This book examines how the historical, social, and physical geomorphology of the two different coast lines have affected human use patterns, vulnerabilities and acceptance or rejection of offshore petroleum activities.

Gitierrez, C. P. (1979).*The Colonial french.*

The make up of Terrebonne and Lafourche was largely poor Creole farmers in 1820.1871: Creole association forms for political purposes. 1914: Law in Louisiana forbids the use of French in legal notices and advertisements.

Gomez, G. M. (1998). *A wetland biography: Seasons on Louisiana's Chenier plain*. Austin: University of Texas Press.

Managing marshes and other valued habitats is a process that involves people of diverse backgrounds, interests, and goals; "recognizing the value of local knowledge is thus a first step toward acknowledging the wetland inhabitants are an integral part of the management spectrum."; landscape biography- role that stresses role of individuals shaping the landscape of impressions (ideas) and expressions (material); distinctive character of the marsh has three sources: marshland and chenier ridges.

(3.) Gramling, R. & Freudenburg, W.R. (1990). A closer look at 'local control': Communities, commodities, and the collapse of the coast. *Rural Sociology*. 55(4): 541-558.

Coastal communities are vulnerable in many ways, not the least of which is in terms of their economic development. This article demonstrates how the growth of one extractive activity (offshore petroleum development) can come to dominate and shape a coastal region's social and economic activities and can thus expose the region's fortunes to the vicissitudes of the global commodity market. (See also Freudenburg and Gramling 1998 above.)

(2.) Gramling, R. & Freudenburg, W.R. (1996). Crude, coppertone and the coast: developmental channelization and the constraint of alternative development Ooportunities. *Society and Natural Resources*, 9:483-506.

Through a comparison of Louisiana and Florida coastal development, the analysis shows how once a particular path is taken, the development of human capital and physical infrastructure, make alternative paths increasingly less probable.

(1.) Gramling, R. & Hagelman, R. (2005). A Working coast: People in the Louisiana wetlands. *Journal of Coastal Research,* 44:112-133.

There is considerable variability in landscape across the Louisiana coastline. This article provides a primer on settlement patterns and resource use across this variability and vulnerability.

(2.) Gramling, R. (1996). *Oil on the edge: Offshore development, conflict, gridlock*. New York: State University of New York Press.

The volume is an environmental history of the gradual movement of the petroleum industry into the coastal wetlands, estuaries and bays and then offshore from the Gulf of Mexico coast, primarily Louisiana. The vulnerability of the Louisiana coast line, the interaction of the coastal geomorphology and human activities and the ways that petroleum activities have exacerbated vulnerability are also discussed.

Gregory, H. F. (1985). 'A Promise from the Sun:' The Folklife Traditions of Louisiana Indians. *In Louisiana Folklife: A Guide to the State.* Baton Rouge: Moran Colorgraphic, Inc.

12,000 Native Americans in LA. Historically lived between the whites and blacks, both who borrowed from their culture. 1890-1925: Missionaries became active in Native American Communities. 1780's Houma Indians moved from St. James to the bayous. 60's and 70's pantribal organization occurred reflecting the impact of the AIM.

Gregory, H. F. (1985). Saving Your Own House: Folk Culture and Mitigation. *In Louisiana Folklife: A Guide to the State.* Baton Rouge: Moran Colorgraphic, Inc

By the 1970's all federally funded projects require survey of the impact on cultural resources. Post WWII in South LA. Bureaucratizing Culture: development of the Department of Culture, Recreation and Tourism. The loss of wetlands and trees is important to preserve culture, p194. Fisheries and competing interest: State, international, conservationists, etc 194-195. Culture managers need to incorporate the local people.

Gitierrez, C. P. (1979).*The Colonial french.*

The make up of Terrebonne and Lafourche was largely poor Creole farmers in 1820.1871: Creole association forms for political purposes. 1914: Law in Louisiana forbids the use of French in legal notices and advertisements

Gutierrez , C.P. (1983). *Foodways and cajun identity*. Unpublished master's thesis, University of North Carolina, Chapel Hill.

This thesis discusses the fact that eating is a cultural activity and the existing foodways - the whole interrelated system of procurement, distribution, preservation, preparation, and consumption. The work addresses the question of how does food express and maintain cultural identity. It further discusses how ethnicity is a cultural differentiation symbolized by foodways and how food preparation is the process that transforms food into part of a culture.

Heinz Center for Science, Economics and the Environment. (2000). *The hidden costs of coastal hazards: Implications for risk assessment and mitigation*. Covello, California: Island Press.

Heinz Center for Science, Economics, and the Environment. (2002). *Human links to coastal disasters*. Washington, D.C.: The H. John Heinz III Center.

Kelley, J. T., A. R. Kelley, O. H. Pilkey, Sr. & A. A. Clark. (1984). *Living with the Louisiana shore*. Durham, NC: Duke University Press.

The state encourages the development of the shoreline with "stabilizing" programs to shoreline near residential and industrial sites. Shoreline engineering- refers to any method of changing a shore to stabilize it. Engineering can cause destruction of shore as well as save it such as on East Timbailer Island. Beach Replenishment- pumping on sand and building up dunes. Jetty- wall built perpendicular to the shore line to keep sand flow from the ship canal. Groin- smaller built away from Channels and inlets to trap sand flow in the longshore (surf zone). At Grand Isle the jetty is much more effective than the groins. Seawalls, bulkheads and revetments- construction built back from the shore and parallel. Truths of the shoreline. Grand Isle.

(1.) Laska, S., G. Wooddell, R. Hagelman, R. Gramling, & M.T. Farris, (2004). At risk: the human, community and infrastructure resources of coastal Louisiana. *Journal of Coastal Research*, (44), 154-175.

Those who live off of the land have a unique culture, and this degradation of the environment around them threatens their way of life and their ability to continue living in this area. This arguably presents a nationwide problem because the United States relies heavily on natural resources local to this area and collected by locals. Erosion continues to present a problem through today with miles of land being lost each year. With the steady decline of marshland which serves as a buffer zone for Louisiana, and a natural filter for the world, these areas are much more prone to natural disasters. Examination of the potential loss communities, cultures, industries, and the country may face if actions are not taken to prevent this loss; for example, 1.5 million people run the risk of being affected if a disaster takes place in coastal Louisiana.

(4.) Longman, J., (2005). *With coastline in ruins, Cajuns face prospect of uprooted towns*. The New York Times. Retrieved Dec. 27, 2005.

(2.) Margavio, A. V., & Forsyth, C.J. with Shirley Laska and James Mason. (1996). *Caught in the net: The conflict between shrimpers and conservationists.* College Station, TX: Texas A&M University Press.

In 1989, TEDs (turtle extraction devices) were protested by hundred of shrimpers who blockaded ports leading to the Gulf of Mexico with their vessels. TEDs protect turtles from becoming caught in the nets of shrimpers, which also allow a large portion of shrimp to be excluded as well, severely hurting this dying industry. This text examines both sides of the story and the conclusion that was finally reached.

(2.) Martin, G. (2004*). Louisiana: off the beaten path: a guide to unique places*. Guilford, CT: Globe Pequot Press.

This is a tourist book highlighting cultural assets of Louisiana.

Morton, R. A., J. C. Bernier, J. A. Barras, & N. F. Ferina. (2005). Rapid subsidence and historical wetland loss in the Mississippi delta plain: likely cause and future implications. *USGS Science for the Changing World*, 1-124.

(1.) Padgett, H. R. (1969). Physical and cultural associations on the Louisiana coast. *Annals of the Association of American Geographers*, *59*(3): 481-493.

Noting a real and potential change that will take place as the new takes hold of the traditional ways of life to yield progress. Padgett discusses how coastal Louisiana has changed at a slower rate than most areas; he examines coastal Louisiana and its port but concentrates on New Orleans and Morgan City. Padgett explains how with

continual change, cultures are moving away from the environment, especially with the drastic amount of technological advancement. Traditional labor of coastal Louisiana is changing from mainly familial to commercial fishing and trapping to including work in the oil industry. The shift in labor is not the only element that is changing the unique lands; the pollution and pesticides used by industries is threatening aquatic life and resulting in dead streams. As jobs come available in industries more family members are moving away from labors like commercial fishing into more financially beneficial jobs similar to petroleum production.

Parker, P.M. (1995). *Climatic effects on individual, social and economic behaviour:A physioeconomic review of research across disciplines*. Westview Press, Boulder, Colorado.

Pierce, J. (1979). *The coastal marshes of the lower delta*.

The variations among interfaces of land and water created "micro-environments" geographically and culturally. Natural levees were influential in settlement patterns. 1930's there were about 375 marsh communities and both plains. Economic development evolved from subsistence to commercial with the improvement in roads and transportation. Commercial fishing and trapping replaced farming in the marshes. The widespread use of the motorboat makes isolated dwellings near fur sources unnecessary. Trapping became commercial when leasing arrangements were institutionalized between trapper and landowners. Small local fisheries shifted to the offshore fisheries. Structure of Shrimp Industry. Dulac-Chauvin ranked forth-in nation in landing of commercial fish and is well known for the shrimp drying industry. Large scale industrial fishery the came from the NE. Oyster Industry was started by the Dalmations.

Sevier, M.B. (1990). *Land uses of terrebonne parish: A historical geography*. Unpublished master's thesis, University of Southwestern Louisiana.

This thesis discusses the major and secondary human made waterways of Terrebonne and the background information on canalization (i.e., Rivers and Harbors Act of 1926 and 1947 and the reversal of the Homestead Act of 1866). High Water Points including the 1920 levee construction of the Atchafalaya, the 1950 Avoca Island levee construction which allows salt-water intrusion., the high water period in Houma of 1973 and jet stream caused flood in Houma in 1983 were also presented. Also examined are historic land uses in Terrebonne including the Houmas settling in Terrebonne in 1776; the settlement under the French, the introduction of sugar cane, the formation of Terrebonne Parish, Houma was incorporated and became the parish seat in 1834, the development of the oyster industry, the period of Land Reclamation, the introduction of the modern shrimping net by the U.S. Bureau of Fisheries, the establishment of the Sugar Cane Experimental Field Station and Laboratory following the growth of demand from WWI and oil coming to Houma. Modern Land Use was also examined in which the author finds 88% of the area as underdeveloped and residential development occurring mostly in the south. The waste disposal system and modern drainage in also studied.

Spitzer, N. R. (ed) (1985). *Louisiana folklife: A guide to the state.* Baton Rouge: Moran Colorgraphic Inc.

A collection of articles of Louisiana folklife produced by the Louisiana Department of Culture, Recreation and Tourism to provide a comprehensive in-depth treatment of the folk culture of the entire state.

Spitzer, N. R. ed. (1979). *Mississippi delta ethnographic overview.* New Orleans: National Park Service.

A collection of articles assembled for Jean Lafitte National Park offering perspectives on southeast Louisiana from multiple disciplines.

Spitzer, N.R. (1979). *From riverine to prairies: Introduction to man/land relationship in south Louisiana*. 2-40.

Four Cultural/ Ecological Zones based on land use, house type, agriculture, fishing and trapping, boat types and typography including: Riverine/Inland- Miss, Bayou Teche, Lafourche; Coastal Marshes- lower delta; Swamp Basins- of the Atchafalaya; and Prairies west of the Atchafalaya. Eastern French differs from the West in topography, economic development, and historical antecedents. The French land system. 1750-Civil War: sugar can was the dominant crop. Line Settlement is a product of the French system. Towns formed along the bayou were culturally diverse. Boats are very important for the local economy, access to water for communication, transportation, and livelihood. Culture work on south LA needs to consider the human/water relationship. Oil reduced heterogeneity between zones providing jobs that required similar skills and allowing people to insulate themselves from the environment.

Spitzer, N.R. (1985). South Louisiana: Unity and diversity in a folk region. *Louisiana folklife: A guide to the state*. (n.d.). Baton Rouge: Moran Colorgraphic, Inc.

Unifying Features include: French Language- 500,000 speakers; Catholicism- varies with formal church to the blessing of shrimp fleets and cane fields; Festivals; Foodways; Traditional Material Culture (houses, boats, etc.);History of Immigration. Overlap between Black Creoles and Cajuns involve speech, music and religion. French Culture strongly maintained by French speaking Houma Indians. Houma Indians in Terrebonne maintain a distinction from the Cajuns. Black Creoles have been assimilated into mainstream African American Culture as well as Cajun into mainstream Anglo Music.

Stanton, M. E. (1971). *The indians in the grand Calliou Dulac community*. Unpublished master's thesis, Louisiana State University, Baton Rouge.

The author presents an account of the ethnicity present in this community with a focus on the Native American community. The structure of the community is examined in which it is found that political organization is lacking and most of the decisions are made by a select group of women. The economics of the community are also examined where it is found that the economy is dependent on the canning and boating industry, that women work in the canneries and there are conflicts over mineral rights in the area. Finally, the author studies the socio-historical development of the community including the isolation of the Houmas ending with the development of oil and gas and the urbanization and industrialization, the establishment of missions in the 1930s, the creation of a separated school system for Indians in 1944, the Houmas reliance upon subsistence until the 1950s which change to wage labor and commercial fishing, the debt to local merchants as a form of control, and their Culture resembling Cajun in ways such as language.

Stokes, G. A. (1985). Occupational Folklife in LA . *Louisiana folklife: A guide to the state*. Baton Rouge: Moran Colorgraphic, Inc.

The diversity of environment in LA offered a wide range of occupations. Complex questions of work, ethnicity and class still need to be explored. Timber: a) 1876: Large scale cypress begins; b) 1890: Intensive pine logging begins; c) 1930: Timber industry goes into decline. Navigation: a) 1836: U.S. gov starts regulation; b) Ferry services were maintained at the parish level; c)1925: Bridging begins and ferries disappeared) boats of LA provide example of the interaction of culture, environment, and technology.

(1.) Streever, B. (2001). *Saving Louisiana? The battle for coastal wetlands*. Jackson, MS: University Press of Mississippi.

This work provides an extensively detailed account of the Mississippi River's delta and its contamination to the detriment of wetlands throughout Louisiana. The results of the death of the marshland are also listed upon which global implications are expounded. This is a "problems-to-come" read and should be taken into

consideration as an example of an area that will be susceptible to natural disasters of the slowly encroaching variety.

(1.) Viosca, Jr., P. (1928). Louisiana wet lands and the value of their wild life fishery resources. *Ecology,* 9(2), 216-229.

This article discusses the vanishing species from the Louisiana wetlands. The basis premise is that loss of land facilitates loss of species. The author finds a breakdown of the physical elements of Louisiana's wetlands. Also noted is a tie into the economic and commercial decline as a result of these environmental declines brought about by man. The article sites an array of failing, man-made devices for nature control that contribute to the decline in life within wet areas. The fact that this article was published in 1928 and the fact that these events still occur today increases the validity of this research.

Williams, S. J., Penland, S. & Sallenger, A.H. (1992). *Louisiana barrier island erosion study: Atlas of shoreline changes in Louisiana from 1853 to 1989.* Reston, VA: U.S. Geological Survey.

The volume provides detailed maps and descriptions of coastal erosion and settlement patterns throughout the Louisiana coastline from 1853 to 1989.

Wooddell, G., Gramling, R. & Forsyth, C.J. (2003). A method for modeling low-probability, high-consequence risk events: Vessel traffic on the lower Mississippi river. *Pierce Law Review* 1:85-101.

The Louisiana coast, particularly the deltaic plain, is one of the most intensively used water transportation routes in the world. This analysis details a method for calculating risk on a water transportation route and applies the method to the lower Mississippi River.

B.) Other Coastal Research

(1) Human links to coastal disasters. (2002).Washington: The H. John Heinz III Center for Science, Economics and the Environment.

This text examines human vulnerability in reference to the issues of the coast; furthermore, in the vulnerability of these areas public and private support is considered. The importance of education both in preparation for a disaster and in the aftermath are taken seriously and current programs are noted. This document provides a number of excellent charts detailing the individual topics addressed including the physical and psychological affect of a disaster. One aspect that is considered is the community perception and the groups that are the most at risk of mental health problems. The work concludes that women and children are considered at risk, but the article expounds further on the differences in gender and the role women play pre- and post- disaster. This article is extremely individual and community centered, even with the discussion revolving around politics and policies.

(1.) Hutton, D., & Haque, C. E. (2004). Human vulnerability, dislocation and resettlement: adaptation process of river-bank erosion-induced displaces in Bangladesh. *Disasters,* 28(1), 41-62.

In Bangladesh, the relocation of the people was strictly involuntary and a result of riverbank erosion and flooding. These involuntary evacuees remained close to home for a variety of reasons including, but not limited to: "…lack of economic affordability to move to urban areas, to avoid uncertainty in unfamiliar urban environment and not to lose the advantages of being part of a larger social network in rural area, and the hope of regaining charland in the future (p. 46)." Some evacuees who lost everything were forced to move to urban areas to provide basic necessities for their families. The results of relocation affected the daily rituals of the women (a focus in the study) to a point of "eroding basic practices (p. 50)" of the prayer ceremonies. This is a cultural trait and without the support from their communities these women began to change their habits to more easily assimilate into their

new surroundings. This change of habit is a small, yet significant change in culture that could eventually lead to cultural extinction.

(2.) National Academy of Sciences. (1970). *The great Alaska earthquake of 1964.* Washington, DC: National Research Council-National Academy of Sciences.

This report discusses the second largest earthquake ever recorded; it happened on March 27, 1964 in Alaska. On the first day of the earthquake there were eleven aftershocks and in the days that followed thousands of aftershocks were recorded. The four minute earthquake caused a number of avalanches and landslides that caused 130,000 square kilometers of damage. 115 lives in Alaska and 16 lives in Oregon were taken, mainly due to the massive water waves. Effects were felt as far away as Louisiana.

(1.) Peacock, W.G., Morrow, B.H., & Gladwin, H. (1997). *Hurricane Andrew: Ethnicity, gender, and the sociology of disaster.* New York, NY: Routledge.

This book examines groups that are typically overlooked by the media during disasters. Specifically, the authors look at what groups of people were the most vulnerable, the areas that were most susceptible to damage, why these are and were the most susceptible, what social factors influence ones ability to leave, and what groups end up with the least assists in the wake of Hurricane Andrew. The authors find that minorities are the ones that fall heavily in the above state groups, especially African Americans. Gender is also examined; women have a huge role in pre- and post- disaster issues like leaving and rebuilding. Women are also a group largely at risk to the above stated vulnerabilities (particularly minority females). Kinship and community ties are also taken into account, along with coping strategies of all list groups. The media promotes the mindset that all are affected by disasters instead of the most vulnerable economic status. This status typically determines who gains and who losses, there exists uneven recovery patterns, and their temporary coping strategies.

Stephen, R. & Rahn, J. (2003). Coastal hazards: Vulnerability of coastal population using GIS. The Geological Society of American 2003 Seattle Annual Meeting, November 2-5, 2003, Abstract with Programs, 35(6): 491.

The present study estimates the population along the coastal counties of Texas which are vulnerable to hurricane related coastal hazards. Understanding the distribution of population along the Texas coast is vital for damage control during coastal hazards. A regional coastal vulnerability study has not been done at this stage or with the demographic data. There have been several attempts to calculate the vulnerability of the populations along coastal areas. Susan Cutter (1997) used vulnerability in her study that is the probability based on the incidences of natural hazards from historical records. Certain socio-economic factors, that make a population more vulnerable, were taken into consideration. The United States geological Survey (USGS) (2003) has also come up with a Coastal Vulnerability Index (CVI) calculated based on physical processes and geomorphic characteristics. Cutter's index does not take the physiography of the landscape into consideration while the USGS CVI does not incorporate the demographic factors of the area. The present study employs land elevation as the primary factor for assessing vulnerability to storm surge. The range of elevation is obtained from 24K DEMs. In a GIS the descriptive statistics of the elevation within each census tract in a county are calculated to estimate the number of people; density of the census tract is assumed to be uniform throughout. Similar socio-economic variables to those used by Cutter are considered to find the total vulnerability. A rough estimate is that approximately 8 per cent of the Texas coastal population is living below the threshold elevation. This type of an index, with physiographic and demographic components, helps to identify the most vulnerable population at a scale of census tracts, which is helpful for the local authorities for disaster preparedness and relief operation.

(2.) Zaman, M. Q. (1993). Rivers of life: living with floods in Bangladesh. *Asian Survey*,

33(10), 985-996.

This article discusses Bengali life as based on the annual flooding of the plains and how major flood events lead to increased interest in finding a solution to flood issues. The work evaluates France's suggested higher levee systems and America and Japan's increase of predictive forecasting with adjustments to live with the flooding and concludes that the attempts to control flooding have failed or will fail. Coping and living with the flooding seems to be the only viable solution presented. Relocation is barely mentioned.

(4.) Michener, W. K., Blood, E. R., Bildstein, K. L., Brinson, M. M., & Gardner, L.R. (1997). Climate change, hurricanes and tropical storms, and rising sea level in coastal wetlands. *Ecological Applications*, 7(3), 770-801.

II. Components of Resilient Communities
Introduction: *Steve Kroll-Smith, University of North Carolina-Greensboro*

Resilience is a buoyant, robust, hopeful term. It focuses on our strengths rather than our weaknesses. It emphasizes learned resourcefulness. Resilience promises survival, recovery, and, perhaps a better life. Applied to disaster, it begins, one might argue, with Kenneth Hewitt's prescient observation: "Most natural disasters are characteristic rather than accidental features of the places and societies where they occur." Resilience, it appears, is the social antidote to life in society beset with natural and human-made dangers. Indeed, one anthropologist refers to "community resilience (as) the holy grail of hazard planning" (Tobin 1999, p.13).

The idea of resilience has been kicked around for quite some time. A common term in engineering, it refers to elasticity or flexibility. It gained traction in the human sciences as a clinical approach to the treatment of Vietnam veterans who suffered from post disaster stress syndrome (PTSD). How, clinicians wondered, could they help vets to become more supple and flexible in their responses to day-to-day stress? It entered the field of disaster and hazard planning several years ago and quickly became a key a part of the vocabulary of both professionals and academics (Omar and Alon 1994; Tobin 1999; Dunning 1999). In 2004, The National Academy of Sciences held a workshop titled "Creating A Disaster Resilient America."

Standing alone, resilience is not a particularly useful term. It is more of an outcome or end than a means. The important question is *how* individuals and communities become resilient or, on the other hand, what prevents them from achieving this vaunted goal? The International Federation of Red Cross and Red Crescent Societies argue that resilience is achieved through the creation of community "capital" (2004). Community capital can take many guises: human, environmental, social, and cultural. Let's discuss each briefly.

Human Capital

What knowledge and skills do community residents possess? In 2003 more than 35,000 people in Europe died of heat exhaustion. Thousands would have been saved if people simply covered themselves with damp cloth and drank plenty of fluids. Simple knowledge can save lives. How do we increase our stock of human capital in order to protect people from natural and technological dangers?

- Education or training creates and sustains human capital. The relative infrequency of disasters will require the use of simulations and models to create an on-going dialogue on preparedness and response.

- The characteristics of extreme events vary widely and should be incorporated into initiatives to create and sustain human capital. An oil-spill, for example, is a qualitatively different event than a tornado.
- Australia has achieved marked gains in human responses to extreme events by folding its educational initiatives into the public schools.

Environmental Capital

How healthy is the local environment? An environmental audit that focuses on the strengths and weaknesses of the immediate eco-system to absorb the shock of a disaster agent is essential to creating a resilient community. The inability of the levee system in New Orleans to protect residents from a recent Category 3 hurricane is an example of what can happen when natural and human-made ecological resources are not maintained.

- Creating environmental capital is always more than a local community can hope to do on its own. Identifying and repairing weaknesses in local eco-systems must involve state and federal agencies.
- Local or regional universities should be encouraged to commit resources to creating and sustaining environmental capital. This can be more easily accomplished if schools, states, and the federal government cooperate.
- The long-term goal of any bio-region should be environmental sustainability. Create a local *index of environmental sustainability* (IES) that focuses specifically on
    a. reducing environmental stressors (and)
    b. reducing human vulnerability to environmental stressors.

Social or Community Capital

Would you say that not only do you live in a community but you also live ***as*** a community? The distinction is important. If you simply live in but not as a community, it will be difficult to build both human and environmental capital. Moreover, in the absence of meaningful local social ties, it will be difficult to plan and implement effective emergency response initiatives. Community capital rests on two interconnected qualities: common trust and viable social networks. The goal is not to tie the community into one big social network organized around disaster, but to build on and strengthen existing social ties.

- Communities are discovering that planning for disasters is a key means of creating social capital. Use planning processes to build trust and ties between people.
- Identify the voluntary associations and groups already active in your town or region. These groups can often be recruited to assist in emergency planning.
- Identify the assisted living centers and other elder-care sites; these too are often a place to recruit knowledgeable people and dense social networks.

In closing

Resilience is a key variable in predicting the capacity of flora and fauna to adapt to changing environmental demands. There is little reason to suppose that it is not also an important resource in human responses to extreme events.

Introduction References

Dunning, C. (1999). Post-Intervention strategies to reduce police trauma: a paradigm shift. In J.M. Violanti & D. Patton (Eds.), *Police trauma: Psychological aftermath of civilian combat (pp. ?)*. Springfield, IL: Charles C. Thompson.

International Federation of Red Cross and Red Crescent Societies. (2004). *World disasters.* from www.ifrc.org/publicat/wdr2004/chapter1.asp

Omar, H. & N. Alon. (1994). The continuity principle: a unified approach to disaster and trauma. *American Journal of Community Psychology*, 22, 273-87.

Tobin, G.A. (1999). Sustainability and community resilience: the holy grail of hazards planning. *Environmental Hazards*, 1, 13-26.

(1) Bankoff, G., Frerks, G., & Hilhorst, D. (2004). *Mapping vulnerability: Disaster, development & people*. London: Earthscan Publications.

First describing, then using, vulnerability as a guide for deeming conditions of an area safe or unsafe, this book delves into areas from Africa, Asia, and Latin America.

(1) Bankoff, G. (2003). Vulnerability as a measure of change in society. *International Journal of Mass Emergencies and Disasters, 21*(2), 5-30.

Uses Terry Cannon's theory that hazards are natural, but disasters are not. Focuses on vulnerability as a useful tool for determining how long-term adaptation to risk may not always be beneficial to a community but may instead leave individuals with further disadvantages.

(1) Bell, S., & Morse, S. (2003). *Measuring sustainability - learning from doing*. London: Earthscan/James & James.

Presents advice on how to develop measurements that will work in real-life development contexts. It describes and analyzes how to derive, validate and apply indicators in the course of an actual development project (as in the case of the Mediterranean Action Plan in Malta.) The author explains the trade-offs and constraints involved and how it is possible to combine the open-ended and flexible prospective of sustainability with the more linear processes and fixed targets of specific projects through the use of pragmatic and reflective methodologies.

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A.)General Readings

Berke, Philip R., Kartez, Jack, and Wenger, Dennis. (1993). Recovery after disaster: achieving sustainable development, mitigation and equity. *Disaster*, 17: 93-109.

This paper reviews key findings and raises issues that not fully addressed by the predominant disaster recovery literature. Achievement of equality, mitigation and sustainable development, particularly through local participation in redevelopment planning and institutional cooperation, is the central issue of the review. Previous research and past assumptions about the process by which communities rebuild after a disaster are reviewed. A conceptual and practical significance of this model is then demonstrated by presenting case studies of local recovery experiences, Finally, conclusions on the current understanding of disaster redevelopment planning, as well as implications for public policy and future research are offered.

Beatley, Timothy. (1998). The visions of sustainable communities. Pp. 233-262 in Raymond J. Burby's (editor), *Cooperating with nature*. Washington, DC: Joseph Henry Press.

Paton, D., Smith, L. and Violanti, J. (2000). Disaster response: risk, vulnerability and resilience, *Disaster Prevention and management*, 9(3):173-179.

The assumption of an automatic link between disaster exposure and pathological outcomes is increasingly being questioned. Recognition of the possibility of positive reactions and growth outcomes in this context necessitates the development of alternative models and, in particular, the accommodations of the resilience construct in research and intervention agenda. Reviews possible vulnerability and resilience factors and adopts a risk management framework to outline its potential for modeling the complex relationships between these variables and both growth and distress outcomes. Resilience and vulnerability is discussed at dispositional, cognitive and organizational levels. The paradigm developed here focuses attention on facilitating recovery and growth in professionals for whom disaster work and its consequences is an occupational reality.

Peacock, Walter Gillis, Samuel D. Brody, and Wesley Highfield. (2005). Hurricane risk perceptions among Florida's single family homeowners." *Landscape and urban planning.*

Hurricane and associated damage remains a constant threat to the health, safety and welfare of residents in Florid. Hurricane risk perception has been found to be an important predictor of storm preparation, evacuation, and hazard adjustments undertaken by households, such as shutter usage. Planners and policy makers often employ expert risk analysis to justify hazard mitigation policies, yet expert and lay risk assessments do not always agree. This article examines factors contributing to hurricane risk perception of single-family homeowners in Florida. Utilizing data from a statewide survey, we first map and spatially analyze risk perceptions throughout Florida . Second, we examine the influence of location on shaping homeowner perceptions along with other factors such as knowledge of hurricane, previous hurricane experience, and socio-economic and demographic characteristics. The findings suggest there is a good deal of consistency between residing in a location identified by experts as being high hurricane wind risk areas and homeowner perceptions. Finally, we discuss the implications of these findings for land use and hazard planning.

Peacock, W. G. (1996). Disasters, development, and mitigation: Taking a proactive stance. *Natural Hazards Observer*, XX (4), 1-2.

Rose, Adam. (2004). Defining and measuring economic resilience to disasters. *Disaster Prevention and Management: An international Journal* 13(4): 307-314.

Tierney, K.J., Lindell, M.K. and Perry, R.W. (2001). *Facing the unexpected: Disaster preparedness and response in the United States.* Washington, D.C.: Joseph Henry Press.

B.) Art, Music, Food, Festivals

Burby, R.J., et al. (1999). Unleashing the power of planning to create disaster-resistant communities. *Journal of the American Planning Association*, 65(3): 247-258.

Artist Vita Marie Lovett's art quilt Toro, I've a Feeling We're Not in Miami Anymore includes debris found in her south Florida yard after Hurricane Andrew struck in 1994. She describes it as a "photo documentary of Hurricane Andrew's destruction whirling against a background of broken fabric roof trusses and window frames." It is dedicated to her friend Jackie Parker Koger who lost her life as a result of the storm, which was the costliest

natural disaster in U.S. history up until that time. After the hurricane, Lovett relocated to Marietta, Georgia, where she creates art quilts with architectural themes from her home studio. Human suffering and losses of lives and property in natural disasters can be reduced with appropriate planning for hazardous areas. Federal policies addressing these problems, however, have yet to recognize the importance of planning as the cornerstone of effective local hazard mitigation. In fact, federal programs make planning more difficult because they encourage the intensive use of hazardous land and shield local governments and private decision makers from financial losses in the disasters that inevitably follow. To unleash the power of planning for hazard mitigation, federal policies must be revised so that they help build local understanding of risk, commitment to hazard mitigation, and support for planning. A number of actions can be taken now to begin moving in this direction. In the long term, however, new legislation is needed to reduce subsidies that sustain and encourage development in hazardous areas and to increase assistance for planning.

Gregory, H. F. (1985). 'A Promise from the Sun:' The Folklife Traditions of Louisiana Indians. *In Louisiana Folklife: A Guide to the State.* Baton Rouge: Moran Colorgraphic, Inc.

12,000 Native Americans in LA. Historically lived between the whites and blacks, both who borrowed from their culture. 1890-1925: Missionaries became active in Native American Communities. 1780's Houma Indians moved from St. James to the bayous. 60's and 70's pantribal organization occurred reflecting the impact of the AIM.

Gregory, H. F. (1985). Saving Your Own House: Folk Culture and Mitigation. *In Louisiana Folklife: A Guide to the State.* Baton Rouge: Moran Colorgraphic, Inc

By the 1970's all federally funded projects require survey of the impact on cultural resources. Post WWII in South LA. Bureaucratizing Culture: development of the Department of Culture, Recreation and Tourism. The loss of wetlands and trees is important to preserve culture, p194. Fisheries and competing interest: State, international, conservationists, etc 194-195. Culture managers need to incorporate the local people.

(1.) Hoffman, S. Oliver-Smith, A. (Eds.). (2002). *Catastrophe & culture: the anthropology of disaster school of American research advanced seminar series).* Santa Fe, NM: School of American Research Press.

--CHAPTER 6

Discussion on how disasters have their own mythology and symbols and how these occurrences in society can be used to help the situation brought about by a disaster instead of hinder it. The duality of trying to escape nature into society and using symbols rooted in nature presents a paradox and the eventual use of these symbols for help instead of hindrance. The cyclic pattern of disasters and their symbols is examined with religious overtones as the focus. Finally, how to reform a culture that has undergone a tragedy? is examined with the differing aspect of what is "evil" in terms of society's view.

(1.) Oliver-Smith, A. (1986). *The Martyred City,* 1st Ed. University of New Mexico Press.Albuquerque, NM.

Oliver-Smith conducted field research in Peru for over a decade and in this text he draws a detailed examination and embracing story of the people of Yungay. The Martyred City begins with an account of May 31, 1970 which began as a normal day; when he does this, the reader sees a typically laid back day for the people of Yungay until the earthquake began. The earthquake that day resulted in a catastrophic landslide that left about 70,000 dead, and forced change upon the people of Peru. The author then examines the meaning of change and how it applies to cultures, and what is needed for successful adaptation. The struggle to maintain their culture was an element the survivors of Yungay fought for because they lost material, political, and social ties that day. Consequences of the

disaster united the survivor in their grief. It was four days before the scope of the disaster was fully understood and feelings of abandonment began to take shape, and once aid began to arrive much of it was not appropriate. The government stepped in to lend aid and relocated the survivors to four camps with the promise of assistance to rebuild in those areas. For the most part the communities were accepting of the help, but must of the aid was not equally distributed and there did exist a class difference in the distribution of aid. The communities senses of place to Yungay was extremely strong and held in many respects their sense of identity, and the people would not allow this capital to be relocated. Yungay was the center of their community and served a number of different roles; for example, it was a market, an educational environment, and a religious center. The national government wanted to move the community's capital; this relocation would keep the individuals and communities safe from future rock slides resulting from earthquakes. The government did not encourage the idea of rebuilding because many felt it was a waste of money. The earthquake and landslide had already affected the people and culture they would not hear of the change in capital because of the need to hold on to their cultural traditions; the potential catastrophic loss of the community ties and cultural heritage. Instead of following the government's wishes they settled their new capital at Pashulpampa which served their needs and allowed them political control over their communities. The communities banded together to avoid the relocation and government takeover, and ten years after the disaster they still hold it close to them and it has become a part of the culture.

(1.) Padgett, H. R. (1969). Physical and cultural associations on the Louisiana coast. *Annals of the Association of American Geographers*, *59*(3): 481-493.
Noting a real and potential change that will take place as the new takes hold of the traditional ways of life to yield progress. Padgett discusses how coastal Louisiana has changed at a slower rate than most areas; he examines coastal Louisiana and its port but concentrates on New Orleans and Morgan City. Padgett explains how with continual change, cultures are moving away from the environment, especially with the drastic amount of technological advancement. Traditional labor of coastal Louisiana is changing from mainly familial to commercial fishing and trapping to including work in the oil industry. The shift in labor is not the only element that is changing the unique lands; the pollution and pesticides used by industries is threatening aquatic life and resulting in dead streams. As jobs come available in industries more family members are moving away from labors like commercial fishing into more financially beneficial jobs similar to petroleum production

C.) Civil Society

Non-Governmental Organizations (NGOs) and Community Based organizations (CBOs)
Faith Based Organizations (FBOs) and Religious Congregations and Groups

Bolin, R. (1982). *Long-term family recovery from disaster*. Boulder, Co: Program on environment and Behavior, Institute of Behavioral Science, University of Colorado, Monograph #36.

Bolin, R. (1993). *Household and community recovery after earthquakes*. Boulder, Co: Program on Environment and Behavior, Institute of Behavioral Science, University of Colorado, Monograph #56.

The research presented here is the result of three years of research funded by the National Science Foundation in the aftermath of the Whittier Narrows Earthquake (October 1, 1987). This project focuses on the community of Whittier, California, which lies east of Los Angeles and is situated near the epicenter of the 1987 earthquake. This report focuses on household and community recovery in Whittier and examines factors and issues that affected recovery processes after the earthquake. This study utilizes a longitudinal research design and presents the findings of two data-collection periods approximately one year apart, beginning two years after the earthquake leveled

downtown Whittier. The major focus of this research is on individual and household (family) responses to earthquakes. Research findings are also presented on the dynamics of community reconstruction and issues that emerged in Whittier over the course of the research. The primary goal in documenting community reconstruction is to identify and discuss the various issues that have affected recovery processes in Whittier.

Bolin, R. and Stanford, L. (1998). The Northridge earthquake: Community-based approaches to unmet recovery needs. *Disasters, 22*(1): 21-38.

The 1994 Northridge, California earthquake has proven to be one of the most costly disasters in United States history. Federal and state assistance programs received some 681,000 applications from victims for various forms of relief. In spite of the flow of US$11 billion in federal assistance into Los Angeles and Ventura counties, many victims have failed to obtain adequate relief. These unmet needs relate to the vulnerability of particular class and ethnic groups. In response to unmet needs, a number of non-governmental organizations (NGOs) have become involved in the recovery process. This paper, based on evidence collected from hundreds of in-depth interviews with the people involved, examines the activities of several community-based organizations (CBOs) and other NGOs as they have attempted to assist vulnerable people with unmet post-disaster needs. We discuss two small ethnically diverse communities in Ventura County, on the periphery of the Los Angeles metropolitan region. The earthquake and resultant disaster declaration provided an opportunity for local government and NGOs to acquire federal resources not normally available for economic development. At the same time the earthquake created political openings in which longer-term issues of community development could be addressed by various local stakeholders. A key issue in recovery has been the availability of affordable housing for those on low incomes, particularly Latinos, the elderly and farm workers. We discuss the successes and limitations of CBOs and NGOs as mechanisms for dealing with vulnerable populations, unmet needs and recovery issues in the two communities.

Christoplos, I., Mitchell, J. and Liljelund, A. (2001). Re-framing risk: the changing context of disaster mitigation and preparedness. *Disasters*, 25(3): 185-198.

This issue of Disasters explores the roles of NGOs and other actors in disaster mitigation and preparedness and also reviews broad international trends in risk assessment and disaster prevention. The need to address risk, and with that the motivation to improve disaster mitigation and preparedness, has tended to fall between the cracks of grander frameworks of development co-operation and humanitarian assistance. Despite the seemingly glaring need to reduce the horrific impact of floods, droughts and wars, disaster mitigation and preparedness have neither the allure of directly 'saving lives', nor of providing an 'escape from poverty'. There are, however, signs that risk management is becoming a min stream concern. Factors such as the need to address factors that do not fit into traditional slots on the relief-development continuum, the rising economic costs of disasters and growing acknowledgement that aid will never cover more than a small fraction of the costs of disasters and are all leading to new approaches, priorities and institutional configurations. A realization that dealing with risk and insecurity is a central part of how poor people develop their livelihood strategies has begun to position disaster mitigation and preparedness within many poverty alleviation agendas. A number of long-standing challenges remain; most of all, the complexities of maintaining the political will that is needed to ensure that risk management becomes more than a passing fad.

Detweiler, Lowell. (2000) The hammer rings hope. Scottsdale: Herald Press.

Fifty years of Mennonite service is portrayed in this volume. It helps give an understanding of the power of local organization through a denomination known for it's humanitarian outreach.

Deyle, Robert E. Steven P. French, Robert B. Olshansky, and Robert G. Paterson. (1998). Pp 119-166 in Raymond J. Burby's (editor), *Cooperating with nature*. Washington, DC: Joseph Henry Press.

Newport, J. K. & Jawahar, G. G. P. (2003). Community participation and public awareness in disaster mitigation. *Disaster prevention and management*, 12(1):33-36.

Describes how the Society for National Integration through Rural Development in India involves the local communities when developing disaster mitigation measures. Shows how participation of the community in resource identification, capabilities, coping mechanisms and vulnerability assessment will be more effective in the planning of a sensible and practical system, more suitable for the needs of the community. Covers contingency planning, community preparedness, task forces (comprising active youths in the ratio of one youth for ten families), and response mechanisms.

Rubin, C. B. 1985. The community recovery process in the United States after a major natural disaster. *International journal of mass emergency and disasters*. 3: 9-28.

After studying first-hand how 14 U.S. communities recovered from a major natural disaster, an organizing framework recovery process was developed. That framework depicts the dynamic processes that contribute to an efficient local recovery, including the key elements of recovery and the relationships among those factors. The three key elements are personal leadership, ability to act, and knowledge of what to do. Of paramount importance to an expeditious recovery is effective intergovernmental relations. In those communities where the speed and quality of recovery was greater, local officials had found ways to (a) ensure more productive intergovernmental relationships, (b) compete effectively for scarce resources, and (c) better manage community- level decision-making during the post-disaster period.

Wachs, M. & Kamel, N. (1996). Decision-making after disasters: responding to the Northridge Earthquake. *Access*, 8: 24-29.

D.) Economy

Alesch, D.J. and Petak, W.J., (1986). *The politics and economics of earthquake hazard mitigation*. Monograph no. 43, Natural Hazards Research and Applications Information Center, Boulder, Colorado.

Alesch, D.J., Taylor, C., Ghanty, S., and Nagy, R.A. 1993. Earthquake risk reduction and small business. Pp 133-160. in Committee on Socioeconomic Impacts (eds.) 1993 national Earthquake Conference Monograph 5: *Socioeconomic Impacts*. Memphis TN: Central United States Earthquake Consortium.

Alesch, Daniel. J., James N. Holly, Elliot Mittler, and Robert Nagy. (2001). *Organizations at risk: What happens when small businesses and not-for-profits encounter natural disasters*. Public Entity Risk Inst (PERI). www.riskinstitute.org/

Berke, Philip R., Kartez, Jack, and Wenger, Dennis. (1993). Recovery after disaster: achieving sustainable development, mitigation and equity. *Disaster*, 17: 93-109.

This paper reviews key findings and raises issues that are not fully addressed by the predominant disaster recovery literature. Achievement of equality, mitigation and sustainable development, particularly through local participation in redevelopment planning and institutional cooperation, is the central issue of the review. Previous

research and past assumptions about the process by which communities rebuild after a disaster are reviewed. A conceptual and practical significance of this model is then demonstrated by presenting case studies of local recovery experiences. Finally, conclusions on the current understanding of disaster redevelopment planning, as well as implications for public policy and future research are offered.

Dalhamer, J.M. and D'Sousa, M.J. (1997). Determinants of business-disaster preparedness in two U.S. metropolitan areas. *International Journal of Mass Emergencies and Disasters (IJMED),* 15: 265-281.

Although there has been a proliferation of "how-to" planning guides in recent years, there has been very little documentation of the variation in and determinants of business-disaster preparedness. The few studies that have been conducted have focused on specific firms or industrial sectors, such as the chemical or tourist industry, or have been plagued by too few cases. These problems clearly limit the generalizability of the research findings. This paper attempts to fill a void in the literature by exploring the determinants and variations of planning within the private sector utilizing two stratified, random samples of businesses from Memphis/Polk County, Iowa (N=1,079). Findings show that business size, whether the business property is owned or leased, and prior disaster experience are all related to business-disaster preparedness among businesses in Memphis/Shelby County. Policy implications of the findings are discussed.

Dahlhamer, James M. and Tierney, Kathleen J. (1998). Rebounding from disruptive events: Business recovery following the Northridge Earthquake. *Sociological Spectrum,* 18:221-141.

Although the long-term effects of disasters and the factors that affect the ability to recover have received increasing attention from social science researchers, little systematic research has been conducted on the processes and outcomes associated with business disaster recovery. This article attempts to fill the void by exploring the determinants of recovery within the private sector. We develop a model of business recovery by drawing from existing research on disaster recovery and on organizational survival in non-disaster contexts and test it by using data collected from a stratified random sample of 1,110 Los Angeles area firms affected by the 1994 Northridge earthquake. Business size, disruption of business operations due to the earthquake, earthquake shaking intensity, and the utilization of external post disaster aid are all predictors of business recovery. Size helps businesses weather disaster losses, just as it proves advantageous in non disaster contexts. How businesses fare following disasters depends not only on direct physical impacts but also on how disasters subsequently affect business operations, as well as on ecological and neighborhood-level impacts. The aid available to business following disasters not only does not appear help them recover; it may actually create additional problems, such as higher debt.

Harrison, David M., Smersh, Greg T. & Schwartz, Arthur L., Jr. (2001). Environmental determinants of housing prices: the impact of flood zone status. *Journal of Real Estate Research*, 21(1/2):3-20.

This article is the winner of the Real Estate valuation manuscript prize (sponsored by The Appraisal Institute presented at the 2000 American Real Estate Society Annual Meeting. This study examines the valuation of homes located within 100-year flood plains. Utilizing a database of 29,887 property transactions in Alachua County, Florida, the results of this investigation suggest that comparable characteristic homes located outside flood zones. Interestingly, the price differential is less than the present value of future flood insurance premiums. In addition, the price differential is shown to have increased since passage of the National Flood Insurance Reform Act of 1994. Finally, it appears that property tax assessors have slightly over assessed properties located in flood zones relative to those in other areas. The large database and the lengthy period of analysis (1980-1997) are much broader than that of previous research efforts.

Kunreuther, H., (1973). *Recovery from natural disasters: Insurance or federal aid?* American Enterprise Institute for Policy Research, Washington, D.C.

Kunreuther, H., & Roth, R. J. Sr., (Eds.). (1998). *Paying the price: the status and role of insurance against natural disasters in the United States.* Washington, D.C. Joseph Henry Press.

Peacock, W.G., N. Dash, and Y. Zhang. (2006). Shelter and Housing Recovery. In H. Rodriguez, E.L. Quarantelli, and RR. Dynes, *The Handbook on Disaster Research*. Springer. (Forthcoming)

Rose, A. (2004). Defining and measuring economic resilience to disasters. *Disaster Prevention and Management: An International Journal* 13(4): 307-314.

Tierney, K.J. (1997). Impacts of recent disasters on business: The 1993 Midwest floods and the 1994 Northridge earthquake. In B.G. Jones (ed.). *Economic consequences of earthquakes: preparing for the unexpected, (pp 189-22).* Berkeley, CA: National Center for Earthquake Engineering Research.

Simmons, K.M. and Kruse, J.B. (2000). Market value of mitigation and perceived risk: Empirical results. *The Journal of Economics*, 26(1): 41-51.

Webb, R. G., Tinerney, J. K., Dahlhamer, & James, M. (2000). Business and disasters: empirical patterns and unanswered questions. *Natural Hazard Review*, 1(2):83-90.

Through five systematic, large-scale mail surveys conducted since 1993, the Disaster Research Center has obtained data on hazard awareness, disaster impacts, and short and long-term recovery among 5.000 private-sector firms in communities across the United States (Memphis /Shelby County, Tenn.; Des Moines, Iowa; Los Angeles, Calif.; Santa Cruz County, Calif.; and South Dade County, Fla.). This paper summarizes findings from those studies in three major areas: (1) factors influencing business disaster preparedness; (2) disaster-related sources of business disruption and financial loss; and (3) factors that affect the ability of business to recovery following major disaster events. Implications of the research for business contingency planning and business disaster management are discussed

Wu, J-Y. and Lindell, M. K. (2004). Housing recovery after two major earthquakes: the 1994 Northridge earthquake in the United States and the 1999 Chi-Chi earthquake in Taiwan. *Disasters*. 28: 63-81.

The idea of pre-impact recovery planning has recently been promoted by researchers and practitioners, but very

Little research has been done to evaluate its effects on disaster recovery. This study compared two jurisdictions – the

city of Los Angeles, California and Taichung County in Taiwan – in their recovery from earthquakes. Although the two cases also differ with respect to variable other than the presence of pre-impact recovery plans, the available data

suggest that having a pre-impact recovery plan facilitates housing reconstruction and allows local officials to make more effective use of window of opportunity after disaster to integrate hazard mitigation into the recovery process

E.) Government

Community leadership (form and function)

Land-use planning

Alexander, D. (2002). *Principles of emergency planning and management*. New York: Oxford University Press.

Berke, P.R. (1995). Natural–hazard reduction and sustainable development: A global assessment. *Journal of Planning Literature*, 9; 370-382.

This article reviews how the principles of sustainable development can be applied to natural-hazard reduction in developing counties. At issue is the extent to which sustainable development can be achieve through planning, and the role international aid plays in linking natural-hazard reduction to sustainable development. A conceptual framework is then offered for evaluating the impacts of outside aid on long-term hazard reduction efforts (and by implication, sustainable development). The consistent use of such a framework would increase the validity if future studies of aid programs and improve the understanding about the adequacy of different institutional arrangements within the international aid delivery system.

Berke, Philip R., Kartez, Jack, and Wenger, Dennis. (1993). Recovery after disaster: achieving sustainable development, mitigation and equity. *Disaster*, 17: 93-109.

This paper reviews key findings and raises issues that not fully addressed by the predominant disaster recovery literature. Achievement of equality, mitigation and sustainable development, particularly through local participation in redevelopment planning and institutional cooperation, is the central issue of the review. Previous research and past assumptions about the process by which communities rebuild after a disaster are reviewed. A conceptual and practical significance of this model is then demonstrated by presenting g case studies of local recovery experiences, Finally, conclusions on the current understanding of disaster redevelopment planning, as well as implications for public policy and future research are offered.

Beatley, Timothy. (1998). The visions of sustainable communities. In Raymond J. Burby's (editor), *Cooperating with nature, (pp. 233-262).*. Washington, DC: Joseph Henry Press.

Bolin, R. and Stanford, L. (1998). *The Northridge earthquake: Vulnerability and disasters*.

London: Routledge. .

Buckland, J. and Rahman, M. (1999). Community-based disaster management during the 1997 Red River Flood in Canada. *Disasters*, 1999, 23(2): 174-191.

This paper examines the relationship between preparedness and response to natural disasters and their level and pattern of community development. This is done by investigating preparation and response to the 1997 Red River Flood by three rural communities in Manitoba, Canada. The communities were selected because of their different ethnic mix and associated level and pattern of community development. The hypothesis was supported that the level and pattern of community development affect community capacity to respond to flooding. Communities characterized by higher levels of physical, human and social capital were better prepared and more effective responders to the flood. However, where the pattern of community development was characterized by high levels of social capital, decision-making processes were complicated.

Burby, R.J., Cigler, B.A., French, S.P., Kaiser, E.J., Kartez, J., Roenigk, D., Weist, D. & Whittington, D. (1991). *Sharing Environmental Risks: How to Control Governments' Losses in Natural Disasters*. Boulder, Colorado: Westview Press.

Burby, R.J., et al. (1999). Unleashing the power of planning to create disaster-resistant communities. *Journal of the American Planning Association*, 65(3): 247-258.
Artist Vita Marie Lovett's art quilt Toro, I've a Feeling We're Not in Miami Anymore includes debris found in her south Florida yard after Hurricane Andrew struck in 1994. She describes it as a "photo documentary of Hurricane Andrew's destruction whirling against a background of broken fabric roof trusses and window frames." It is dedicated to her friend Jackie Parker Koger who lost her life as a result of the storm, which was the costliest natural disaster in U.S. history up until that time. After the hurricane, Lovett relocated to Marietta, Georgia, where she creates art quilts with architectural themes from her home studio. Human suffering and losses of lives and property in natural disasters can be reduced with appropriate planning for hazardous areas. Federal policies addressing these problems, however, have yet to recognize the importance of planning as the cornerstone of effective local hazard mitigation. In fact, federal programs make planning more difficult because they encourage the intensive use of hazardous land and shield local governments and private decision makers from financial losses in the disasters that inevitably follow. To unleash the power of planning for hazard mitigation, federal policies must be revised so that they help build local understanding of risk, commitment to hazard mitigation, and support for planning. A number of actions can be taken now to begin moving in this direction. In the long term, however, new legislation is needed to reduce subsidies that sustain and encourage development in hazardous areas and to increase assistance for planning.

Burby, Raymond J. (1998). Natural hazards and land use: An introduction. In Raymond J. Burby's (editor), *Cooperating with nature, (pp. 1-28)*. Washington, DC: Joseph Henry Press.

Burby, Raymond J. (1998). *Cooperating with Nature: Confronting Natural Hazards with Land – Use Planning for Sustainable Communities*. Washington, D.C.: Joseph Henry Press.

Christoplos, I., Mitchell, J. and Liljelund, A. (2001). Re-framing risk: the changing context of disaster mitigation and preparedness. *Disasters*, 25(3): 185-198.
This issue of Disasters explores the roles of NGOs and other actors in disaster mitigation and preparedness and also reviews broad international trends in risk assessment and disaster prevention. The need to address risk, and with that the motivation to improve disaster mitigation and preparedness, has tended to fall between the cracks of grander frameworks of development co-operation and humanitarian assistance. Despite the seemingly glaring need to reduce the horrific impact of floods, droughts and wars, disaster mitigation and preparedness have neither the allure of directly 'saving lives', nor of providing an 'escape from poverty'. There are, however, signs that risk management is becoming a main stream concern. Factors such as the need to address factors that do not fit into traditional slots on the relief-development continuum, the rising economic costs of disasters and growing acknowledgement that aid will never cover more than a small fraction of the costs of disasters are all leading to new approaches, priorities and institutional configurations. A realization that dealing with risk and insecurity is a central part of how poor people develop their livelihood strategies has begun to position disaster mitigation and preparedness within many poverty alleviation agendas. A number of long-standing challenges remain; most of all, the complexities of maintaining the political will that is needed to ensure that risk management becomes more than just a passing fad.

Deyle, Robert E., Steven P. French, Robert B. Olshansky, & Robert G. Paterson. (1998). Pp 119 166 in Raymond J. Burby's (editor), *Cooperating with nature*. Washington, DC: Joseph Henry Press.

Godschalk, David R. et. al. (1999). Mitigation natural hazards: A national challenge. Pp 3-26 in Godschalk, Beatley, Berke, Brower, and Kaiser, *Natural hazard mitigation*. Washington, D.C.:

Island Press.

Godshalk, David R. et.al. (1999). Evolving mitigation policy directions. In Godschalk, Beatley, Berke, Brower, and Kaiser, *Natural hazard mitigation, (pp 27-81)*. Washington, D.C.: Island Press

Godschalk, David R. et. al. (1999). Ethical guidelines for hazard mitigation. In Godschalk, Beatley, Berke, Brower, and Kaiser, *Natural hazard mitigation, (pp 479-524)*. Washington, D.C.: Island Press.

Godschalk, D. R., Kaiser, E.J., & Berke, P.R. (1998). Integrating hazard mitigation and local land use planning. In Raymond J. Burby's (editor), *Cooperating with nature, (pp 85-118).* Washington, DC: Joseph Henry Press.

Harrison, David M., Smersh, Greg T. and Schwartz, Arthur L., Jr. (2001). Environmental determinants of housing prices: the impact of flood zone status. *Journal of Real Estate Research.* 21(1/2):3-20.

This article is the winner of the Real Estate valuation manuscript prize (sponsored by The Appraisal Institute) presented at the 2000 American Real Estate Society Annual Meeting. This study examines the valuation of homes located within 100-year flood plains. Utilizing a database of 29,887 property transactions in Alachua County, Florida, the results of this investigation suggest that comparable characteristic homes located outside flood zones. Interestingly, the price differential is less than the present value of future flood insurance premiums. In addition, the price differential is shown to have increased since passage of the National Flood Insurance Reform Act of 1994. Finally, it appears that property tax assessors have slightly over assessed properties located in flood zones relative to those in other areas. The large database and the lengthy period of analysis (1980-1997) are much broader than that of previous research efforts.

Lindell, M.K. & Prater, C.S. (2003). Assessing community impacts of natural disasters. *Natural Hazards Review*, 4: 176-185.

Research on the community impacts of natural disasters has yielded a wide variety of findings, but no coherent model of the process by which hazard agent characteristics produce physical and social impacts. This article summarizes the principal features of this process and describes the ways in which hazard mitigation and emergency preparedness practices can limit the physical impacts and the ways in which community recovery resources and extra-community assistance can reduce social impacts.

May, P.J., Burby, R.J., and Kunreuther, H. (1998). Policy design for earthquake hazard mitigation. *Earthquake Spectra*, 14(4):629-50.

The failure of homeowners to invest in mitigation measures for reducing potential losses from earthquakes presents a major obstacle to stemming economic losses. The design of earthquake risk reduction policies requires an understanding of the appropriate combination of institutional and individual incentives for inducing investment in mitigation. We address the challenges of inducing protective actions by considering the experiences with energy conservation, random reduction, and termite control. We examine the institutional design of relevant policies and programs, the role of various intermediaries, and the involvement of third parties in creating markets for services. From this, we draw lessons about the leveraging of governmental resources, fostering of markets for services, and carrying out of programs for outreach and education.

McEntire, D. A. & Myers, A. (2004). Preparing communities for disasters: issues and processes

for government readiness. *Disaster prevention and management*, 13(2):140-152.

This paper discusses what local governments must do to prepare for various disasters, including terrorist attacks. It provides background information on preparedness and highlights lessons from prior research. It also identifies the process of establishing local ordinances, assessing risk, creating emergency operations plans, acquiring resources, instituting mutual aid agreements, training, exercising and educating the public. Finally, it concludes with recommendations to implement these preparedness measures.

Olshansky, R. B. & Kartez, J.D. (1998). Managing land use to build resilience. In Raymond J. Burby's (editor), *Cooperating with nature, (pp 167-202).* Washington, DC: Joseph Henry Press.

Olson, R. S. & Olson, R. A. (1993). "The rubble's standing up" In Oroville, California: The politics of building safety. *International Journal of Mass Emergencies and Disasters (IJMED),* 11(2):163-88.

Disaster researchers have long been aware that the political context of mitigation and preparedness measures has formidable impact on their initiation, adoption and implementation. Yet most discussion and reporting of the political aspects of disasters have remained anecdotal, and few scholars have attempted to incorporate systematically political forces into social science models applied to disaster phenomena. This paper represents an explicit attempt to describe and explain the impact of politics on the public policy debate over structural safety in Oroville, California, following a damaging 1975 earthquake.

Olson, Richard Stuart. (2000). Toward a politics of disaster: Losses, values, agendas, and blame. *International Journal of Mass Emergencies and Disasters (IJMED)*, 18(2):265-27.

Offering exemplars from around the world, including China, Mexico, Nicaragua, and California, this paper argues that disasters must be understood and analyzed more deeply and more often as explicitly political events. The paper also argues that because politics is the "authoritative allocation of values." The politics-disaster nexus revolves around the allocation of several important values: life safety in the pre-event period, survival in the emergency phase, and "life chances" in the recovery and reconstruction periods. The paper concludes by suggesting that the literatures on agenda control and causal stories/blame management are particularly useful points of departure for analyzing disasters as intrinsically political events.

Paton, D., Smith, L. & Violanti, J. (2000). Disaster response: risk, vulnerability and resilience, *Disaster prevention and management*, 9(3):173-179.

The assumption of an automatic link between disaster exposure and pathological outcomes is increasingly being questioned. Recognition of the possibility of positive reactions and growth outcomes in this context necessitates the development of alternative models and, in particular, the accommodations of the resilience construct in research and intervention agenda. Reviews possible vulnerability and resilience factors and adopts a risk management framework to outline its potential for modeling the complex relationships between these variables and both growth and distress outcomes. Resilience and vulnerability is discussed at dispositional, cognitive and organizational levels. The paradigm developed here focuses attention on facilitating recovery and growth in professionals for whom disaster work and its consequences is an occupational reality.

Peacock, W. G., Brody, S.D., & Highfield, W. (2005). Hurricane Risk Perceptions among Florida's Single Family Homeowners. *Landscape and Urban Planning.*

Hurricane and associated damage remains a constant threat to the health, safety and welfare of residents in Florida. Hurricane risk perception has been found to be an important predictor of storm preparation, evacuation, and hazard adjustments undertaken by households, such as shutter usage. Planners and policy makers often employ

expert risk analysis to justify hazard mitigation policies, yet expert and lay risk assessments do not always agree. This article examines factors contributing to hurricane risk perception of single-family homeowners in Florida. Utilizing data from a statewide survey, we first map and spatially analyze risk perceptions throughout Florida . Second, we examine the influence of location on shaping homeowner perceptions along with other factors such as knowledge of hurricane, previous hurricane experience, and socio-economic and demographic characteristics. The findings suggest there is a good deal of consistency between residing in a location identified by experts as being high hurricane wind risk areas and homeowner perceptions. Finally, we discuss the implications of these findings for land use and hazard planning.

Peacock, W. G. (1996). Disasters, development, and mitigation: Taking a proactive stance. *Natural Hazards Observer*, XX (4): 1-2.

Peacock, W.G., N. Dash, & Y. Zhang. (2006). Shelter and housing recovery. In H. Rodriguez, E.L. Quarantelli, and RR. Dynes, *The handbook on disaster research.* Springer. (Forthcoming)

Rubin, C. B. (1985). The community recovery process in the United States after a major natural disaster. *International journal of mass emergency and disasters*. 3: 9-28.

After studying first-hand how 14 U.S. communities recovered from a major natural disaster, an organizing framework recovery process was developed. That framework depicts the dynamic processes that contribute to an efficient local recovery, including the key elements of recovery and the relationships among those factors. The three key elements are personal leadership, ability to act, and knowledge of what t o do. Of paramount importance to an expeditious recovery are effective intergovernmental relations. In those communities where the speed and quality of recovery was greater, local officials had found ways to (a) ensure more productive intergovernmental relationships, (b) compete effectively for scarce resources, and (c) better manage community- level decision-making during the post-disaster period.

Rubin, C. (1991). Recovery from disaster. In Drabek, T.E. & Hoetmer, G.J., *Emergency management: Principles and practice for local government, (pp 224-259).* Washington, D.C.: International City Management Association.

Schneider, R.O. (2002). Hazard mitigation and sustainable community development. *Disaster prevention and management*, 11(2): 141-147.

Emergency management has come to be regarded by many analysts as a critical part of the development of sustainable communities. The emergency management function has been linked to issues such as environmental stewardship and community planning. Especially important is the linkage between hazard mitigation efforts and community planning in the context of building sustainable communities. But this conceptual linkage has been difficult to implement in practice. The resolution of this difficulty and a clarification of the essential linkage of hazard mitigation to community planning will require a broader definition and a reformulation of the emergency management function. It will also require an assessment and the removal of impediments that currently stand in the way of the implementation of this linkage. Practical steps can be taken to begin this important chore

Tierney, K.J., Lindell, M.K. & Perry, R.W. (2001). *Facing the unexpected: Disaster preparedness and response in the United States.* Washington, D.C.: Joseph Henry Press.

Wu, J-Y. & Lindell, M. K. (2004). Housing recovery after two major earthquakes: the 1994 Northridge earthquake in the United States and the 1999 Chi-Chi earthquake in Taiwan.

Disasters, 28: 63-81.

The idea of pre-impact recovery planning has recently been promoted by researchers and practitioners, but very

little research has been done to evaluate its effects on disaster recovery. This study compared two jurisdictions – the city of Los Angeles, California and Taichung County in Taiwan – in their recovery from earthquakes. Although the two cases also differ with respect to variables other than the presence of pre-impact recovery plans, the available data suggest that having a pre-impact recovery plan facilitates housing reconstruction and allows local officials to make more effective use of window of opportunity after disaster to integrate hazard mitigation into the recovery process.

2. Land-Use Planning

(2.) Bodnar, J. (1987). *The Transplanted: A History of Immigrants in Urban America.* Bloomington, Indiana. Indiana University Press.

A look at immigrants' lives after moving to America, including introspective commentary from the author. Many groups immigrated to America for a variety of reasons with varying degrees of difficulty upon arrival. No groups experienced the same events, but parallels can be drawn between the different groups in reference to their encounters with capitalism and providing for their families. Bodnar suggests that only those who where not of the lower class in their regions immigrated to the Americas, suggesting also that the lower class could not afford to. It could also be the case that the lower class of those areas relied heavily on their ecosystem to provide what little they had for their family. Also, ignorance of what availed them upon immigrating could be another contributor to this statistic

(1.) Boyce, J. and S., Barry (Eds). (2003). *Natural assets: Democratizing environmental ownership.* Washington: Island Press.

(1.) Brown, L. (2006). *Plan B 2.0: Rescuing a plant under stress and a civilization in trouble. NY:* W.W. Norton and Company.

(1.) Casagrande, D. G. (n.d.). The human component of urban wetland restoration. *Interdisciplinary Restoration* (pps. 254-270).

An ecological restoration can be socially and biologically beneficial. In restoring an area employ the community to assist, they can help rebuild while gaining connectedness and a sense of success. Some approaches that would be useful in achieving a social oriented restoration are: local participation, having a focus on community, including a facilitator, educating the community, demonstrating projects, and evaluating the results. Restoration must consider more than just the physical appearance of the affected area. This being said, it is important to have a knowledgebase on the environment in question, and to take into account the group. Examining the behaviors of the community, seeing the characteristics of that group, and noting their values can help in guiding and understanding.

(1.) Cernea, Michael M. (1994). *Sociology, anthropology, and development: An annotated bibliography of the world bank publications 1975 – 1993.* Washington D.C.: World Bank Publications.

Diamond, J. (2005). *Collapse : how societies choose to fail or succeed*. New York: Penguin .

Earthquake Conference Monograph 5: *Socioeconomic impacts*. Memphis TN: Central United States Earthquake Consortium.

(2.) Enarson, Elaine. (2002). *Building disaster resilient communities: learning from community.women*. Statement for the UN Commission for the Status of Women (46th session) panel discussion on Environmental Management and Mitigation of Natural Disaters: a GenderPerspective. Retrieved on DATE, from http://www.un.org/womenwatch/daw/csw/csw46/panel-Enarson.pdf.
Focuses on women's views throughout the disaster process from warning of the disaster (if that exists) through reconstruction after the disaster. This paper dictates the methods and reasons for following the lead that women around the world have taken in assessing, preventing, and rebuilding for disasters. A discussion on learning from local women and their methods of preparedness leads to risk assessment by these women which in turn leads to methodologies from three cited areas where natural disasters are a continuous standard of life. A focus on emergency preparedness draws its resources from four women-made groups and then draws from a further three groups depicting their emergency relief efforts. Finally, from a pool of four examples, the paper expounds upon the long-term relief efforts. From these examples of women based organizations and groups there is a call to use this knowledge and turn it into action so that the knowledge from a variety of women's groups can be put into effect into areas of high risk where these groups are sadly absent.

(1.) Enarson, E. (2004). *Making risky environment safer: Women building sustainable anddisaster-resilient communities.* Women 2000 and Beyond publication (April 2004), UN DAW. Retrieved on DATE, from http://ww.un.org/womenwatch/daw/public/w2000.html.
A global view and very general discussion of gender roles in disaster prone and stricken areas. Focuses on the roles that society places upon women and how these roles affect the well-being of women and the communities housing them. Differentiates between degraded environments and natural disaster environments. General coverage of women's role in assessing risk and vulnerabilities, increasing awareness, responding to, and coping with natural disasters. Good general assessment of women's overall roles throughout disaster periods along with suggestions on how to capitalize on the strengths provided by those women.

(1.)Hallowell, C., (1979). *People of the bayou; Cajun life in lost America.* Gretna, LA: PelicanPress.

(4.) Harrison, B. (2001). *Collaborative programs in indigenous communities from fieldwork topractice*. Lanham, MD: AltaMira Press.
This book outlines the process of program design, data collection, analysis, and interpretation, for formal or pilot programs. The case study materials provide details on collaborative programs in economic development, education, social services, and health.

(2.) Koehler, Gus A., *What Disaster Response Management Can Learn From Chaos Theory*
Chaos theory is about finding the underlying order in apparently random data. This, under the assumption that disaster brings about chaos before (if predictable), during, and after its existence, leads one to believe that by studying chaos theory, aid can be predictably, to a degree, sent to higher risk places to minimize loss of life and possessions.

(2.) Lofland, J. & Lofland, L. H. (1995). *Analyzing social settings: A guide to qualitative observation and analysis.* Belmont: Wadsworth Publishing Company.

(1) Long, C. (2001). *Participation of the poor in development initiatives: taking their rightful place*. London: Earthscan Publications.

(3.) Merem, E. (2005). The Agroforestry system of west africa: the case of nigeria. *AFTA 2005Conference Proceedings*, 1-11.
Agroforestry assists in helping environmental problems and supports community sustainability. This article examines some of the economic benefits and outlines several successful communities. For example, the success of Nigeria and their oil palm trees is discussed in the achievements with integrated farming. The following proposals are discussed as way of assisting in creating and maintaining a sustainable environment and communities: the promotion of participation (men, women, and children), the education of communities, having financial support (which has the potential to be more cost effective in the long term in comparison so some other projects), and having procedures restructured.

Meyer, W.B., and Turner, B.L. II (Eds.). (1994). *Changes in land use and land cover: A globalperspective*. Cambridge: Cambridge University Press.
Sillitoe suggests a three-part organization which utilizes IK researchers and endeavors, and as such uses the emerging technology to our benefit in the most efficient manner possible. Using a global land module, there would be causes and effects world wide drawn from even the simplest endeavor since the world cannot be broken into affected and unaffected areas.

(1.) Nakagawa, Y., & Shaw, R. (2004). Social capital: a missing link to disaster recovery. *International Journal of mass emergencies and disasters*, *22*(1), 5-34.
Delves into the prospect that in Kobe, Japan in a post-earthquake rebuilding process the community participated in the rebuilding and had a perceived higher and faster rebound rate. The model derived from that disaster was used in Gujarat, India when there was a similar earthquake disaster with a need to rebuild. The model was also used in four different communities, and it was observed that the communities with the highest social capital had the highest satisfaction rates for new town planning and the speediest recoveries. Discussion of what constitutes social capital, along with the roles of community leaders, are examined with intense detail. The conclusion dictates the uses of social capital and their value to post-disaster recovery

(1.) Olson, R. S. (2000). Toward a politics of disaster: losses, values, agendas, and blame. *International journal of mass emergencies and disasters*, *18*(2), 265-288.
There are a myriad of other sections of politics ranging from air pollution to cancer, but there lacks ? a political regime for disaster control which this paper outlines with examples from ancient Asia, Nicaragua, Mexico, and California. There are also phases that are described for both rapid onset and slow onset disasters. Pre-Impact and impact are the first two phases for a rapid onset disaster whereas those same phases for a slow onset are deemed pre-recognition and recognition. The remaining three phases for both types of disaster are response, recovery, and reconstruction. Lives are valued higher in the first phases and survival is deemed most important in the response phase. The author describes any disaster not only as natural, but as a political crisis since all disasters must be explained. This leads us into the blame management portion of the paper wherein everything from the disaster itself to the plea of ignorance are used as a cover to the actual causes of the disaster. Also outlined are disaster justifications from finding unseen benefits to the ‘it could have been worse’ mentality. All in all this paper is the first of its kind to point out the need for, and setup an outline of the politics of disasters and contain examples of the different phases set in the outline. As this provides a good structure for disaster management to affix its structure, there is little more than theory at this point.

(1.) Sillitoe, P., Bricker, A., & Pottien, J. (2002). *Participating in development approaches toindigenous knowledge*. 1st ed. Oxford, UK: Routledge.

As the title indicates, this is an extensive text on the values of indigenous knowledge (IK) both within the lives of the peoples and in considering development of the areas inhabited by these people. The IK can only be completely understood from an insider's perspective, and as such, outside developers who enter into an area should first engage the locals to find out from their IK what is the best course of action. He denotes three models to explore the relationship between IK and science. The first model is a continuum. On one end is the poor farmer with no education and exposure to scientific knowledge, and on the other end is the Western scientist and a wide variety of people with different levels of education, exposure to other knowledge systems and identity occupying the space in between. The second model is a circle on which he plots different stakeholders. This becomes a two-way learning process with no scope for hierarchical positioning and in which no one has a privileged position. Yet Sillitoe is not satisfied with either of these models as some form of hierarchy inadvertently creeps in, especially if we admit that development must, in part, promote the use of scientifically informed technology to improve lives. His third solution is a three-dimensional curved space and sphere, in which the global plotting of different knowledge with scope for movement reflects the dynamism of knowledge. This global model would, he suggests, help in the comparison and co-relation of different knowledge central to IK research and endeavors. The global model conveys to the development community that local knowledge is not monolithic, but individually variable as is scientific knowledge.

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(1.) Tierney, K. (n.d.). *Conceptualizing and measuring organizational and community resilience:lessons from the emergency response following the September 11, 2001 attack on the world trade center*. Retrieved Nov 10, 2005, from http://www.drs.dpri.kyoto-u.ac.jp/us-japan/cd3/KathleenTierney.pdf.

The meaning and importance of resiliency is examined at both the internal organizational level and at the community level. Although New York has planned for and educated in responding to disasters, no one could have been prepared for the attack on the World Trade Center; however, the area was able to recover. The reasons why this area was able to cope and rebuild are its robustness, its redundancy, its resourcefulness, and its rapid response. Emergency response to September 11 was successful because it was a small area, and it was able to meet the social, economic, and organizational needs of the aftermath. The community mobilization and response allowed personal support and resource support. With this physical and social support the individuals and families involved in this disaster were able to make sense of what took place.

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Turner II, B.L. (1997). The sustainability principle in global agendas: implications for understand land-use/ cover change. *The Geographical Journal, 163*(2), 133-140**.**

III. Social Characteristics / Actions that Diminish or Enhance Resiliency

Diminishment of Resiliency: ***Dr. Walt G. Peacock, Texas A & M***

Enhancement of Resiliency: ***Pat Stukes, Texas Women's College***
Dr. Pam Jenkins, University of New Orleans

Introduction- Diminishment of Resiliency: *Dr. Walt G. Peacock, Texas A & M*

Vulnerability can take on many possible meanings. When considering resiliency from natural or environmental hazards, vulnerability means a susceptibility or potential for experiencing the harmful impacts of a hazard event.3 . The impacts might be damage to buildings, human causalities, or, more generally, some form of loss. To be vulnerable to an environmental hazard then, means that an entity is open or susceptible to suffering negative consequences. The more vulnerable an entity, the more susceptible it is to hazard impacts. The nature of the entity can be anything from a building, to an individual, social group, or even community. Here we are focusing much more on individuals and various forms of social groupings, such as households, families, businesses and even whole communities.

Historically, when considering community vulnerability the focus was likely to be limited to how near it was to potential hazards such as a river, the ocean, fault lines, volcanoes, or other hazard. So the focus of a vulnerability analysis was likely to be on locating the river's flood plain, storm surge zones, or subsidence area. The solutions, on the other hand, were likely to be some form of engineering solution, such as strengthening or raising buildings, adding fill, and building dams, levees or sea walls. In a very real sense, the focus was on assessing the structural or physical aspects of vulnerability and the solutions were technological requiring modifying the natural or built environment. It is equally important that we better understand the physical nature of hazard agents be they coastal storms, flooding, hurricanes and the problems of subsidence and sea level rise. This focus on the proximity or exposure to particular hazards, the nature of the hazard itself, and developing technological or engineering solutions is still very important for understanding and addressing vulnerability. However, a complete understanding of vulnerability requires that we look beyond the agent itself and only technological solutions.

Emerging in the in the later part of the 20th century we began to see a call for alternative approaches and foci. This trend is perhaps best capture early by key researchers like Gilbert F. White4 (1945) who call for the consideration of non-structural approaches to hazard mitigation, through planning and appropriate development. The basic notion was that it was the way we were developing and using the environment that was in part responsible for our vulnerability to hazards and, as a consequence, disasters.5 In addition, researchers began to critically examine the nature of impacts and the fact that they were unequally distributed, often impacting those least likely to be able to respond.6 By the last decade of the century, a new perspective had began to emerge that moved beyond the physical dimensions of vulnerability suggesting that we must also examine the social dynamics that shape vulnerability, hence the term *social vulnerability*.

Blaike, Cannon, Davis, and Wisner (1994) in their classic work on the subject entitled *At Risk7*, defined *social vulnerability* as "the characteristics of a person or group in terms of their capacity to anticipate, cope with,

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[3] Two of many useful discussions can be found in Cutter 1996 and Deyle et al. 1998)
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[4] See White, Gilbert. 1945. *Human Adjustment to Floods*. University of Chicago Department of Geography Research Paper No. 29. Chicago: University of Chicago Department of Geography.
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[5] see also for example Cuny 1983; Bates 1982; Oliver-Smith 1986;
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[6] See for example Bates et al, 1963; Bates and Peacock 1987; Bolin 1976; 1985; 1986; Peacock et al. 1987.
7.

resist and recover from the impacts of a natural hazard. It involves a combination of factors that determine the degree to which someone's life and livelihood are put at risk…" The concept social vulnerability then broadens the idea of vulnerability, suggesting that it is not enough to focus on vulnerabilities emerging from physical or spatial aspects, but rather there are social dimensions to vulnerability. These social factors often determine why some people find themselves in hazardous places, living in inadequate shelter, and are unable to address future events. Furthermore, social vulnerability as a concept directly extends our view drawing out attention to factors that shape and determine the ability to anticipate a future event, to cope with or resist an event, and also to recover from an event should it occur.

The notion of social vulnerability can perhaps most easily be seen when examining poverty or more broadly the consequences of lower levels of wealth and income. Households living below the poverty level are much more constrained when it comes to responding to potential hazards, despite, as research clearly suggests, their often-higher levels of risk perception. For example, poor households often find themselves in lower quality housing, perhaps built using older weaker building codes. They are more likely to be renting, and hence do not have the freedom to modifying their homes, adding hurricane shutters should they be able to afford them, when hurricanes threaten. Lower levels of economic resources constrains choice, hence they may have greater difficulty leaving contaminated neighborhoods or in more risky areas such as floodplains, or areas subject to mudslides, etc. In the unfortunate event that they are threatened by a hazard agent or impacted by a disaster event, they have fewer resources to escape and flee prior to impact. And, after impact, they have significantly fewer economic resources are available to bring about recovery resulting in many households staying in damage structures. Hence, in areas subject to chronic hazards and high levels of poverty, the cycle often can repeat itself. Resilience in this situation is difficult to realize without external resources and support.

While relatively recent in its emergence, researchers utilizing a social vulnerability perspective have begun to systematically explore other social factors that shape and determine vulnerability. More often than not these are factors that social scientists have found to be important for determining access to scarce social resources and rewards such as wealth, power, and status. Hence primary factors like race and ethnicity, gender, age, religion, and education are being examined. In addition other factors that influence and shape an individual's and household's vulnerability such as residing in urban/rural areas, family structure (dependency ratio, single parent, female headed, etc.), and secondary factors, such as tenure status, occupation, transportation dependence, and proximity to critical facilities have also been explored.

The nature and importance of particular factors for social vulnerability can change with time and will necessarily differ given different the socio-political environments of different societies or cultural regions of the world. The nature of the hazard under consideration may also be important, particularly for secondary factors. For example, gender is clearly critical in all societies, but can take on added consequences in more traditional Muslim communities and the types of racial/ethnic groups under consideration can vary considerably as well. What is important for an understanding of *social vulnerability*, it to critically examine social structures and dynamics that can have consequences for determining and shaping vulnerability.

The following sections offer suggested readings related to various factors or dimensions of social vulnerability that should be considered when examining a particular hazard context. When considering these factors, they should not necessarily be thought of as independent distinct factors, with little relationship to each other. Indeed, many are inextricably related to each other, making it difficult for researchers to assess the

[7] *At Risk: Natural Hazards, People's vulnerability and disasters. Wisner, Blaikie, Cannon, and Davis.*

independents effects of each. Instead, one should view them as a complex set of phenomena that shape and determine vulnerability, some of which might well be more important than others given certain types of hazards or different dimensions of resiliency. We begin with general readings.

Introduction- Enhancement of Resiliency: ***Dr. Pam Jenkins,***
University of New Orleans
Pat Stukes, Texas Woman's College

When communities experience disaster, quite often it is hard in sifting through the debris, and destruction of their lives to imagine that there will ever be a time when things are back to some semblance of normalcy. Yet, communities have been incredibly resourceful in managing to come full circle out of a disaster to serve as an example to other communities faced with the similar circumstances.

This section of the bibliography focuses on the dynamics of a variety of characteristics that contribute to just such a recovery. Picou,* et al succinctly describe the resolve following such events, citing the work of several disaster researchers who have identified best practice approaches referred to here as "emergent therapeutic community."

> Disaster outcomes are based on preexisting social structures and the consequences of these structures for both organizational and individual responses (Dynes 1993; Kreps 1985, 1989; Oliver-Smith 1996). Disasters are "catalysts for collective action," but more important they are also "systemic" events that permeate community social structure, producing social responses that are both emergent and constraining (Dynes 1974; Kreps 1985, 1998)…Emergency response efforts are designed to provide social, economic, and financial support that generates an emergent "therapeutic community" (Barton 1969; Fritz 1961) As such, natural disasters are viewed as a "consensus-type" crisis, where coordinated response efforts push for a timely recovery for victims (Quarantelli & Dynes 1976).

Thus, communities impacted produce "social responses that are both emergent and constraining." These emergent therapeutic community characteristics can provide a good deal of support for resiliency and recovery efforts. Each community's response varies by the internal strengths and challenges of the community prior to the disaster and then, the response by external forces during and after the event.

Recovery studies show that locally based, bottom-up recovery approaches are most successful (Geis, 1996). This is not surprising in that communities possess local knowledge about their neighborhoods, communities, and residents. Studies of top down approaches to recovery show that many top down efforts fail to provide the needed assistance and in fact, often ignore the local communities' ability to develop the capacity to recover (Berke and Beatley, 1977). The capacity of the community and neighborhoods to overcome the obstacles of the disaster and to thrive are linked with how local knowledge is gathered, understood, and becomes part of the long term recovery plan.

Both nationally and internationally, the economic infrastructure and the political position of the community and of the country play an integral role in the resiliency of a community. Much of the individual and community efforts can be enhanced or diminished based on the class position of many residents or the economic vitality of the community or region. Political placement in national and international terms also plays a role for communities impacted by a disaster. The economic and political response to 9/11 in contrast to that of Katrina illustrates how class, politics and policy intertwine to create a climate that illustrates how a community's own capacity is allowed to develop.

One of the most important factors in resiliency of a community revolves around sense of place and attachment to place. For many residents, their understanding of sense of place and their level of attachment to a place correspond to the individual and community's ability to respond to the disaster and to recover. An individual's sense of place and attachment can mediate the affects of many factors that determine a community's capacity to respond. Some individuals and communities have such a strong sense of identity around place that they will return to their homes and rebuild in spite of numerous obstacles. Other factors that contribute to a community's ability to rebound from the disaster include the relations of culture, gender, race and ethnicity, family and community relationships, non-governmental organizations, religion, and education. All these factors contribute to the "social responses that are both emergent and constraining."

Researchers can aid in this bottom-up recovery by using a participatory action research model to **work with** (as opposed to for) communities. While there are many definitions of participatory action research, any model of this type of research includes community residents in the scope, direction and implementation of the research, a reflexive approach to the problem, and accountability to the community under investigation. The research process quite simply leads to an understanding of the community dimensions and processes that are linked to local knowledge and increases the resiliency capacity of a community.

* Picou JS, Grill DA, Dyer C, & Curry EW. (1992). Disruption and stress in an Alaskanfishing community: initial and continuing impacts of the Exxon-Valdex oil spill. *Ind. Crisis Q.*, 6:235-57.

A. General Readings

(4.) Berkes, F. (Eds.). (1989). *Common Property Resources, Ecology and Community-BasedSustainable Development.* London: Belhaven Press.

"**Abstract**

Involuntary population displacements and resettlement entailed by development programs have reached a magnitude and frequency that give these phenomena worldwide relevance and require policy-guided solutions. The author extracts the general trends and common characteristics revealed by a vast body of empirical data, to construct a theoretical model of displacement and reconstruction. The model captures the socioeconomic content of both segments of the process: forced displacement and reestablishment. It identifies the key risks and impoverishment processes in displacement as: (a) landlessness; (b) joblessness; (c) homelessness; (d) marginalization: (e) food insecurity; (f) loss of access to common property resources; (g) increased morbidity; (h) community disarticulation. Conversely, the model suggests that reconstructing and improving the livelihood of those displaced require risk-reversals through explicit strategies backed up by adequate financing. Flawed approaches to reconstruction and the intrinsic limitations of cost-benefit analysis are discussed. The paper shows how the proposed model can be used by practitioners and researchers as a diagnostic tool, a predictive tool, a problem-resolution tool and a research-guidance tool."

((3.) Clark, D., Fox, J., Treakle, K. (2003). *Demanding Accountability: Civil Society Claims and the World Bank Inspection Panel*, Lanham, MD: Rowman and Littlefield Publishers, Inc.

Cochrane, H.C. 1975. *Natural Hazards and Their Distributive Effects*. Boulder, CO: Institute of Behavioral Sciences.

Cuny, Frederick C. 1983. *Disasters and Development*. Oxford: Oxford University Press.

Drabek, T.E. 1986. *Human System Responses to Disaster: An Inventory of Sociological Findings.* New York: Springer-Verlag.

(3.) Fox, J. (2003). Introduction: Framing the Inspection Panel. In D. Clark, J. Fox, K. Treakle(Eds.) *Demanding Accountability: Civil Society Claims and the World Bank Inspection Panel*. (pp. xi-xxxi). Lanham, MD: Rowman and Littlefield Publishers, Inc.

(1.) Greider, T., Garkovich, L. (1994). Landscapes: The Social Construction of Nature and theEnvironment. *Rural Sociology*, 59(1) , 1-24.

Heinz Center for Science, Economics and the Environment. 2000. The Hidden Costs of Coastal Hazards: Implications for Risk Assessment and Mitigation. Covello, California: Island Press.

Heinz Center for Science, Economics, and the Environment. 2002. Human Links t Coastal Disasters. Washington, D.C.: The H. John Heinz III Center.

(1.) Hoffman, S. Oliver-Smith, A. (Eds.). (2002). *Catastrophe & culture: the anthropology ofdisaster school of American research advanced seminar series)*. Santa Fe, NM: School of American Research Press.
--CHAPTER 6
Discussion on how disasters have their own mythology and symbols and how these occurrences in society can be used to help the situation brought about by a disaster instead of hinder it. The duality of trying to escape nature into society and using symbols rooted in nature presents a paradox and the eventual use of these symbols for help instead of hindrance. The cyclic pattern of disasters and their symbols is examined with religious overtones as the focus. Finally, how to reform a culture that has undergone a tragedy? is examined with the differing aspect of what is "evil" in terms of society's view.

(3.) Holling, C.S. (1986). The Resilience of Terrestrial Ecosystems: Local Surprise and GlobalChange. In W.C. Clark, R.E. Munn (Eds.), *Sustainable Development of the Biosphere*. Cambridge, MA: International Institute for Applied Systems Analysis and Cambridge University Press.
This text describes how humans respond to economic and environmental hardships.

Johnston, B. R. (2000). Reparations and the Right to Remedy. Retrieved 2005, from WCD WebSite: http://www.dams.org/thematic/contrib.papers.php Briefing paper prepared for the World Commission on Dams from July 2000.
Intense study of the areas affected by the construction of dams and those people's rights to reparations due to damage brought about by trying to control the world waterways. It deems the World Commission of Dams responsible for the well-being of the world's population not just those directly surrounding the dams in question. There is a list of possible scenarios in which people can and have been affected.

(1.) Korpela, K., Hartig, T., Kaiser, F.G., Fuhrer, U. (2001). Restorative experience and selfregulation in favorite places. *Environment and Behavior*, 33, 572-589.

(3.) Leighton, A., (n.d.). *The Governing of Men: General Principles and Recommendationsbased on Experiences at a Japanese Refugee Camp.* Princeton: Princeton University Press.

Mileti, D. S., Drabek, T. E., and Haas, J. E. 1975. *Human Systems in Extreme Environments: A Sociological Perspective.* Boulder, CO: Institute of Behavior Science, University of Colorado, Monograph #21.

Mileti, Dennis. 1999. Disasters By Design: A Reassessment of Natural Hazards in the United States. Washington, D.C. Joseph Henry Press.

Morrow, B.H. 1998. Identifying and mapping Community Vulnerability. *Disasters*, 23: 1-18.
Abstract: Disaster vulnerability is socially constructed, i.e., it arises out of the social and economic circumstances of everyday living. Most often discussed from the perspective of developing nations, this article extends the argument using American demographic trends. Examples from recent disasters, Hurricane Andrew in particular, illustrate how certain categories of people, such as the poor, the elderly, women-headed households and recent residents, are at greater risk throughout the disaster response process. Knowledge of where these groups are concentrated within communities and the general nature of their circumstances is an important step towards effective emergency management. Emergency planners, policy-makers and responding organisations are encouraged to identify and locate high-risk sectors on Community Vulnerability Maps, integrating this information into GIS systems where feasible. Effective disaster management calls for aggressively involving these neighbourhoods and groups at all levels of planning and response, as well as mitigation efforts that address the root causes of vulnerability. National Flood Insurance Program data, and a social vulnerability index, based on census information. These indices are combined to determine spatial patterns of evacuation assistance needs in Hillsborough County, Florida. Four evacuation dimensions are analyzed: population traits and building structures, differential access to resources, special evacuation needs, and a combination of variables. Results indicate that geophysical risk and social vulnerability can produce different spatial patterns that complicate emergency management. Different measures of social vulnerability also confound evacuation strategies and can result in ineffective practices. It is argued that careful consideration be given to the characteristics of local populations

Morrow, Betty Hearn and Walter Gillis Peacock. 1997. Disasters and Social Change: Hurricane Andrew and the Reshaping of Miami? Pp 226-242 in Peacock, Morrow and Gladwin. *Hurricane Andrew: Ethnicity, Gender and the Sociology of Disasters*. London: Routledge.

Oliver-Smith, Anthony. 1990. Post disaster housing reconstruction and social inequality: A challenge to policy and practice. *Disasters*, 14.1: 7-19.
Abstract: In post-disaster reconstruction the social aspects of housing provision are important for the success of both emergency shelters and permanent housing, particularly in settlement that have been permanently relocated or entirely rebuilt. The social dimensions of housing reconstruction after disaster are discussed in the context of the long-term effects of reconstruction after the Yungay, Peru Earthquake-Avalanche of 1970. Considerations of these issues presents questions regarding the tension between continuity and change in affected populations, the importance of pre-disaster socio-economic patterns for reconstruction and the criteria used for assessing the success of post-disaster reconstruction and development projects. The author contends that post-disaster housing reconstruction must avoid rebuilding structures which reflect, sustain, and reproduce patterns of inequality and exploitation.

(3.) Patel, A., Mehta, A. (1995). The Independent Review: Was it a Search for Truth? In Fisher,W.F. (Ed.) *Toward Sustainable Development: Struggles Over India's Narmada River*. Armonk, NY and London, England: M.E. Sharpe.

Peacock, W.G. with A.K. Ragsdale. 1997. Social Systems, Ecological Networks and Disasters: Toward a Socio-political Ecology of Disasters. Pp 20-35 in Walter Gillis Peacock, Betty Hearn Morrow, and Hugh Gladwin, Hurricane Andrew: Ethnicity, Gender, and the Sociology of Disasters. London: Rutledge.

Peacock, Walter Gillis, Betty Hearn Morrow, and Hugh Gladwin, 1997. *Hurricane Andrew: Ethnicity, Gender, and the Sociology of Disasters.* London: Rutledge.

Morrow, Betty Hearn and Walter Gillis Peacock. 1997. Disasters and Social Change: Hurricane Andrew and the Reshaping of Miami? Pp 226-242 in Peacock, Morrow and Gladwin. *Hurricane Andrew: Ethnicity, Gender and the Sociology of Disasters*. London: Routledge.

Pelling, M. (2003). The Vulnerability of Cities: Natural Disasters and Social Resilience. London: Earthscan.

(1.) Taylor-Ide, D., Taylor, C. (2002). *Just and Lasting Change: When Communities Own Their Future* Baltimore, MD: Johns Hopkins Press.

Tierney, K.J. 1989. Improving theory and research on hazard mitigation: political economy and organizational perspectives. *International Journal of Mass Emergencies and Disasters*. 7(3): 367-396.

Tierney, Kathleen J. 1999. Toward a Critical Sociology of Risk. *Sociological Forum*, Jun 99, Vol. 14, Issue 2, p 215-42.

Abstract: Sociologists are growing increasingly skeptical toward research on risk conducted in other fields, and new perspectives on risk are emerging. Topics that merit further exploration include the social construction of risk and risk objects, risk analysis as a type of scientific enterprise, the organizational and institutional forces that shape positions on risk, safety and risk as dynamic properties of social systems, and the social forces that create and allocate risk. In particular, sociologists need to place more emphasis on exploring the roles played by organizations and the state in hazard production and on formulating a political economy of risk. To a significantly greater degree than other disciplines concerned with risk, sociology emphasizes the contextual factors that structure vulnerability to hazards and the linkages that exist between vulnerability and social power.

Wisner, B, 1998. Marginality and vulnerability: why the homeless of Tokyo don't 'count' in disaster preparations, *Applied Geography*, 18(1):25-53.

Abstract: The philosophical and methodological bases of urban disaster vulnerability analyses are presently underdeveloped. Few such analyses incorporate social data, partly because urban disaster managers and other potential user groups do not fully appreciate the value of this information, and partly because techniques for including it in existing vulnerability analyses have not been worked out. This paper explores the value of adding data on social marginality to Japanese models of earthquake impact and of incorporating marginal groups into the disaster planning process. The growing phenomenon of homelessness in Tokyo is used as a test case. It is argued that data on homelessness would improve the performance of systems designed to increase personal and social protection, whereas the incorporation of marginal urban groups would tap new knowledge of coping mechanisms and enrich the entire planning process

World Commission on Dams, (2000). *Dams and Development: A New Framework for DecisionMaking,* London: Earthscan Publications Ltd. Expounded decisions of the governing body of the world for dams.

B. Age

The young and old of any society tend to be the most vulnerable to hazards and disasters. This particularly holds true in today's so called modern societies where elder members are often isolated and yet often have special needs. Age is a factor that exemplifies how age represents both a strength and a challenge during a disaster. Elderly residents often hold the memories of a community and can play a major role in the long-term recovery of a community's identity. Young people represent the future of a community and yet, are often overlooked in the rebuilding and planning efforts.

Knight, Bob G., Margaret Gatz Andrus, Kenneth Heller, Vern L. Bengtson Andrus. 2000. Age and Emotional Response to the Northridge Earthquake: A Longitudinal Analysis. *Psychology and Aging.* Vol. 15 (4) December 2000, pp. 627-634.
Abstract: Cross-sectional studies have found older adults to have lower levels of emotional distress after natural disasters. The maturation hypothesis suggests that older adults are less reactive to stress events, whereas the inoculation hypothesis argues that prior experience with disaster is protective. One hundred and sixty-six adults aged 30 to 102 were interviewed regarding the 1994 Northridge earthquake. Longitudinal data were available on depressed mood before and after the earthquake. The maturation hypothesis was generally not supported. The young-old were least depressed; however, this age difference was present prior to the earthquake. The old-old showed lowest levels of earthquake-specific rumination, but age did not buffer the relationship between damage exposure and rumination. The inoculation hypothesis was supported for depressed mood. Prior earthquake experience was related to lower postearthquake depression scores.

McMillen, J. Curtis, North, Carol S. and Smith, Elizabeth M. 2000. What Parts of PTSD Are Normal: Intrusion, Avoidance, or Arousal? Data from the Northridge, California, Earthquake. *Journal of Traumatic Stress* Vol. 13 Issue 1, p 57-75.
Abstract: The incidence and comorbidity of posttraumatic stress disorder (PTSD) are addressed in a study of 130 Northridge, California, earthquake survivors interviewed 3 months postdisaster. Only 13% of the sample met full PTSD criteria, but 48% met both the reexperiencing and the arousal symptom criteria, without meeting the avoidance and numbing symptom criterion. Psychiatric comorbidity was associated mostly with avoidance and numbing symptoms. For moderately severe traumatic events, reexperiencing and arousal symptoms may be the most "normal," and survivors with a history of psychiatric problems may be those most likely to develop full PTSD. A system that considers people who meet all three symptom criteria to have a psychiatric disorder yet recognizes the distress of other symptomatic survivors may best serve traumatized populations.

Phifer, James F. 1990. Psychological Distress and Somatic Symptoms after Natural Disaster: Differential Vulnerability among Older Adults. *Psychology and Aging*. Vol. 5, Issue 3, September 1990. pp. 412-420.
Abstract: In a panel study, more than 200 older adults were interviewed before and after a severe flood in southeastern Kentucky in 1984. The issue in this study was whether older adult flood victims were differentially vulnerable to increases in psychological and physical symptoms on the basis of their age, sex, marital status, occupational status, education level, and preflood symptom levels. Flood exposure was related

to increases in depressive, anxiety, and somatic symptoms at 18 months postflood. Within this older adult sample, men, those with lower occupational status, and persons aged 55–64 were at significantly greater risk for increases in psychological symptoms. Sociodemographic status did not moderate the impact of flood exposure on physical health. Implications for crisis-intervention services to older adult disaster victims are discussed.

Sanders, Sara; Bowie, Stan L.; and Bowie, Yvonne Dias. 2003. Lessons learned on Forced Relocation of Older Adults: The Impact of Hurricane Andrew on Health, Mental Health and Social Suport of Public Housing Residents. *Journal of Gerontological Social Work*, 2003, 40, 4, 23-35.

C. Community Attachment/Sense of Place

(1.) Brown, B.B., Perkins, P.B. (1992). Disruption in Place Attachment. In I. Altman, S. M. Low (Eds.), *Place Attachment: Human Behavior and the Environment*. 12 (pp. 278-304). New York, NY: Plenum.

(1.) Clark, J. K., Stein, T.V. (2003). Incorporating the Natural Landscape within an Assessment of Community Attachment. *Forest Science.* 49(6), 867-876.

(1.) Cuba, L., Hummon, D.M. (1993). A Place to Call Home: Identification with Dwelling, Community and Region. *Sociological Quarterly*. V34, 111-131.

(1.) Fullilove, Mindy Thompson M.D. (2005) Root shock: how tearing up city neighborhoods hurts America, and what we can do about it. New York: Ballantine Books.
This book examines the phenomenon of being uprooted from place due to housing and land policies. It argues that the emotional trauma affects not only the Afro- American community but all of America.

(2.) Gupta, A., Ferguson, J. (Eds.) (1997). *Culture, Power, Place: Explorations in ritical Anthropology.* Durham, NC: Duke University Press.

(1.) Hinchman, L. P. & Hinchman, S. K. (2001). *Memory, Identity, Community: the Ideaof Narrative in Human Science* Albany, NY State University of New York Press

(1.) Holstein, J. A. & Gubrium, Jaber F. (2000). *The Self We Live By: Narrative Identity in a Postmodern World* NY Oxford University Press .

(1.) Mesch, G.S., & O. Manor. (1998). Social ties, environmental perception, and localattachment. In *Environment and Behavior*. V30 No.4 504-519.

Phillips, B.D. 1996. Creating, sustaining and losing place: Homelessness in the context of disaster." *Humanity & Society*, 20: 94-101.

(2.) Oliver-Smith A. (1977). Traditional Agriculture, Central Places and Post-disaster Urban Relocation in Peru. *Am. Ethnol.* 3, 102-116.

"Abstract

In the aftermath of the 1970 earthquake-avalanche disaster in Peru, survivors of the devastated city of Yungay refused to let their city be relocated in a safer area. Research suggests that as well as having strong emotional ties to the site of their destroyed home, the survivors' refusal to relocate demonstrates a rational assessment of the functional prerequisites for urban growth. These folk perceptions of urban settlement parallel closely the basic formulations of central place theory from geography."

(1.) Vorkinn, M., Riese, H. (2001). Environmental Concern in a Local Context: The Significance of Place Attachment. *Environment and Behavior*. 33 (2), 249-263.

Wisner, B, 1998. Marginality and vulnerability: why the homeless of Tokyo don't 'count' in disaster preparations, *Applied Geography*, 18(1):25-53.

Abstract: The philosophical and methodological bases of urban disaster vulnerability analyses are presently underdeveloped. Few such analyses incorporate social data, partly because urban disaster managers and other potential user groups do not fully appreciate the value of this information, and partly because techniques for including it in existing vulnerability analyses have not been worked out. This paper explores the value of adding data on social marginality to Japanese models of earthquake impact and of incorporating marginal groups into the disaster planning process. The growing phenomenon of homelessness in Tokyo is used as a test case. It is argued that data on homelessness would improve the performance of systems designed to increase personal and social protection, whereas the incorporation of marginal urban groups would tap new knowledge of coping mechanisms and enrich the entire planning process.

D. Community Dimensions and Social Processes

(1.) Bruch, C., Jansky, L., Nakayama, M., Salewicz, K (Eds.) (2005). *Public Participation in the Governance of International Freshwater Resources.* Tokyo, Japan: United Nations University Press.

(1.) Krumholz, N., Forester, J. (1990). *Making Equity Planning Work: Leadership in the Public Sector.* Philadelphia, PA: Temple University Press.

Oliver-Smith, Anthony. 1991. Success and failures in post-disaster resettlement. *Disasters*, 15.1: 12-23

Abstract: In this article I examine the problem of the resettlement of population after disaster. After considering the complexity of the resettlement process in general and the reasons resettlement is often chosen by authorities following disaster, I discuss a theoretical perspective from development project resettlement which may have relevance for disaster research. This is followed by an examination pf those factors in post-disaster resettlement projects which proved important in affecting successful or unsuccessful outcomes. Site, layout, housing and popular input are presented as crucial issues in the determination of success or failure in post-disaster resettlement. Case material from Turkey, Iran and Peru is presented to illustrate how failure to attend t these issues produces unsuccessful resettlement villages. Case material from Turkey is used to illustrate how attention to these factors improves chances of success in resettlement. Material from case of voluntary spontaneous post-disaster resettlement in Guatemala is also presented to underscore the importance of popular inputs. The article ends with a brief consideration of resistance to resettlement and alternative policies.

(1.) Pound, B., Snapp, S., McDougall, C., Braun, A. (Eds.) (2003). *Managing Natural Resources for Sustainable Livelihoods: Uniting Science and Participation.* London, England: EarthScan Publications.

Wisner, B, 1998. Marginality and vulnerability: why the homeless of Tokyo don't 'count' in disaster preparations, *Applied Geography*, 18(1):25-53.

Abstract: The philosophical and methodological bases of urban disaster vulnerability analyses are presently underdeveloped. Few such analyses incorporate social data, partly because urban disaster managers and other potential user groups do not fully appreciate the value of this information, and partly because techniques for including it in existing vulnerability analyses have not been worked out. This paper explores the value of adding data on social marginality to Japanese models of earthquake impact and of incorporating marginal groups into the disaster planning process. The growing phenomenon of homelessness in Tokyo is used as a test case. It is argued that data on homelessness would improve the performance of systems designed to increase personal and social protection, whereas the incorporation of marginal urban groups would tap new knowledge of coping mechanisms and enrich the entire planning process.

E. Culture

Culture is a very general term utilized by social scientists to refer to society's symbol systems and the information that they convey. This information shapes and patterns every facet of human existence. Cultural variations are often most evident when comparing across societies and nations. However, even within a society there can exist distinct sub-cultures often associated with different ethnic groups, regional variations, dialects and even variations in language and livelihoods. In the context of vulnerability, culture can often have both positive and negative consequences. For example, the loss of local culture and cultural patterns can be associated with development patterns that are no longer in harmony with the natural environment; hence increasing vulnerability. In other words, "modern" cultural traits need not always be associated with reducing vulnerability.

Communities are often defined by a distinctive cultural heritage. The potential loss of community's cultural artifacts, customs, and rituals, creates a rallying point that can galvanize a unique population into action.

- Art –is one way in which a community may symbolize its uniqueness. Preservation of community art can foster pride and create a rallying point from which a community can work to maintain its most cherished history.
- Music –is also a reflection of a community's past and present. Like its artists, musicians can establish a call for action, which may culminate in a collective body of work marking a specific place in time.
- Food –is a typical reflection of culture and as such can play a central role in bringing people back to their roots. For cities and communities known for their food, it can be a source for gathering both residents and tourists in terms of providing support for rebuilding, and recovery.
- Festival –nothing marks a town like its festivals. People tend to anticipate those opportunities to visit communities during festivals and by continuing such a tradition, communities regain a sense of collectivity, and are provided with a familiar attraction that may take their minds away from the devastation, even if briefly. Festivals also return communities to a state of normalcy by maintaining a traditional celebration despite whatever devastation they may have experienced.

Haque, C. Emdad. 2003. Perspectives of Natural Disasters in East and South Asia, and the Pacific Island States: Socio-economic Correlates and Needs Assessment. Natural Hazards, Volume 29, Number 3, pp. 465-483.
Abstract: The regions of East and South Asia, and the Pacific Islands are among the most-hazard prone areas in the world. Because of this, during the last century, most of the human casualties of `natural-triggered' disasters have taken place in this region. This circumstance therefore has become a major global humanitarian concern. Another major concern, specifically for the donor agencies, is the damage sustained by infrastructure resulting from environmental disasters. These recurrent losses take away a significant proportion of the cumulative economic gains accrued from development investments over many years. Stepwise multiple regression results substantiated the fact that many of the socio-economic and demographic variables significantly influence disaster-related deaths and injuries in this part of the world. A comparative temporal analysis has shown that, over the past two decades, demographic variables have become prominent predictors of disaster-loss in South, Southeast and East Asian and the Pacific states. Many countries of the region are lagging behind in understanding and recognizing the broader scope of disaster mitigation and management. Emerging needs and awareness among the decision-makers and the general public, however, have prompted institutions in many countries to initiate a critical review of the prevailing approaches. The country-specific disaster-management capacities and needs in the region vary widely. There are many differences in historical courses, institutional and administrative settings, sociocultural characteristics, as well as political and economic systems. Development of a common institutional framework for the region, therefore, seems unfeasible. Based upon a regional review, it has become clear that the research calls for improving the understanding of the significance of disaster mitigation and management in light of sustainable development and the emerging global issues. In addition, aspects of human resource development to enhance institutional mitigation and response capacities are emphasized.

(1.) Hinchman, Lewis P. & Hinchman, Sandra K. (2001). *Memory, Identity, Community: the Idea of Narrative in Human Science.* Albany, NY: State University of New York Press.

(1.) Padgett, H. R. (1969). Physical and cultural associations on the Louisiana coast. *Annals of the Association of American Geographers*, *59*(3): 481-493.

Noting a real and potential change that will take place as the new takes hold of the traditional ways of life to yield progress. Padgett discusses how coastal Louisiana has changed at a slower rate than most areas; he examines coastal Louisiana and its port but concentrates on New Orleans and Morgan City. Padgett explains how with continual change cultures are moving away from the environment especially with the drastic amount of technological advancement. Traditional labor of coastal Louisiana is changing from mainly familial to commercial fishing and trapping to including work in the oil industry. The shift in labor is not the only element that is changing the unique lands; the pollution and pesticides used by industries is threatening aquatic life and resulting in dead streams. As jobs come available in industries more family members are moving away from labors like commercial fishing into more financially beneficial jobs similar to petroleum production.

Oliver-Smith, Anthony. 1990. Post disaster housing reconstruction and social inequality: A challenge to policy and practice. *Disasters*, 14.1: 7-19.

Abstract: In post-disaster reconstruction the social aspects of housing provision are important for the success of both emergency shelters and permanent housing, particularly in settlement that have been permanently relocated or

entirely rebuilt. The social dimensions of housing reconstruction after disaster are discussed in the context of the long-term effects of reconstruction after the Yungay, Peru Earthquake-Avalanche of 1970. Considerations of these issues presents questions regarding the tension between continuity and change in affected populations, the importance of pre-disaster socio-economic patterns for reconstruction and the criteria used for assessing the success of post-disaster reconstruction and development projects. The author contends that post-disaster housing reconstruction must avoid rebuilding structures which reflect, sustain, and reproduce patterns of inequality and exploitation

(2.) Padgett, H. R. (1963). The sea fisheries of the southern united states: retrospect and prospect.*Geographical Review, 53*(1): 22-39.
A historical look at the southern fishing industry. For the coast, fishing has come last and is the most neglected of the area's many resources. Why is this resource and the people who make this their livelihood, in a low status; this is the question the author raises. In the 1800's fisheries were based on a local level with the use of small boat to get their catch. The booming product of this time was salt fish and, though New Orleans had the largest local market, there were problems. Agriculture began to take shape and resulted in a decline in fisheries, and there were hindrances with the market due to competition and the problem with keeping the seafood from spoiling. Things picked up when shipment by air became possible. Today (in the 1960's) the coasts seafood industry has a number of factors going for it like the quality and taste of the product, but there has still been a decline in fisheries. Today's problems involve "…lack of government to trade association inspection to ensure quality and standard size, difficulties concerning credit and insurance for fishermen, a general public unfamiliarity with fish (the multiplicity of kinds, unstandardized common names, and ignorance of seasons of abundance lead to deception by unscrupulous dealers), and noticeable lack of the scientific research, technical efficiency, and expert management and salesmanship that are necessary to meet competition (P.35)."

Yasemin, Aysan and Paul Oliver. 1987. *Housing and culture after earthquakes: A guide for future policy making on housing in seismic areas*. Oxford: Oxford Polytechnic.

F. Education

Education is associated with socio-economic status in that highly educated members of a society will generally have higher incomes, accumulate more wealth and power. Furthermore, higher education is also associated with lower levels of risk perception, in part because of increased resources with which to address potential threats. For example, education also provides greater access to information related to accessing resources, mitigation technology and perhaps the ability to understand warnings.

Brasseaux, C. A. (1983). *Acadian education: From cultural isolation to mainstream America*. 133-143.

Cajuns became the target of constant pressure by Anglo-American to accept the educational system and the values that produced it; Acadian farmers saw formal education as having no practical value; Cajuns viewed education as a function of the Catholic Church; Education was also continued at home where elders transmitted folklore and customs and history; Lack of interest in education was consolidated by the lack of opportunity in the Anglo commercial world for Cajuns; In the progressive movement the equation of Cajun with ignorance increased and in 1916 the state legislature approved a mandatory education bill; Expanded economic opportunity in the area required emphasis on education.

Lindell, M.K. and Perry, R.W. 2000. Household adjustment to earthquake hazard, a review of research. *Environment and behavior,* 32: 590-630.

Abstract: Data from 23 studies confirm theoretical predictions that households' adoption of earthquake hazard adjustments is correlated with their perceptions of the hazard and alternative adjustments, demographic characteristics, and social influences. However, some findings require modification of existing theories of hazard adjustment. Examination of the methods used in previous investigations underscores a need for better theories, more complete testing of existing theories, and improved data analytic and data reporting procedures in future tests of those theories.

Shaw, R., Shiwaku, K., Kobayashi, H., and Kobayashi, M. 2004. Linking experience, education, perception and earthquake preparedness. *Disaster Prevention and management, 13(1): 39-49.*

Abstract: To understand the impact of earthquake experience and education on awareness, a survey was conducted with 1,065 high school first grade students from five prefectures of Japan. Results showed that earthquake experience is not the prime factor to enhance awareness. Education, when it is confined to school education, can provide useful information as the knowledge base for earthquake. However, in the gradual path of knowing, realizing, deepening, decision and action, family, community, and self education are found to be more prominent. While, self education is important for realizing and deepening, family and community education play the most vital role for decision and actions. In school education, more active ways of disaster education through conversation, experiencing, and visual aids are found to be more effective. It is believed that school education, coupled with self, family and community education can help a student to develop a "culture of disaster preparedness'', which, in turn, will urge them to take right decisions and actions as an adult.

Whitehead, J.C., Edwards, B., Van Willigen, M., Maiolo, J.R., Wilson, K, and Smith, K.T. 2001. Heading for higher ground: factors affecting real and hypothetical hurricane evacuation behavior, *Environmental Hazards*, 2:133-142.

G. Family, Kin, Household Structure

Asgary, A. and Willis, K.G. (1997). Household behavior in response to earthquake risk: An assessment of alternative theories. *Disasters,* 21(4): 354-365.

Households respond to earthquake risk in different ways. The main theories explaining human behavior under the threat of earthquakes are reviewed. A survey of households' responses in Tehran and Rasht in Iran to earthquake risk is used to assess the validity of psychological, 'need', socio-cultural and economic theories in explaining behavior. More support of cognitive and culture theories are found rather than economic and 'need' theories of earthquake safety measures; this suggests that positive adoption of mitigation measures can be encouraged in terms of cognitive process through information and education.

Lindell, M.K. and Perry, R.W. 2000. Household adjustment to earthquake hazard, a review of research. *Environment and behavior,* 32: 590-630.

Abstract: Data from 23 studies confirm theoretical predictions that households' adoption of earthquake hazard adjustments is correlated with their perceptions of the hazard and alternative adjustments, demographic characteristics, and social influences. However, some findings require modification of existing theories of

hazard adjustment. Examination of the methods used in previous investigations underscores a need for better theories, more complete testing of existing theories, and improved data analytic and data reporting procedures in future tests of those theories.

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H. Gender

Gender: Gender is such a fundamental organizing principle in our social lives that it is taken as a fundamental given, and yet, even a cursory examination across cultures can clearly reveal the often dramatic consequences it can have for vulnerability, particularly for women in most societies. What is most disconcerting is that a critical analysis of gender as a fundamental element of social vulnerability often meets with considerable resistance. It is important to recognize that in the sense of disaster recovery at least, gender refers to the different societal roles that men and women play in terms of providing an analysis. Women are often doubly impacted by disaster especially if they are single working parents. These women are most apt to be responsible for children and care taking in general of the family. In terms of providing support and recovery, there is little doubt, though researched by a handful of sociologists, (Morrow and Enarson, E., 1996; Morrow, B. H., 1997; Phillips B., 1990, O'Brien, P. and Atchison, P., 1998;) that women do the brunt of the caretaking both in the home as well as community in the event of a disaster. Whether it is as Red Cross volunteers, or as single parent victims of a disaster, women seem to have an incredible well of energy that can be tapped again and again. Women's insights have been critical to gaining understanding regarding the impacts on daily negotiation as well as long-term recovery.

(1.) Ariyabandu, M. M., Platt, L., (2005). Paying Attention to Women's and Gender Issues in Responding to the Tsunami Crisis. Available at ITDG South Asia. Colombo. Sri Lanka.

A basic why and how to for rehabilitation of an affected area focused on women's needs after a tsunami. A bulleted, yet concise, listing of suggested do's and don'ts in the pre- through post-hazard scene to fully use women's capabilities and provide them with essentials for the taxing time when women will uphold the community.

(4.) Bari, F. (1998). Gender, Disaster, and Empowerment: A Case Study from Pakistan. InEnarson, E. & Morrow, B.H. (Eds.), *Stop Disaster* 24 (13). 125-132.

(4.) Bari, Sona. (1992). Women in the aftermath. In H. Hossain, et al. (eds.). *Crisis to Development: Coping With Disasters in Bangladesh, (pp. 55-58).* Dhaka: University Press Limited.

(3.) Batenman, Julie and Robert Edwards. (2002). Gender and evacuation: a closer look at why women likely to evacuate for hurricanes. *Natural Hazards Review* 3(3).
It is recommended that this book be attained because from the work that has been reviewed there is little to suggest the why of this question. There are more examples that women do without the delving into the reasons for this occurrence. This is unclear.

(4.) Bhatt, Ela. (1998). Women victims' view of urban and rural vulnerability. In John Twiggand Mihir Bhatt (eds.) *Understanding Vulnerability: South Asian Perspectives,(pp. 12-26).* Colombo, Sri Lanka: Intermediate Technology Publication Duryog Nivaran.

(4.) Bradshaw, Sarah. (2001). *Dangerous Liaisons: Women and Hurricane Mitch*. FundacionPuntos de Encuentro: Managua, Nicaragua. English/ Spanish bilingual publication.

(1.) Buvinic, Mayra. (1999). *Hurricane Mitch: Women's Needs and Contributions.* Inter American Development Bank , Sustainable Development Department.
Examines the results of Hurricane Mitch of 1998 in Central America. Depicts the impact of hurricane Mitch in death and displacement, focusing on families headed by women, female employment loss, the health of those women, and violence wrought upon them. The response to the disaster is broken down further into the response of institutions and those of the people with examples from La Masica for good practices in emergency preparedness.

(2.) Date-Bah , E. (2004). ILO, Its Crisis Response and Reconstruction Program and NaturalDisasters: Jobs and Gender Dimensions. Retrieved 2005, from Conference Proceedings
Web Site: http://www.ssri.hawaii.edu/research/GDWwebsite/pages/proceeding.html.
Paper prepared for Gender Equality and Disaster Risk Reduction Workshop in Honolulu, HI.

(3.) Delaney, Patricia and Elizabeth Shrader. (2000). *Gender and post-disaster reconstruction: the case of hurricane Mitch in Honduras and Nicaragua.* Preliminary report commissionedby the World Bank. Available through the Gender and Disaster Network:
http://online.northumbria.ac.uk/geography_research/gdn/resources/reviewdraft.doc.
Depicts gender and disaster management with differential impacts and opportunities dealing with the aftermath of Hurricane Mitch. Focuses on the reasons that gender sensitivity improves relief effort drawing from communities in Honduras and Nicaragua. There is a break down of natural disasters into slow-onset and rapid-onset. The timeline from pre-disaster through recovery are depicted along with variations on vulnerability and hazard to provide enough coverage of variables to ensure fullest knowledge base for educated project models. Practical examples come from the second section as the focus on Hurricane Mitch is centered around the impact and opportunities of the women with the full range of the aforementioned variables. Following this is the reasoning behind the remaining lack of knowledge about these instances to the mass public with a plan to use this knowledge in future disaster recovery events. (This project is fully inclusive and highly detailed, I recommend the use of this article as a core to the gender section of our project.)
(4.) Drew, K. (2000). Gender Issue in Disaster Response. Retrieved 2005 from British Red Cross Society, International Programme Advisory and Development Department CRID #12927 Web site: http://www.crid.or.cr/script/wxis.exe/iah/.

Enarson, E. and Morrow, B.H. 1997. A Gendered Perspective: The Voices of Women. Pp 116-140 in Peacock, Morrow, and Gladwin *Hurricane Andrew: Ethnicity, Gender and the Sociology of Disasters*. London: Routledge

Enarson, Elaine and Betty Hearn Morrow. 1998. The Gendered Terrain of Disaster through Women's Eyes. Prager Publishers.

Enarson, E. (2000a). *A Gender Analysis of Work and Employment issues in Natural Disasters.*Retrieved 2005 from Final report prepared for the International Labor Organization's In Focus Programme on Crisis and Reconstruction Web site: http://ww.ilo.org/public/english/employment/recon/crisis/gender.htm.

(2.) Enarson, . (2002). *Building disaster resilient communities: learning from community women*. Statement for the UN Commission for the Status of Women (46th session)panel discussion on Environmental Management and Mitigation of Natural Disaters: a Gender Perspective. Available through DAW: http://www.un.org/womenwatch/daw/csw/csw46/panel-Enarson.pdf.
Focuses on women's views throughout the disaster process from warning of the disaster (if that exists) through reconstruction after the disaster. This paper dictates the methods and reasons for following the lead that women around the world have taken in assessing, preventing, and rebuilding for disasters. A discussion on learning from local women and their methods of preparedness leads to risk assessment by these women which leads to methodologies from three cited areas where natural disasters are a continuous standard of life. A focus on emergency preparedness draws its resources from four women-made groups and then draws from a further three groups depicting their emergency relief efforts. Finally, from a pool of four examples, the paper expounds upon the long-term relief efforts. From these examples of women based organizations and groups there is a call to use this knowledge and turn it into action so that the knowledge from a variety of women's groups can be put into affect in areas of high risk where these groups are sadly absent.

Enarson, Elaine. (2000). *A Gender Analysis of Work and Employment issues in Natural Disasters*
Final report prepared for the International Labor Organization's In Focus Programme on Crisis and Reconstruction. Source: http://ww.ilo.org/public/english/employment/recon/crisis/gender.htm
.

(2.) Enarson, Elaine. (2000). Gender issues in natural disasters. Talking points and research needs. Paper prepared for the ILO InFocus Programme in Crisis Response and Reconstruction. Pp. 101-108 in *High-Level Research Consultation on Crisis.* Geneva: ILO Recovery and Reconstruction Department.
Discusses the different types of women from economically challenged to 'rich' and those at varying levels of vulnerability, and those women's inherent difficulties pre-, during, and post-disaster. The focus is on the negative impacts brought on by the disaster and how and why women face more of these difficulties than males.

(4.)Fenton, Heather. (1989). *Impact of hurricane Gilbert on Jamaican women*.
Paper presented at Meeting on the Role of Women in Disaster Management, Port of Spain, November 13 15. On-line: PAHO/CRID # 1302:

Fieth, Rosemary. (1995). Saving lives after disaster strikes. *Stop Disasters,* 24: 7.

(1.) Fogleman, C. W., & Parenton, V. J. (1959). Disaster and aftermath: selected aspects of individual and group behavior in critical situation. *Social Forces, 38*(2), 129-135.
The authors were interested in what happens to communities when impacted by natural disasters; the emphasis was on communities and individuals under stress and their resulting behavior. This article studied those affected by

Hurricane Audrey focusing on Cameron Parish. Audrey left many homeless and over 400 dead. Many residents of this area chose not to evacuate under the assumption that the hurricane would not do as much damage as it did. Males were the sex that wished to stay and protect their homestead; whereas, mainly women wished to evacuate early. When the disaster occurred, schools and neighbors were helpful as homes began to flood and required evacuation. More blacks were lost than whites as many did not return. After looking at the stress there was an examination of the rehabilitation factor and assistance efforts. Slow recovery eventually lead to assimilation of the stress from the hurricane into their lives and eventually into the culture.

(4.) Fordham, M. (1999). The intersection of gender and social class in disaster: balancing resilience and vulnerability. *International Journal of Mass Emergencies and Disasters,* 17(1): 15-36.

(5.)Fordham, Maureen & Anne-Michelle Ketteridge. (1998). 'Men must work and women must weep': examining gender stereotypes in disasters. In Elaine Enarson and Betty Hearn Morrow (eds.). *The Gendered Terrain of Disaster, (pp 81-94).*

(4.) Halvorson, Sarah J. (2003). A geography of children's vulnerability: gender, householdresources. *Louisiana Environmentalist Magazine Online*. Retrieved on DATE, from http://www.leeric.lsu.edu/le/special/index.htm

(4.) Hoffman, Susanna. (1999). The regenesis of traditional gender patterns in the wake of disaster. In Susanna Hoffman and Anthony Oliver-Smith (eds.), *The Angry Earth: Disaster in Anthropological Perspective, (pp 173-191).* New York: Routledge.

(4.) Ikeda, Keiko.*(*1995). Gender differences in human loss and vulnerability in natural disasters:a case study from Bangladesh. *Indian Journal of Gender Studies,* 2 (2): 171-193.

*(6.)*Jiggins, Janice. (1986). Women and seasonality: coping with crisis and calamity. *IDS Bulletin,* 17(3): Sussex: Institute of Development Studies.

(4.) Kabir, Krushi. (1992). How women survived. In Hameeda Hossain et al. (eds.) *From Crisis to Development: Coping With Disaster in Bangladesh, (pp 74-80). Dhaka:* University Press.

(4.) Katwikirize, Stuart. (2001). *Understanding Resettlement Capacities and Vulnerabilities ofDisplaced Male and Female Headed Households: A Case of Three Camps in Northern Uganda*. World Vision International/Cranfield Disaster Management Centre. Thesis presented at the Gender Equality and Disaster Risk Reduction Workshop (Honolulu, HI). Conference proceedings [presentations]: http://www.ssri.hawaii.edu/research/GDWwebsite/pages/proceeding.html.

(4.) Levin, S., Groves, A., Lurie, J. (1980). Sharing the Move: Support Groups for Relocated Women. *Social Work,* 25, 323-325.

Moore, H.E. and Bates, F.L., Layman, M.V. and Parenton, V.J. 1963. *Before the Wind: A study of the Response to Hurricane Carla*. Washington D.C.: National Academy of Sciences/National Research Council.

(7.)Morris, P., (1998). *Weaving Gender in Disaster and Refugee Assistance*. Report prepared by Interaction: American Council for Voluntary International Action. Washington, D. C.
A gender worksheet as the title suggests that could be useful as a guideline to assure that we are researching the proper areas of gender to fully cover the extent to which gender affects the disaster stricken and it use to help heal those affected more rapidly.

Scott, C. (1995). *Gender and development: rethinking modernization and dependency theory*.Boulder, CO: Lynne Rienner Publisher.

(4.) Sapir-Guha, Debarati. (1993). Natural and man-made disasters: the vulnerability of womenheaded households and children without families. *World Health Statistics Quarterly*, 46: 227-233.

(1.) Wisner, Ben, Piers Blaikie, Terry Cannon, & Ian Davis,. *(n.d.) Natural Hazards, People's Venerability and Disasters 2nd ed.*
Deals with vulnerability as a result of many factors, the main of which is most controllable, population. By having higher populations, more people are at risk and therefore by maintaining population controls we reduce the amount of people who are in harm's way. The authors discuss famines, biological hazards (human and crop diseases), floods, severe coastal storms, earthquakes, volcanoes, and landslides. Disaster mitigation is seen largely in terms of reducing vulnerability and the development of public to help rather than exploit people. Depends on prevention rather than building us into situations that, while they may seem helpful, turn out to be less beneficial when disasters strike.

(4.) Wolfelt, D. (1993). The misdiagnosis of ADHD in bereaved children: all-too-common mistake. *The Forum*, (18): 9-10.
Recently, awareness has grown towards grieving children in schools; for example, the misdiagnosis of Attention Deficient Hyperactivity Disorder.

I. Housing

Housing is the cause of much vulnerability and a cure that can lead to resilience. Poor housing stock and housing in high risk areas contributes too much of the vulnerability people experience. Quality housing in hazard-free areas is a necessity for resiliency. 'Housing' includes the vulnerability of the neighborhood and the possibilities that the housing and neighborhood give to social existence and resiliency.

Bolin, Robert C. (1982). *Long-term family recovery from disaster.* Boulder: University of Colorado Press

Bolin, Robert C. (1994). *Household and community recovery after.* Boulder: University of Colorado Press

Bolin, Robert C. (1998). *The Northridge earthquake; Vulnerability and disaster.* London: Routledge Press

Detweiler, Lowell. (2000) The hammer rings hope. Scottsdale: Herald Press.
Fifty years of Mennonite service is portrayed in this volume. It helps give an understanding of the power of local organization through a denomination known for it's humanitarian outreach.

Fullilove, Mindy Thompson M.D. (2005) Root shock: how tearing up city neighborhoods hurts America, and what we can do about it. New York: Ballantine Books.
This book examines the phenomenon of being uprooted from place due to housing and land policies. It argues that the emotional trauma affects not only the Afro- American community but all of America.

Phillips, B.D. 1996. Creating, sustaining and losing place: Homelessness in the context of disaster." *Humanity & Society*, 20: 94-101.

Wisner, B, 1998. Marginality and vulnerability: why the homeless of Tokyo don't 'count' in disaster preparations, *Applied Geography*, 18(1):25-53.
Abstract: The philosophical and methodological bases of urban disaster vulnerability analyses are presently underdeveloped. Few such analyses incorporate social data, partly because urban disaster managers and other potential user groups do not fully appreciate the value of this information, and partly because techniques for including it in existing vulnerability analyses have not been worked out. This paper explores the value of adding data on social marginality to Japanese models of earthquake impact and of incorporating marginal groups into the disaster planning process. The growing phenomenon of homelessness in Tokyo is used as a test case. It is argued that data on homelessness would improve the performance of systems designed to increase personal and social protection, whereas the incorporation of marginal urban groups would tap new knowledge of coping mechanisms and enrich the entire planning process.

J. Income, Wealth, and Power

These concepts are often subsumed under the more general concept *socio-economic status* by many doing social vulnerability research. There can be little denying that vulnerability, whether speaking of individual, household, or community is fundamentally related to these issues and hence, resiliency is greatly enhance by having greater access to these scarce resources.

Austin, R. and Schill, M. (1994). *Unequal Protection*. San Francisco: Sierra Club Books

(1.) Bell, S., Morse, S. (2003). *Measuring Sustainability: Learning From Doing.* London, England: Earthscan Publications.

*(8.)*Chambers, Robert. (ed.). (1996). *Eight Main Risks: Impoverishment and Social Justice in Resettlement.* Washington, DC: World Bank Environment Department.

(9.)Date-Bah , E. (2004). ILO, Its Crisis Response and Reconstruction Program and Natural Disasters: Jobs and Gender Dimensions. Retrieved 2005, from Conference Proceedings Web Site: http://www.ssri.hawaii.edu/research/GDWwebsite/pages/proceeding.html.
Paper prepared for Gender Equality and Disaster Risk Reduction Workshop in Honolulu, HI.

(3.) Dobby, E. H. (1998). Resisting Dams and 'Development:' Contemporary Significance of the Campaign against the Narmada Projects in India. *European Journal of Development Research,* 10(2): 135-179.

(3.) Fisher, W. F. (ED.) (1995). *Toward Sustainable Development: Struggles Over India's Narmada River*. Armonk, NY and London, England: M.E. Sharpe.

Fothergill, A. and Peek, L.A. 2004. Poverty and Disasters in the United States: A Review of Recent Sociological Findings. *Natural Hazards*, 32(1): 89-110.

Abstract: This article synthesizes the literature on poverty and disasters in the United States and presents the results from a wide range of studies conducted over the past twenty years. The findings are organized into eight categories based on the stages of a disaster event. The review illustrates how people of different socioeconomic statuses perceive, prepare for, and respond to natural hazard risks, how low-income populations may be differentially impacted, both physically and psychologically, and how disaster effects vary by social class during the periods of emergency response, recovery, and reconstruction. The literature illustrates that the poor in the United States are more vulnerable to natural disasters due to such factors as place and type of residence, building construction, and social exclusion. The results have important implications for social equity and recommendations for future research and policy implementation are offered.

Haque, C. Emdad. 2003. Perspectives of Natural Disasters in East and South Asia, and the Pacific Island States: Socio-economic Correlates and Needs Assessment. Natural Hazards, Volume 29, Number 3, pp. 465-483.

Abstract: The regions of East and South Asia, and the Pacific Islands are among the most-hazard prone areas in the world. Because of this, during the last century, most of the human casualties of `natural-triggered' disasters have taken place in this region. This circumstance therefore has become a major global humanitarian concern. Another major concern, specifically for the donor agencies, is the damage sustained by infrastructure resulting from environmental disasters. These recurrent losses take away a significant proportion of the cumulative economic gains accrued from development investments over many years. Stepwise multiple regression results substantiated the fact that many of the socio-economic and demographic variables significantly influence disaster-related deaths and injuries in this part of the world. A comparative temporal analysis has shown that, over the past two decades, demographic variables have become prominent predictors of disaster-loss in South, Southeast and East Asian and the Pacific states. Many countries of the region are lagging behind in understanding and recognizing the broader scope of disaster mitigation and management. Emerging needs and awareness among the decision-makers and the general public, however, have prompted institutions in many countries to initiate a critical review of the prevailing approaches. The country-specific disaster-management capacities and needs in the region vary widely. There are many differences in historical courses, institutional and administrative settings, sociocultural characteristics, as well as political and economic systems. Development of a common institutional framework for the region, therefore, seems unfeasible. Based upon a regional review, it has become clear that the research calls for improving the understanding of the significance of disaster mitigation and management in light of sustainable development and the emerging global issues. In addition, aspects of human resource development to enhance institutional mitigation and response capacities are emphasized.

(1.) Hoffman, S., & Oliver-Smith, A. (Eds.). (2002). *Catastrophe & culture: the anthropology of disaster (school of american research advanced seminar series)*. Santa Fe, NM: School of American Research Press.

The thought pattern of chapter two of this text revolves around disasters not only affecting one area of life but all lives and all areas of those lives from financial to spiritual, and claims that disasters are multidimensional thus leading into similar thought when deciphering the effects of disasters. Examines the changing the role of sociology to study the aftermath of disasters from individual and group to the vulnerability of every aspect of a community from individuals and families to the institutions in the areas. Nature and society are examined and the role of humans moving from being a part of nature to controlling nature and the affects of such a shift are flushed out. The next section details how and why society constructs calamities whether real or imagined and indeed what

constitutes a disaster. Drawn next is the connection between disaster research and anthropology and the usefulness that the anthropological method of study could be to helping prevent disaster from causing a catastrophe.

Lindell, M.K. and Perry, R.W. 2000. Household adjustment to earthquake hazard, a review of research. *Environment and behavior*, 32: 590-630.

Abstract: Data from 23 studies confirm theoretical predictions that households' adoption of earthquake hazard adjustments is correlated with their perceptions of the hazard and alternative adjustments, demographic characteristics, and social influences. However, some findings require modification of existing theories of hazard adjustment. Examination of the methods used in previous investigations underscores a need for better theories, more complete testing of existing theories, and improved data analytic and data reporting procedures in future tests of those theories.

Logan, J.R. and Molotch, H.L. 1987. *Urban Fortunes: The Political Economy of Place*. Berkeley, CA: University of California Press.

(1.) Oliver-Smith A. (1986). *Disaster context and causation: an overview of changing perspectives in disaster research*, pp. 1-35.

Decades of Disaster: Promise and Performance in the Callejon de Huaylas, Peru

Gives a detailed history of the peoples of this areas and their development both before and after the earthquake. Although reading the entire article adds to the readers knowledge of what these peoples went through, the article from the section "First the Earthquake, then the Disaster" to the end is the most helpful for understanding the dynamics of the post-disaster society. Even though this is a thorough depiction of the plight of this area, there are little more than a few examples that could be largely applied to the entire project.

(3.) Oliver-Smith A. (1996). Lima, Peru: underdevelopment and vulnerability in the city of thekings. In Mitchell, JK. (ed.). *Disasters in Megacitie.* Tokyo: United Nations Univ. Press. In press.

(3) Oliver-Smith, Anthony. 1990. Post disaster housing reconstruction and social inequality: A challenge to policy and practice. *Disasters*, 14.1: 7-19.

Abstract: In post-disaster reconstruction the social aspects of housing provision are important for the success of both emergency shelters and permanent housing, particularly in settlement that have been permanently relocated or entirely rebuilt. The social dimensions of housing reconstruction after disaster are discussed in the context of the long-term effects of reconstruction after the Yungay, Peru Earthquake-Avalanche of 1970. Considerations of these issues presents questions regarding the tension between continuity and change in affected populations, the importance of pre-disaster socio-economic patterns for reconstruction and the criteria used for assessing the success of post-disaster reconstruction and development projects. The author contends that post-disaster housing reconstruction must avoid rebuilding structures which reflect, sustain, and reproduce patterns of inequality and exploitation

Peacock, W. G. 2003. Hurricane mitigation status and factors influencing mitigation status among Florida's single-family homeowners. *Natural Hazard Review*. 4(3):149-158.

Abstract: This paper presents statewide estimates of shutter usage and envelope coverage for owner-occupied single-family detached housing in Florida. Intrastate regional variations are also presented and discussed. Multivariate analyses of shutter and envelope coverage assessing the relative influence of a variety of factors

considered by the literature to be determinants of household mitigation are presented. The findings suggest that perceptions of hurricane risk and knowledge, past hurricane experience, proportion of neighbors with shutters, residing in coastal counties and counties subscribing to the South Florida Building Code, household income, and race/ethnicity are all significant determinants of shutter usage and envelope coverage. Policy implications are discussed.

Peacock, Walter Gillis, Samuel D. Brody, and Wesley Highfield. 2005. Hurricane Risk Perceptions among Florida's Single Family Homeowners." *Landscape and Urban Planning.*
Abstract: Hurricane and associated damage remains a constant threat to the health, safety and welfare of residents in Florid. Hurricane risk perception has been found to be an important predictor of storm preparation, evacuation, and hazard adjustments undertaken by households, such as shutter usage. Planners and policy makers often employ expert risk analysis to justify hazard mitigation policies, yet expert and lay risk assessments do not always agree. This article examines factors contributing to hurricane risk perception of single-family homeowners in Florida. Utilizing data from a statewide survey, we first map and spatially analyze risk perceptions throughout Florida . Second, we examine the influence of location on shaping homeowner perceptions along with other factors such as knowledge of hurricane, previous hurricane experience, and socio-economic and demographic characteristics. The findings suggest there is a good deal of consistency between residing in a location identified by experts as being high hurricane wind risk areas and homeowner perceptions. Finally, we discuss the implication sof these findings for land use and hazard planning.

Peacock W.G., Killian, C. D., and Bates, F.L. 1987. The effects of Disaster Damage and Housing Aid on Household Recovery Following the 1976 Guatemalan Earthquake. *International Journal of Mass Emergencies and Disasters (IJMED)*, 5(1):63-88.
Abstract: This paper examines the effects of housing programs, disaster damage, community type, and other social determinants on household recovery following a major natural disaster—the 1976 Guatemalan earthquake. The domestic assets index, a measure of household living conditions, and a refined measure of household recovery are introduced and employed. The domestic assets scale is an index of the economic value of household equipment and is an adaptation of level of living scales. While reconstruction aid was the single most important determinant of recovery, it was the type and not the value of aid that was critical. Strong support exists for the conclusion that temporary housing as a form of aid retarded the recovery process while permanent housing programs actually produced net improvement in living conditions. There is also evidence that the unequal effects of different types of housing programs produced significant changes in the distribution of economic resources, thus affecting the stratification system in affected communities. In addition, while other factors associated with the social characteristics of household were found to be important, this analysis consistently suggests that household residing in small, rural, and politically removed communities experienced greater difficulty in overcoming the debilitating effects of a natural disaster.

Peacock, W.G., N. Dash, and Y. Zhang. 2006. Shelter and Housing Recovery. In H. Rodriguez, E.L. Quarantelli, and RR. Dynes, The Handbook on Disaster Research. Springer. (Forthcoming)
objective of achieving community emergency preparedness. This paper reviews the concepts of community preparedness and emergency planning, and their relationships with training, exercises, and the written plan. A series of 10 planning process guidelines are presented that draw upon the preparedness literature for natural and technological disasters, and can be applied to any environmental threat.

Philips, B.D. 1993. Culture diversity in disasters: sheltering, housing and long-term recovery. *International Journal of Mass Emergencies and Disasters* (IJMED). pp. 99-110.
Abstract: Demographic shifts have put minority groups and the poor at greater risk to disaster during the last decade. Problems of sheltering and housing for these groups occurred following the 1989 Lorna Prieta earthquake in Watsonville, California. To mitigate future problems disaster planners must identify various ethnic groups and other groups in a community. Diversity must be built into the disaster response during the planning stage. Researchers should continue and expand work related to diversity and disaster.

Phillips, B.D. 1996. Creating, sustaining and losing place: Homelessness in the context of disaster." *Humanity & Society*, 20: 94-101.

Robinson, R., O'Sullivan, T. and Grand, J.L. 1985. Inequality and housing. *Urban Studies*, 22:249-256.
Abstract: This paper seeks to provide a measure of housing inequality across the entire household population. Ratable values are used as an informed assessment of the flow of housing services yielded by a particular dwelling, and the Atkinson inequality index is applied to a data set obtained from the Family Expenditure Surveys of 1968 and 1978. The results indicate that though income inequality has increased over this period, overall housing inequality did not increase. Tenure specific analysis suggests that this is largely the result of inter-tenure moves, and that local Authority housing policy has succeeded in driving a wedge between general economic inequality in public sector housing.

(3.) Siegel, J. M., Bourque, L. B., & Shoaf K. I. (1999). Victimization after a natural disaster:social disorganization or community cohesion?. *International Journal of Mass Emergencies and Disasters*, *17*(3), 265-294.
Study of crimes with victims before and after earthquakes in three case studies from California.
Summary denotes that there is no indication that social disorganization follows after a disaster, however, there is minimal support suggesting the emergence of an altruistic society. Lots of demographic information presented in chart format.

(1.) Shugg, Roger W. (1968). *Origins of Class Struggle in Louisiana.* University of Louisiana.

(1.) Sillitoe, P., Bicker, A., Pottier, J. (2002). *Participating in Development: Approaches toIndigenous Knowledge.* London, England: Routledge.

Winchester, P. 2000. Cyclone mitigation, resource allocation and post-disaster reconstruction in South India: lessons from two decades of research. *Disasters*, 24(1): 18-37.
Abstract: This paper opens with a history of development and disaster-prevention strategies in a cyclone-prone area of the east coast of India and traces the evolution in the area of British and Indian government and policy over a century, Research over the last 20 years has shown however that the programmes and policies have failed to balance economic growth with safety. Resources intended for the benefit of all have been diverted by alliances of powerful people to a small minority, and recent developments have reduced the physical protection of the area. The result is that increasing numbers of people are vulnerable to the effects of cyclones and floods. The findings suggest that the best way to reduce vulnerability is to improve the socioeconomic standing of the most vulnerable and for this to happen these people must have an assured income based on assets that will enable them to acquire social and economic credit-worthiness within the local economy. The paper presents evidence that suggests that non-governmental organization (NGO) - supported co-operatives are the best way to achieve this through self-help and self-employment schemes. It also suggests

that NGOs should be encouraged to take up environmentally and ecologically beneficial activities involving the poorest group in the communities, in this way combining sustained self-employment with environmental protection.

K. Nonprofit/ Nongovernmental Organizations

Nonprofit NPO or Nongovernmental NGO organizations include faith-based organizations FBO, community based organizations CBO, non-profits, local and national and emergent response groups after disasters. At the local level there may be many groups that become active after a disaster. These groups may be 'formal' organizations with a formal membership, bylaws, and a listing in the phone book or 'informal' organizations with no fixed membership or structure. Taylor (1984) would include 'networks' and 'publics' in informal organizations. Networks are the 'connections' between individuals or organizations. Networks are important communications links in organizations and communities. Publics are individuals who have common interest – like soccer Dads. There are various 'mission' that groups may have in disasters from relief to recovery, and political advocacy and community organization and grassroots economic development. There are now many groups involved in disaster response – most in the relief phase. The competition between these groups seems to be growing while cooperation seems to be deteriorating. There seems to be a growing tendency for national NGO and FBO groups to ignore local agencies and groups and to dismiss local knowledge – including knowledge of natural hazards. The resources which these national group bring are most effectively used when the decisions for their use is in the hands of a coalition of representative local groups. (Anderson 1998. Pelling 2003)

The best of these organizations tend to arrive in communities seeking to assist in whatever capacity they can. Often driven by a need to respond to a dire need of humanity, some NGOs tend to focus specifically on matching resources and services with communities that need them. Mostly addressing the pressing needs of a particularly vulnerable population, i.e. aging, disabled, shut-ins, poor and children, NGOs can help with everything from applicant registration, translating, distribution, debris clean-up, and/or field operations help, to providing hot meals, snacks, beds, bedding and day care for parents who must attend to more pressing immediate needs.

Mary Anderson 1998 *Raising from the Ashe*
Mark Pelling 2003 *The Vulnerability of Cities: natural Disasters and Social Resilience*

Bolin, R. and Stanford, L. (1998). The Northridge earthquake: Community-based approaches to unmet recovery needs. *Disasters, 22*(1): 21-38.

The 1994 Northridge, California earthquake has proven to be one of the most costly disasters in United States history. Federal and state assistance programs received some 681,000 applications from victims for various forms of relief. In spite of the flow of US$11 billion in federal assistance into Los Angeles and Ventura counties, many victims have failed to obtain adequate relief. These unmet needs relate to the vulnerability of particular class and ethnic groups. In response to unmet needs, a number of non-governmental organizations (NGOs) have become involved in the recovery process. This paper, based on evidence collected from hundreds of in-depth interviews with the people involved, examines the activities of several community-based organizations (CBOs) and other NGOs as they have attempted to assist vulnerable people with unmet post-disaster needs. We discuss two small ethnically diverse communities in Ventura County, on the periphery of the Los Angeles metropolitan region. The earthquake and resultant disaster declaration provided an opportunity for local government and NGOs to acquire federal resources not normally available for economic development. At the same time the earthquake created political openings in which longer-term issues of community development could be addressed by various local stakeholders. A key issue in recovery has been the availability of affordable housing for those on low incomes,

particularly Latinos, the elderly and farm workers. We discuss the successes and limitations of CBOs and NGOs as mechanisms for dealing with vulnerable populations, unmet needs and recovery issues in the two communities.

Christoplos, I., Mitchell, J. and Liljelund, A. (2001). Re-framing risk: the changing context of disaster mitigation and preparedness. *Disasters*, 25(3): 185-198.
This issue of Disasters explores the roles of NGOs and other actors in disaster mitigation and preparedness and also reviews broad international trends in risk assessment and disaster prevention. The need to address risk, and with that the motivation to improve disaster mitigation and preparedness, has tended to fall between the cracks of grander frameworks o development co-operation and humanitarian assistance. Despite the seemingly glaring need to reduce the horrific impact of floods, droughts and wars, disaster mitigation and preparedness have neither the allure of directly 'saving lives', nor of providing an 'escape from poverty'. There are, however, signs that risk management is becoming a min stream concern. Factors such as the need to address factors that do not fit into traditional slots on the relief-development continuum, the rising economic costs of disasters and growing acknowledgement that aid will never cover more than a small fraction of the costs of disasters and are all leading to new approaches, priorities and institutional configurations. A realization that dealing with risk and insecurity is a central part of how poor people develop their livelihood strategies has begun to position disaster mitigation and preparedness within many poverty alleviation agendas. A number of long-standing challenges remain; most of all, the complexities of maintaining the political will that is needed to ensure that risk management becomes more than a passing fad.

Detweiler, Lowell. (2000) The hammer rings hope. Scottsdale: Herald Press.
Fifty years of Mennonite service is portrayed in this volume. It helps give an understanding of the power of local organization through a denomination known for it's humanitarian outreach.

Pelling, M. (2003). The Vulnerability of Cities: Natural Disasters and Social Resilience. London: Earthscan.

L. Physical Abilities and Special Needs Population

Phillips, B.D. 1996. Creating, sustaining and losing place: Homelessness in the context of disaster." *Humanity & Society*, 20: 94-101.

Sanders, Sara; Bowie, Stan L.; and Bowie, Yvonne Dias. 2003. Lessons learned on Forced Relocation of Older Adults: The Impact of Hurricane Andrew on Health, Mental Health and Social Suport of Public Housing Residents. *Journal of Gerontological Social Work,* 2003, 40, 4, 23-35.

M. Political Dynamics

Brechin, S.R. , P.R. Wilshusen, C.L. Fortwangler, & P.C. West. (2003). *Contested Nature: Promoting International Biodiversity with Social Justice in the Twenty-first Century*. Albany: State University of New York Press.
This text contains arguments for the review of current tactics pertaining to conservationism, bio-diversity, and other such sustainable methods of resource use. It also highlights the oppression methods used in different areas and questions the validity of allowing this to happen and how to keep it from happening.

(1.) Boyce, J., Shelley, B., (Eds) (2003). *Natural Assets: Democratizing Environmental*

Ownership. Washington D.C.: Island Press.

(1.) Cernea, M. (1991). *Putting People First: Sociological Variables in Rural Development*Washington D.C.: World Bank Publications.

(4.) Field, D.R. (1996). Social Science: A Lesson in Legitimacy, Power and Politics in LandManagement Agencies. In A.W. Ewert (Ed.). Natural Resource Management: The Human Dimension. (pp. 249-256). Boulder, CO: Westview Press.

(2.) Olson, R. S. (2000). Toward a Politics of Disaster: Losses, Values, Agendas, and Blame.*International Journal of Mass Emergencies and Disasters*, *18*(2), 265-288.
There are a myriad of other sections of politics ranging from air pollution to cancel, but there lacks a political regime for disaster control which this paper outlines with examples from ancient Asia, Nicaragua, Mexico, and California. There are also phases that are described for both rapid onset and slow onset disasters. Pre-Impact and impact are the first two phases for a rapid onset disaster whereas those same phases for a slow onset are deemed pre-recognition and recognition. The remaining three phases for both types of disaster are response, recovery, and reconstruction. Lives are valued higher in the first phases and survival is deemed important in the response phase. The author describes any disaster not only as natural, but a political crisis since all disaster must be explained. This leads us into the blame management portion of the paper wherein everything from the disaster itself to the plea of ignorance are used as cover to the actual causes of the disaster. Also outlined are disaster justifications from finding unseen benefits to the 'it could have been worse' mentality. All in all this paper is the first of its kind to point out the need and setup an outline for the politics of disasters and contains examples of the different phases set in the outline. As this provides a good structure for disaster management to affix its structure, there is little more than theory at this point.

(2.) Plummer, J. (2002). *Focusing Partnerships: A Sourcebook for Municipal Capacity Building in Public-Private Partnerships.* London, England: EarthScan Publications.

N. Psychological
In the context of sustainable development and the building resilient communities psychology must be understood both as how people understand and react internally to certain stimuli (individual psychology) and how people react collectively to stimuli (social or community psychology). We know that in long-term disaster recovery and mitigation (resiliency programs) stress accumulates and changes over time. We know that this accumulated stress can disrupt normal thinking and decision-making patterns of individuals and communities. It is well documented that disaster responders, caregivers, and managers are also impacted but accumulated stress – this is often called compassion fatigue or Secondary Traumatic Stress Disorder. We believe that compassion fatigue can and does impact organizations and agencies and their policies and practices causing them to blame the clients, lose patience with the clients, and reduce services, involvement, and commitments. There is a tendency among caregivers, researches, managers, and policy makers to dismiss strong feelings and the people who have them. The wise change agent remembers that "Feelings are <u>facts</u>!"

Bates, F.L., Fogleman, C., Parenton, V., Pittman, R. and Tracy, G. (1963). *The social and psychological consequences of a natural disaster: A longitudinal study of Hurricane Audrey.* Washington, D.C., National Research Council.

Becker, Ernest (1973). *The denial of death.* NY: Free Press

Burleson, B. (1994) *Communication of social support: Messages, interactions, relationships, and community.* Thousand Oaks: Sage Pub.

Caruth, Cathy (1995). *Trauma: Explorations in memory.* Baltimore: John Hopkins

Ecevit, Mehmet, and Kasapoglu, Aytul. 2002. Dempgraphic and psychological features and their effects on the survivors of the 1999 earthquake in Turkey. *Social Behavior & Personality: An International Journal* Vol. 30 Issue 2, p195-8.

Abstract: A survey was conducted of 500 survivors of the 1999 earthquake in Turkey to investigate their levels of alienation and forms of preparedness for future disasters. It was found that the level of alienation in general is not very significant and that level of education is the most important influential independent variable. The only alienation component found to have a negative impact on the responsible behavior related to preparedness for earthquakes was the social isolation variable. As level of education increases and social isolation decreases, responsible behavior increases. The existence of little such research in developing societies like Turkey increases the importance of this work and it is expected that it will have a positive impact on similar future studies.

Fullilove, Mindy Thompson M.D. (2005) Root shock: how tearing up city neighborhoods hurts America, and what we can do about it. New York: Ballantine Books.

This book examines the phenomenon of being uprooted from place due to housing and land policies. It argues that the emotional trauma affects not only the Afro- American community but all of America.

Friedman, Maurice (1992). *Dialogue and the human image: Beyond humanistic psychology.* Newbury Park: Sage Pub.

Friedman is a follower of Martin Buber and his clinical approach is based on Buber's understanding of relationships and the place of dialogue. Relationships and community are proving to be key elements in disaster recovery and in building resilient communities. Dialogue assumes ability, creativity, and possibility on the survivor and does not treat the survivor or her community as helpless, ignorant, and selfish. (Unfortunately not all caregivers and agencies share this conviction and try to dictate to, discount, and often direct survivors and local caregivers. We have found Friedman's insights and method to be very helpful in disaster recovery as the grounding for program or intervention development.

Gist, Richard (1999) *Response to disaster: Psychosocial, community, and ecological approaches.* Philadelphia: Burnner/Mazel

Goenjian, Armen K. and Steinberg, Alan M. 2000. Prospective Study of Posttraumatic Stress, Anxiety, and Depressive Reactions After Earthquake and disasters. American Journal of Psychiatry; Jun 2000, Vol. 157 Issue 6, p 911-17.

Abstract: *Assesses the severity and longitudinal course of posttraumatic stress, anxiety and depressive reactions after exposure to earthquake and political violence. High risk of developing severe and chronic posttraumatic stress reactions associated with chronic anxiety and depressive reactions of people exposed to earthquake or political violence*

Lifton, Robert (1980). *The broken connection.* NY: Simon and Schuster

Lifton, Robert (1967) *Death in life: Survivors of Hiroshima.* NY: Basic Books

Lifton, Robert *The future of immortality: and other essays for the nuclear age.* NY: Basic Books

Lifton, Robert (1993). *The protean self: Human resilience in an age of fragmentation.* Chicago: University of Chicago Press

McMillen, J. Curtis, North, Carol S. and Smith, Elizabeth M. 2000. What Parts of PTSD Are Normal: Intrusion, Avoidance, or Arousal? Data from the Northridge, California, Earthquake. *Journal of Traumatic Stress* Vol. 13 Issue 1, p 57-75.

Abstract: The incidence and comorbidity of posttraumatic stress disorder (PTSD) are addressed in a study of 130 Northridge, California, earthquake survivors interviewed 3 months postdisaster. Only 13% of the sample met full PTSD criteria, but 48% met both the reexperiencing and the arousal symptom criteria, without meeting the avoidance and numbing symptom criterion. Psychiatric comorbidity was associated mostly with avoidance and numbing symptoms. For moderately severe traumatic events, reexperiencing and arousal symptoms may be the most "normal," and survivors with a history of psychiatric problems may be those most likely to develop full PTSD. A system that considers people who meet all three symptom criteria to have a psychiatric disorder yet recognizes the distress of other symptomatic survivors may best serve traumatized populations.

Ministry of Health Canada (1990) *Personal services psychosocial panning for disasters.* Montréal, Canada: Ministry of Supply and Services Canada.

O. Race and Ethnicity

Race and Ethnic Bonds—this category is probably most crucial in political and economic negotiations with local, state, and federal government initiatives. These two concepts are often employed interchangeably to refer to minority group status based upon racial characteristics or on ethnicity, which is usually defined by language, culture, and or national origin. Minority group status refers not to numerical distributions in the population, but rather individuals who, due to ethnic or racial characteristics ar
e often denied full access to society's opportunity structure and scarce resources. In the United States African Americans and Hispanics are examples of minorities. Much like the gender component, racial and ethnic bonds can create cohesive community action as well as provide negotiation power when engaging governmental entities who may or may not understand the additional problems that minority communities face. Like women as a minority population, racial and ethnic bonds are crucial to organizing and establishing additional needs that may not be addressed by mainstream organizations. This group, like women, also often has an additional drawback of poverty, which further undermines recovery. Racial and ethnic bonds can foster camaraderie within the community while simultaneously providing links to groups outside the affected area and thereby creating networks and access to untapped resources that otherwise might not have been made available by the mainstream assistance programs.

(3.) Chudacoff, Howard P. & Smith, Judith E. (n.d.) *The Evolution f American Urban Society 5th ed.* Highlights the ways in which differing cultures have adapted, and coped while constantly rebuilding a new environment through their interaction in American society from the 16th century to present day.

Dash, Nicole, Walter Gillis Peacock, and Betty Morrow. 1997. And the Poop Get Poorer: A Neglected Black Community. Pp 206-225 in Peacock, Morrow, and Gladwin, *Hurricane Andrew: Ethnicity, Gender and the Sociology of Disaster.* London: Routledge.

(1.) Duran, E., Bonnie, D. (1995) *Native American Postcolonial Psychology* Albany, NY: University of New York Press.

Feagin, J.R. and Sikes, M.P. 1994. *Living with Racism: The Black Middle Class Experience*. Boston, MA: Beacon.

Flippen, C. 2004. Unequal returns to housing investments? A study of real housing appreciation among black, white, and Hispanic households. *Social Forces,* 82(4): 1523-1551.
Abstract: This article assesses whether housing in predominantly minority and integrated neighborhoods appreciates more slowly than comparable housing in predominantly white communities, and if so, the extent to which inequality is due to neighborhood racial composition per se rather than nonracial socioeconomic and housing structure factors. I take a dynamic approach to the issue of housing appreciation, considering both racial, ethnic, and poverty composition at purchase and change in those characteristics over time. I examine differences in real housing appreciation across black, white, and Hispanic households by applying a hedonic price analysis to data from the Health and Retirement Study, combined with data from the 1970, 1980, and 1990 Census. While much of neighborhood appreciation inequality is explained by nonracial (particularly socioeconomic) factors, minority composition continues to exert a significant effect on appreciation even net of these considerations, particularly in highly segregated communities and those that experience large increases in black representation. Unequal housing appreciation has a large negative impact on the overall wealth holdings of mature minority households, and has important implications for racial and ethnic stratification.

(2.) Fogleman, C. W., & Parenton, V. J. (1959). Disaster and aftermath: selected aspects ofindividual and group behavior in critical situation. *Social Forces*, *38*(2), 129-135.
The authors were interested in what happens to communities when impacted by natural disasters; the emphasis was on communities and individuals under stress and their resulting behavior. This article studied those affected by Hurricane Audrey focusing on Cameron Parish. Audrey left many homeless and over 400 dead. Many residents of this area chose not to evacuate under the assumption that the hurricane would not do as much damage as it did. Males were the sex that wished to stay and protect their homestead; whereas, mainly women wished to evacuate early. When the disaster occurred, schools and neighbors were helpful as homes began to flood and required evacuation. More blacks were lost than whites as many did not return. After looking at the stress there was an examination of the rehabilitation factor and assistance efforts. Slow recovery eventually lead to assimilation of the stress from the hurricane into their lives and eventually into the culture.

Fothergill, A., Maestas, E. G. M., and Darlington, J. D. 1999. Race, ethnicity and disasters in the United States: A review of the literature. *Disasters, 23*(2), 156-173
Abstract: In this paper we synthesise past disaster research that addresses issues of race and ethnicity in the United States. Using an eight-stage typology to organise the findings, this literature review presents the results from a wide range of studies. The synthesis shows how various racial and ethnic groups perceive natural hazard risks and respond to warnings, how groups may be differentially affected, both physically and psychologically, and how disaster effects vary by race and ethnicity during the periods of emergency response, recovery and reconstruction. We show that studies have important findings, many illustrating that racial and ethnic communities in the US are more vulnerable to natural disasters, due to factors such as language,

housing patterns, building construction, community isolation and cultural insensitivities. By presenting these studies together, we are able to witness patterns of racial and ethnic inequalities that may be more difficult to see or interpret in individual studies that take place in one specific time and place. We conclude the review with policy and research recommendations.

Fullilove, Mindy Thompson M.D. (2005) Root shock: how tearing up city neighborhoods hurts America, and what we can do about it. New York: Ballantine Books.
This book examines the phenomenon of being uprooted from place due to housing and land policies. It argues that the emotional trauma affects not only the Afro- American community but all of America.

Girard, Chris and Walter Gillis Peacock. 1997. Ethnicity and Segregation: Post Hurricane Relocation. Pp 191-205 in Peacock, Morrow, and Gladwin, *Hurricane Andrew: Ethnicity, Gender and the Sociology of Disaster*. London: Routledge.

Horton, H.D. 1992. Race and wealth: A demographic analysis of Black homeownership. *Sociological Inquiry*, 62: 480-489.

Lindell, M.K. and Perry, R.W. 2000. Household adjustment to earthquake hazard, a review of research. *Environment and behavior*, 32: 590-630.
Abstract: Data from 23 studies confirm theoretical predictions that households' adoption of earthquake hazard adjustments is correlated with their perceptions of the hazard and alternative adjustments, demographic characteristics, and social influences. However, some findings require modification of existing theories of hazard adjustment. Examination of the methods used in previous investigations underscores a need for better theories, more complete testing of existing theories, and improved data analytic and data reporting procedures in future tests of those theories.

Logan, J.R. and Molotch, H.L. 1987. *Urban Fortunes: The Political Economy of Place*. Berkeley, CA: University of California Press.

Massey, D.D. and Denton, N.A. 1993. *American Apartheid : Segregation and the Making of the Underclass*. Cambridge, MA: Harvard University Press.

Moore, H.E. and Bates, F.L., Layman, M.V. and Parenton, V.J. 1963. *Before the Wind: A study of the Response to Hurricane Carla*. Washington D.C.: National Academy of Sciences/National Research Council.

Peacock, W. G. 2003. Hurricane mitigation status and factors influencing mitigation status among Florida's single-family homeowners. *Natural Hazard Review*. 4(3):149-158.
Abstract: This paper presents statewide estimates of shutter usage and envelope coverage for owner-occupied single-family detached housing in Florida. Intrastate regional variations are also presented and discussed. Multivariate analyses of shutter and envelope coverage assessing the relative influence of a variety of factors considered by the literature to be determinants of household mitigation are presented. The findings suggest that perceptions of hurricane risk and knowledge, past hurricane experience, proportion of neighbors with shutters, residing in coastal counties and counties subscribing to the South Florida Building Code, household income, and race/ethnicity are all significant determinants of shutter usage and envelope coverage. Policy implications are discussed.

Peacock, Walter Gillis, Samuel D. Brody, and Wesley Highfield. 2005. Hurricane Risk Perceptions among Florida's Single Family Homeowners." *Landscape and Urban Planning.*
Abstract: Hurricane and associated damage remains a constant threat to the health, safety and welfare of residents in Florid. Hurricane risk perception has been found to be an important predictor of storm preparation, evacuation, and hazard adjustments undertaken by households, such as shutter usage. Planners and policy makers often employ expert risk analysis to justify hazard mitigation policies, yet expert and lay risk assessments do not always agree. This article examines factors contributing to hurricane risk perception of single-family homeowners in Florida. Utilizing data from a statewide survey, we first map and spatially analyze risk perceptions throughout Florida . Second, we examine the influence of location on shaping homeowner perceptions along with other factors such as knowledge of hurricane, previous hurricane experience, and socio-economic and demographic characteristics. The findings suggest there is a good deal of consistency between residing in a location identified by experts as being high hurricane wind risk areas and homeowner perceptions. Finally, we discuss the implication sof these findings for land use and hazard planning.

Peacock W.G., Killian, C. D., and Bates, F.L. 1987. The effects of Disaster Damage and Housing Aid on Household Recovery Following the 1976 Guatemalan Earthquake. *International Journal of Mass Emergencies and Disasters (IJMED)*, 5(1):63-88.
Abstract: This paper examines the effects of housing programs, disaster damage, community type, and other social determinants on household recovery following a major natural disaster—the 1976 Guatemalan earthquake. The domestic assets index, a measure of household living conditions, and a refined measure of household recovery are introduced and employed. The domestic assets scale is an index of the economic value of household equipment and is an adaptation of level of living scales. While reconstruction aid was the single most important determinant of recovery, it was the type and not the value of aid that was critical. Strong support exists for the conclusion that temporary housing as a form of aid retarded the recovery process while permanent housing programs actually produced net improvement in living conditions. There is also evidence that the unequal effects of different types of housing programs produced significant changes in the distribution of economic resources, thus affecting the stratification system in affected communities. In addition, while other factors associated with the social characteristics of household were found to be important, this analysis consistently suggests that household residing in small, rural, and politically removed communities experienced greater difficulty in overcoming the debilitating effects of a natural disaster.

Peacock, W. G. and Bates, F.L. 1982. Ethnic difference in earthquake impact and recovery. In F.L. Bates (ed.) *Recovery, Change and Development. A longitudinal study of the Guatemalan Earthquake*, pp. 792-892. Athens, GA, University of Georgia Press.

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Pfost, Russell L. 2003. Reassessing the Impact of Two Historical Florida Hurricanes. *Bulletin of the American Meteorological Society*, 84(10):1367-1372.
Abstract: This paper reexamines two historic South Florida hurricanes, the "Miami" Hurricane of 1926, and the "Okeechobee" Hurricane of 1928. These storms are frequently cited for their disastrous impacts, but the casualty figures currently associated with them are low due to underreporting of nonwhite persons and other sociological factors. More accurate information is available, and to put the impact of these storms in a better historical perspective, the casualty figures associated with them should be corrected.

Philips, B.D. 1993. Culture diversity in disasters: sheltering, housing and long-term recovery. *International Journal of Mass Emergencies and Disasters* (IJMED). pp. 99-110.
Abstract: Demographic shifts have put minority groups and the poor at greater risk to disaster during the last decade. Problems of sheltering and housing for these groups occurred following the 1989 Lorna Prieta earthquake in Watsonville, California. To mitigate future problems disaster planners must identify various ethnic groups and other groups in a community. Diversity must be built into the disaster response during the planning stage. Researchers should continue and expand work related to diversity and disaster.

Robinson, R., O'Sullivan, T. and Grand, J.L. 1985. Inequality and housing. *Urban Studies*, 22:249-256.
Abstract: This paper seeks to provide a measure of housing inequality across the entire household population. Ratable values are used as an informed assessment of the flow of housing services yielded by a particular dwelling, and the Atkinson inequality index is applied to a data set obtained from the Family Expenditure Surveys of 1968 and 1978. The results indicate that though income inequality has increased over this period, overall housing inequality did not increase. Tenure specific analysis suggests that this is largely the result of inter-tenure moves, and that local Authority housing policy has succeeded in driving a wedge between general economic inequality in public sector housing.

Simpson, L. 2004. Statistics of racial segregation: measures, evidence, and policy. *Urban Studies*, 41(3):661-681.
Abstract: Subsequent to riots in UK northern cities, claims of self-segregation and polarised communities are examined with data unique to the city of Bradford and first results from the UK population census. Statistics relating to race often reinforce misleading stereotypes that are unhelpful to the development of appropriate social policy. Previous studies of indices of segregation are shown to be inadequate through lack of consideration of change over time and the confounding of population change with migration. The separation of natural change and migration supports survey evidence that dispersal of South Asian populations has taken place at the same time as absolute and relative growth. Social policy will do well to take on board these demographic facts in a positive inclusive approach to all residents in all areas.

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P. Religion

In the context of sustainable development and the building resilient communities psychology must be understood both as how people understand and react internally to certain stimuli (individual psychology) and

how people react collectively to stimuli (social or community psychology). We know that in long-term disaster recovery and mitigation (resiliency programs) stress accumulates and changes over time. We know that this accumulated stress can disrupt normal thinking and decision-making patterns of individuals and communities. It is well documented that disaster responders, caregivers, and managers are also impacted but accumulated stress – this is often called compassion fatigue or Secondary Traumatic Stress Disorder. We believe that compassion fatigue can and does impact organizations and agencies and their policies and practices causing them to blame the clients, lose patience with the clients, and reduce services, involvement, and commitments. There is a tendency among caregivers, researches, managers, and policy makers to dismiss strong feelings and the people who have them. The wise change agent remembers that "Feelings are facts!"

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An old book that reads like today's newspapers. Barkun links disasters to millennium thinking. He shows how disasters can lead to millennium thinking, totalitarianism, and terrorism. the last chapter entitled 'Changing Patterns of Disaster' Barkun states "Since spontaneous events cannot be counted upon to produce disaster after disaster, men take it upon themselves to generate catastrophe…. As the means for inducing disaster at will have been developed and used, millenarianism has become as much the instrument of oppression as its by-product. Millenarianism has emerged from its old haunts – the ghetto, small town, and backland – into the modern urban society. In the process, it has increasingly left behind the oppressed for whom it was the last resort in adversity and become the creature of those who seek power and dominion." Barkun's ideas deserve careful attention because they do relate to disaster response policy and practice and they have important implication for foreign and national policy. Words like "EVIL" that polarize are indicative of millennium thinking. This is an important book for those who want to reflect on the long-term impact of September 11.
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Bolin explores the impact that race, religion, and ethnicity have on long-term recovery and mitigation.

(2.) Brueggemann, W. (1977). *The Land: Place as Gift, Promise, and Challenge in Biblical Faith.*
Philadelphia, Pa: Fortress Press.
This is a theological book on the relationship of humans, land and landlessness. It has important implications for disaster recovery and mitigation when understanding a persons connection to the sacredness of place.

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Ecological and human rights issues are always play a significant part of disasters and recovery. This is a good introduction to ecological and human rights problems.

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This is an important book that looks at suffering as more than psychological trauma and recovery as more than theory. Using the experiences of Latin American thinkers and activists, she addresses the social and political causes of suffering.

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This is a good introduction to the roles of voluntary agencies and disasters. It lists most voluntary organizations active in disasters.

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Charity can be and often is oppressive because it does not reduce the vulnerability or increase the sustainable capacity of people in need. This book takes the reader beyond charity to real grassroots development.

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I. Urban/Rural

Buckland, J. and Rahman, M. (1999). Community-based disaster management during the 1997 Red River Flood in Canada. *Disasters*, 1999, 23(2): 174-191.
This paper examines the relationship between preparedness and response to natural disasters and their level and pattern of community development. This is done by investigating preparation and response to the 1997 Red River Flood by three rural communities in Manitoba, Canada. The communities were selected because of their different ethnic mix and associated level and pattern of community development. The hypothesis was supported that the level and pattern of community development affect community capacity to respond to flooding. Communities characterized by higher levels of physical, human and social capital were better prepared and more effective responders to the flood. However, where the pattern of community development was characterized by high levels of social capital, decision-making processes were complicated.

Gitierrez, C. P. (1979).*The Colonial french.*
The make up of Terrebonne and Lafourche was largely poor Creole farmers in 1820.1871: Creole association forms for political purposes. 1914: Law in Louisiana forbids the use of French in legal notices and advertisements

Mitchell, J.K. 1998. Hazard in changing cities. *Applied Geography*, 18(1): 1-6.
Abstract: A special session of the International Geographical Union's Study Group on the Disaster Vulnerability of Megacities illustrates three different directions in which teams of researchers working on problems of natural hazards and large-scale urbanization are proceeding. Geographers are analysing the social dimensions of human vulnerability among marginal populations in Tokyo. Engineers are developing a time-sensitive methodology for assessing earthquake risk and hazard mitigation capacities in megacities. Physicists are exploring the potential of emerging models of self-organizing neural systems and adaptive learning as pointers to the future development of urban settlement patterns. All three initiatives offer improvements to existing analytic tools for understanding hazards in the context of urbanization.

Smith, Stanley K. and McCarty, Christopher, 1996, Demographic Effects of Natural Disasters: A Case Study of Hurricane Andrew. *Demography*, 33(2):265-275.
Abstract: Many studies have considered the economic, social, and psychological effects of hurricanes, earthquakes, floods, tornadoes, and other natural disasters, but few have considered their demographic effects. In this paper we describe and evaluate a method for measuring the effects of Hurricane Andrew on the housing stock and population distribution in Dade County, Florida. Using information collected through sample surveys and from other data sources, we investigate the extent of housing damages, the number of people forced out of their homes, where they went, how long they stayed, and whether they returned to their prehurricane residences. We conclude that more than half the housing units in Dade County were damaged by Hurricane Andrew; that more than 353,000 people were forced to leave their homes, at least temporarily; and that almost 40,000 people left the county permanently as a direct result of the hurricane. We believe that this study will provide methodological guidance to analysts studying the demographic effects of other large-scale natural

Uitto, J.I. 1998. The geography of disaster vulnerability in megacities: a theoretical framework. *Applied Geography*, 18(1): 7-16.
Abstract: The philosophical and methodological bases of urban disaster vulnerability analyses are presently underdeveloped. Few such analyses incorporate social data, partly because urban disaster managers and other potential user groups do not fully appreciate the value of this information, and partly because techniques for including it in existing vulnerability analyses have not been worked out. This paper explores the value of adding data on social marginality to Japanese models of earthquake impact and of incorporating marginal groups into the disaster planning process. The growing phenomenon of homelessness in Tokyo is used as a test case. It is argued that data on homelessness would improve the performance of systems designed to increase personal and social protection, whereas the incorporation of marginal urban groups would tap new knowledge of coping mechanisms and enrich the entire planning process.

IV. The Four R's: Reconstruction, Recovery, Resettlement, and Relocation of Impacted Communities

Introduction- Reconstruction and Recovery: ***Dr. Brenda Phillips***
Oklahoma State University

Introduction- Resettlement and Relocation:
Dr. Tony Oliver- Smith, University of Florida

Reconstruction and Recovery - Dr. Brenda Phillips

The terms recovery, reconstruction, restoration, rehabilitation and restitution have all been used within the time period generally thought of as recovery. In practice, though, the terms mean something quite different. Reconstruction refers to the physical rebuilding of a community while recovery refers to the social process required to bring the community back to a functioning level or beyond. FEMA, for example, defines recovery as returning the community to "normal" though the agency does not define what constitutes normalcy. Community recovery suggests that something beyond physical reconstruction occurs and that the social institutions return to a familiar way of doing things. Health care, for example, can function at the levels necessary to maintain well-being ranging from the individual to the broader public health levels and from routine services to trauma situations.

The physical reconstruction process is usually handled through a variety of means. Within the United States, physical reconstruction is managed through city government by means of a building permit process. Residents usually experience that as a rather beleaguered process accompanied by long lines, long waits to launch rebuilding, and misunderstanding of the process. The process can be expedited or delayed by the circumstances of the physical damage to the community. For example, delays may occur while decisions over mitigation measures take place. New ordinances and new building codes may need to be written and passed through a political process, resulting in potentially long delays. Conversely, government can move to expedite the process if they have good planning and zoning procedures in place.

Physical reconstruction commences when insurance or government grants and/or loans arrive to the homeowners. The goal is to return the physical capital to use. This may require repairs on surviving structures or demolition followed by new construction. That process may begin fairly quickly or can take years to accomplish. Lower income residents typically experience an elongated process as the insurance, grants or loans they receive are not sufficient to cover the full costs of reconstruction. That process is often worsened for single parents, the elderly, persons working at waged labor or persons with disabilities. In these cases, it is not unusual for external organizations to arrive with volunteer labor and resources to address unmet needs.

Thus the physical reconstruction process is accompanied by a social process that involves a series of steps and stages that residents move through at different rates. A variety of organizations and actors are engaged in the physical and social dimensions of reconstruction. What appears to work best is a recovery process that actively involves the community in decision-making about possible relocations, mitigation measures and the long-term future of the community as a viable entity. Stakeholder involvement, even in the physical reconstruction, heightens buy-in to the difficult decisions that must be made. Stakeholders understand that the physical reconstruction is not the only dimension that must be taken into consideration. Rather, a holistic approach is the one that is generally preferred by residents and recommended by experts. That approach integrates physical reconstruction of buildings with economic vitality, environmental conservation, recognition of equity issues, mitigation of risk, and appropriate reconstruction of critical infrastructure and lifelines, all of these comprising the overall concept of resiliency.

Resettlement and Relocation- Dr. Tony Oliver-Smith

Community resiliency counter inquisitively can also be enhanced <u>after</u> a community is destroyed. If an entire community must be resettled because the original location can no longer be inhabited safely, the methods that are used to resettle or relocate the populous may build in resilience toward future risk. The bibliography on displacement and resettlement reflects the themes that have arisen over the past twenty five years of research in a variety of fields. Researchers from the fields of development-induced displacement, refugee studies and disaster research (Hansen and Oliver-Smith 1982, Cernea 1996, Turton 2003, Oliver-Smith 2005) have discovered that displaced peoples regardless of cause share many similar challenges. In point of fact, although there are obvious

differences in terms of cause, the infrastructural destruction wrought by an earthquake, a bombardment, or a bulldozer, or a catastrophic hurricane for example, may often be uncomfortably similar.

Although the places and peoples are geographically and culturally distant and the sociopolitical environments and causes of dislocation dissimilar, there emerge a number of common concerns and processes. Refugees, earthquake victims and displacees experience uprooting and relocation and must cope with the consequent stresses and the need to adapt to new or radically changed environments. All may experience privation, loss of homes, jobs, and the breakup of families and communities. All must mobilize social and cultural resources in their efforts to reestablish viable social groups and communities and to restore adequate levels of material life. These are important similarities that we must recognize and understand both to minimize displacement and to assist in the material reconstruction and the social reconstitution of communities when such events occur.

Thus, much of the research on disasters and forced migration does not come from disaster studies per se, but from studies of political economy, environment and development. The spatial-temporal frameworks of disaster research have been relatively narrow, primarily event and site focused. The short term emergency and relief stages have captured the overwhelming majority of the attention from social scientists largely due to the traditional definition of disaster as largely a social psychological phenomenon with the focus on behavior of persons and groups in a specific context of disruption and/or damage. However, given more recent perspectives on historical structural features of disasters, there is greater attention to more longitudinal issues, one of which should necessarily be forced migration and displacement as an outcome of disaster. Similarly, with a more longitudinal perspective, research is shifting from an exclusive focus on the disaster site to greater attention to the multiple sites where both policies and practices are developed as well as outcomes, such as forced migration, play themselves out. Longitudinal and multi-site ethnographic research requires substantial changes in field methods as well as significant challenges for data acquisition and management. Attaining such methodological goals may be worth the effort because with such a broader focus comes the capacity to explore the conditions and processes that might prevent such outcomes in the future., i.e. steps to improved resiliency.

The emerging disaster trends and characteristics of vulnerable populations and complex disasters will very like increase the number and scale of forced migrations and displacements in the relatively near future including in the U.S. The combination of increasing population, population density, increasing poverty, and occupation of hazardous sites has accentuated vulnerability to both natural and technological hazards and increases the probability of forced migrations. Technology has also vastly increased the numbers of hazards to which populations are exposed. When socio-natural disasters trigger technological disasters, the resulting complex process may force people to migrate because the disaster impacts in combination with local environmental contamination make the environment uninhabitable. While many of the changes associated with increasing state and market integration have established more resilient infrastructures in some regions of the world, they have also frequently undermined traditional adaptations of rural populations to natural hazards. In addition, the effects of global climate changes, including increased risks of flooding, more powerful tropical storms, deforestation, desertification, soil erosion, and sea level rise increase the probability of disasters contributing to internal and international forced migration.

Initial attempts at theorizing involuntary displacement and resettlement focused on the most immediate and visible outcomes for the people involved. The first attempt at modeling displacement began when Thayer Scudder and Elizabeth Colson developed an approach based on the concept of stress to describe and analyze the process of involuntary dislocation and resettlement (1982). They posited that three forms of stress resulted from involuntary

relocation and resettlement: physiological stress, psychological stress, and sociocultural stress. Physiological stress is seen in increased morbidity and mortality rates. Psychological stress has four manifestations: trauma, guilt, grief, and anxiety. Sociocultural stress is manifested as a result of the economic, political, and cultural effects of relocation. These three forms of stress, referred to as multidimensional stress, are experienced as affected people pass through the displacement and resettlement process. The process itself is represented as occurring in four stages, which they label recruitment, transition, potential development, and handing over/incorporation. Achieving the incorporation stage signifies that the resettlement project has been successful. They define success by the achievement of local management of economic and political affairs and the phasing out of external agencies and personnel from day-to-day management of the community. The community has become able to assume its place within the larger regional context that includes host communities and other regional systems.

At roughly the same time that Scudder and Colson were developing their model, an approach began in an emerging political ecology that focused on the linked ideas of vulnerability and risk. Vulnerability was initially employed in disaster research to understand the vast differences among societies in disaster losses from similar agents. An alternative perspective on human–environment relations, emphasizing the role of human interventions in generating disaster risk and impact, found that these sets of relations coalesced in the concept of vulnerability (Hewitt). As these concepts gained currency, Cernea began to write about the risks of poverty resulting from displacement from water projects (1990). He subsequently developed his well-known Impoverishment Risks and Reconstruction (IRR) approach to understanding (and mitigating) the major adverse effects of displacement in which he outlines eight basic risks to which people are subjected by displacement (1996); Cernea and McDowell 2000). The model is based on the three basic concepts of risk, impoverishment, and reconstruction. Cernea models displacement risks by deconstructing the "syncretic, multifaceted process of displacement into its identifiable, principle and most widespread components": landlessness, joblessness, homelessness, marginalization*, food insecurity, increased morbidity, loss of access to common property resources, and social disarticulation* (Cernea 2000).

He further asserts that the probability of these risks producing serious consequences is extremely high in badly implemented or unplanned resettlement. Basically he argues that displacement should be avoided where at all possible, but where it is determined to be necessary, the risks of negative effects can be reduced by political commitment, appropriate legal protection, and adequate resource allocations. His IRR model is designed to predict, diagnose and resolve the problems associated with displacement and resettlement.

Most recently, Chris de Wet has sought to incorporate Cernea's important insights into a more comprehensive approach. Asking why resettlement so often goes wrong, de Wet sees two broad approaches to responding to the question. The first approach is what he calls the "Inadequate Inputs" approach, which argues that resettlement projects fail because of a lack of appropriate inputs: national legal frameworks and policies, political will, funding, pre-displacement research, careful implementation, and monitoring. Optimistic in tenor, the inadequate inputs approach posits that the risks and injuries of resettlement can be controlled and mitigated by appropriate policies and practices.

De Wet, on the other hand, finds himself moving toward what he calls the "Inherent Complexity" approach. He argues that there is a complexity in resettlement that is inherent in "the interrelatedness of a range of factors of different orders: cultural, social, environmental, economic, institutional and political—all of which are taking place in the context of imposed space change and of local level responses and initiatives" (de Wet 2006). Moreover, these changes are taking place simultaneously in an interlinked and mutually influencing process of

transformation. And further, these internal changes from the displacement process are also influenced by and respond to the imposition from external sources of power as well as the initiatives of local actors.

Therefore, the resettlement process emerges out of the complex interaction of all these factors in ways that are not predictable and that do not seem amenable to a purely linear rational planning approach. De Wet suggests that a more comprehensive and open-ended approach than the predominately economic and operational perspective of the inadequate inputs approach is necessary to understand, adapt to, and take advantage of the opportunities presented by the inherent complexity of the displacement and resettlement process. While some might see this perspective as unduly pessimistic, the fact that authorities are limited in the degree of control they can exercise over a project creates a space for resettlers to take greater control over the process. The challenge thus becomes the development of policy that supports a genuine participatory and open-ended approach to resettlement planning and decision-making (De Wet 2006).

Introduction References

**Marginalization- denied or reduced access to the benefits of society accorded most citizens.*
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A. General Readings

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(3.) Aspelin, P. & Coelho dos Santos, C. (1981). *Indian Areas Threatened by HydroelectricProjects in Brazil*. Copenhagen: IWGIA.

Aysan, Y., & Oliver, P. (1987). *Housing and Culture After Earthquake*, Oxford: Oxford Polytechnic.
This entire text revolves around working with the community during the restoration, taking into consideration their culture (privacy, language, beliefs, kinship, customs, other such culture sculpting items that are commonly overlooked), and looking at relocation pertaining to families from a non-nuclear standpoint. It involves housing, temporary and permanent, both physical and cultural hosing, who gets that aid, and recommendations for future aid disbursement. Separation of families is also an issue that is ill considered when relocation is the path chosen. Problems arise when providing aid when a culture's values are not taken into consideration. First, the damage a disaster does which is followed by the damage caused by those coming into an affected area to help. The second damage can be longer lasting than the damage the incomers came to fix in the first place. Cultural values may have a profound bearing upon the ways in which dwelling are designed, built, used, settlement and building. Many such aspects of culture are threatened during the recovery period and the after math of a disaster. Aid needs to be culturally appropriate based on beliefs (often doubling as laws), traditions, culture, economic stability, and safety. Safety pertains to relocation only upon extreme necessity due to lack of will to break cultural ties; conversely, we do not want those relocated to become dependant on the aid provided by the host community and others. Cultural revamps occur when aid provided is also an attempt to "modernize" the affected areas, often to the degradation of the culture. Another issue addressed is that of how media coverage affects timeliness and amount of aid. Higher media coverage equates to more and swifter coverage than areas less covered usually as a result of location or sparse damage. There is a list of suggested policies that may assist in more efficient recovery process. Shelter policies: alternative policies, appropriate shelters, recycling of local resources, watching out for dependence on aid, conserving natural resources, and larger shelters than those directly affected. Relocation needs to be put into affect as a safety measure for a community not a first resort. This mindset along with a speed and rate of action are the areas of focus for improvement in relocation. Assistance of those relocating upon return must revolve around the traditional way of life along with health benefits and high involvement of the community relocated as they need to be shown how to fend for themselves again as opposed to given aid and left alone. Providing permanent hosing for the new location, if forced to relocate, helps lower the two main weaknesses in relocation: vulnerability and future risk. Awareness of community reaction with a target towards community leaders can be extremely beneficial in the relocation or rebuilding phase. Personalized housing situation need to be a factor when providing housing as each family differs in their present and future needs. There needs to be a choice of location and neighbors. Low interest and long repayment schedules are necessary for those being aided with consideration to economic standing. Reducing vulnerability is a multifaceted task that involves: involving the community, awareness among families of safety hazards and preventions, using building ideas from the community who know their areas, and outlining maps of vulnerable areas. National education, risk perception, disaster aftermath and safety shown, and access to old villages are all aspects scrutinized. This is also a repeat

(3.) Barabas, A. & Bartolome, B. (1973). *Hydraulic Development and Ethnocide: The Mazatecand Chinantec People of Oaxaca, Mexico*. Copenhagen: IWGIA.

Bates, Frederic L., Peacock, W.G., *Living Conditions, Disasters, & Development*

(3.) Baviskar, A., (1992). *Development, Nature and Resistance: The Case of the Bhilala Tribalsin the Narmada Valley*, PhD. Dissertation, Cornell University, Ithaca, New York.

(4.) Berger, T.R., (1977). *Northern Frontier, Northern Homeland: The Report of the MackenzieValley Pipeline Inquiry: Volume One*. Minister of Supply and Services Canada, Ottawa.

(4.) Brown, H. F., Burditt, V. B., & Liddell, C. W. (1965). The crisis of relocation. In H. J.Parad (Ed.), *Crisis Intervention* (pp. 248-260). New York: Family Service Associationof America.

(3.) Butcher, D. (n.d.). An Organizational Manual for Resettlement: A Systematic Approach tothe Resettlement Problem Created by Man-Made Lakes, with Special Reference for West Africa, Rome: Food and Agriculture Organization.

(3.) Butcher, D., (n.d.). An Organizational Manual for Resettlement: A Systematic Approach tothe Resettlement Problem Created by Man-Made Lakes, with Special Reference for West Africa. Rome, Italy: Food and Agriculture Organization.

(1) Cernea, M. (1997). The Risks and reconstruction model for resettling displaced populations.*World Development* 25:10: 1569-1588.

(1.) Cernea, M. M. (1999). *The Economics of Involuntary Resettlement: Questions and Challenges*, Washington DC: The World Bank.
This text presents a broad policy and debate about reorienting the development methodologies toward social inclusion and social development by focusing on one aspect: the need to bridge the gap between economic and social knowledge in addressing population resettlement. The volume is devoted to the argument for a more direct and involved role for economics in studying the social and economic dimensions and effects of involuntary population resettlement.

(3.) Chambers, R. (Eds.). (1993). Anthropological and Sociological Research for Policy Development on Population Resettlement. In M.M. Cernea, S.E. Guggenheim(Eds.) *Anthropological Approaches to Resettlement*, Boulder: Westview Press.

(3.) Cernea, M. M. & McDowell, C. (2000). *Risk and Reconstruction: Experiences of Settlersand Refugees*. Washington DC: The World Bank.

(3.) Chambers, R. (Eds.). (1996). *Eight main risks: impoverishment and social justice in resettlement*. World Bank Environment Department, Washington, DC.

(3.) Chambers, R. (Eds.). (1990). *Poverty Risks from Population Displacement in Water Resources Development*, HIID Development Discussion Paper No. 355, Harvard University, Cambridge, MA.

(3.) Chambers, R. (1969). *Settlement Schemes in Africa*, London: Routledge and Kegan Paul.

(3.) Chambers, R. (Eds.), (1970). *The Volta Resettlement Experience*. New York: Praeger/VoltaRiver Authority, Accra and University of Science and Technology, Kumasi.

(1.) Colson, E. (1971). *The Social Consequences of Resettlement: The Impact of the Kariba Resettlement Upon the Gwembetonga*. Manchester University Press, Great Britain.
The main focus of the text was on five communities from 1957 to 1963 that relocated from the Gwembe Valley. Europeans had been taking over the area for awhile, but the relocation is noted as being the result of flooding. Communities passively resisted their relocation and villagers were forced to start fresh. Even though new jobs were made available, natives experienced material and structural losses and political change. Individual family strife caused problems because the family would work together as a result of starting over. The father would receive all the benefits of family work and would choose what to do with the benefits, but over time even those issues were smoothed over. The people and communities stuck together and many old conflicts were forgotten as was the maintenance of their homestead. An interesting factor was the examination of the women of this culture. The resettlement caused hardship and the kinship ties were put in crisis. Families were made to separate, women fell under the dominion of their husbands, and were often beaten. Women would often leave their husbands because they missed their family and were being ill treated (the day the divorce went through he would kill her and then kill himself). The beliefs were not lost and rituals were used to embrace culture and past. Like most technological advancement it brought financial loss, illness, and death.

(4.) Diessenbacher, H. (1995). Explaining the genocide in Rwanda: how population growth anda shortage of land helped to bring about the massacres and the civil war. *Law and State,* 52: n58-88.

(3.) Dobby, E. H. (1952). Resettlement transforms Malaysia: a case history of relocating thepopulation of an asian plural society. *Economic Development and Cultural Change,* 50:163-189.

(4.) Dorais, L. (1991). Refugee adaptation and community structure: the Indochinese in Quebeccity, Canada. *International Migration Review, 25*(3), 551-573.
The Indochinese relocation to Quebec since the mid 1970's is an instance of forced migration. There were two waves of immigrants: the first was welcomed by family living in Quebec already, and the second had no family to speak of and were less educated and did not speak French or English. The second wave was the displaced wave of refugees that had a higher turnover rate (especially in the Cambodians) as laborers left Quebec for more industrialized cities. Those who were able to find work entered temporary unskilled labor. The initial students from 1962 and on provided a small community for both waves to attach to upon arrival. The first wave, being higher educated and from more industrialized areas of Indochina, was able to assimilate into the Quebec lifestyle. The second wave had more difficulties and still has only close social ties with the people of their area resulting in three distinct cultures in the area: the Vietnamese, the Cambodian, and the Laotians. It is hypothesized that these communities can maintain their culture because there is a constant influx from Indochina and an outflow to larger cities. The correlation between the second wave and other displaced communities is that they come from environmentally reliant communities. The difference is that where the second wave community has a constant stream of individuals bringing the "home-culture" with them, a displaced community would not have such a stream.

(1.) Dwivedi, R. (1999). Displacement, risks and resistance: local perceptions and actions in thesardar sarovar. *Development and Change,* 30: 43-78.
"This article looks at the problems of displacement and resettlement in the Sardar Sarovar, the reservoir of the Navagam dam on the river Narmada. In his analysis, the author considers three major variables-resettlement policies and their implementation, action-group mediation, and internal differentiation among people-to argue that people will have different perceptions and reactions to displacement: while some will risk resistance, others may

risk resettlement. Given the importance of these variables, the article highlights the need to conceptualize displacement and resettlement as components in a dynamic environment, and argues that in the specific context of the Sardar Sarovar, a reworking of the displacement-resettlement problem is possible and perhaps desirable." Should this be a quote?

(3.) De Wet, C. (n.d.). Risk, complexity and local initiative in involuntary resettlement outcomes. In C. De Wet (Ed.). *Towards Improving Outcomes in Development Induced Involuntary Resettlement Projects*. Oxford and New York: Berghahn Books.

(3.) Fernandes, W., Thukral, E.G. (1989). *Development, Displacement and Rehabilitation*. NewDelhi: Indian Social Institute.

(3.) Fahim, H. (n.d.). Egyptian *Nubians: Resettlement and Years of Coping*. Salt Lake City:University of Utah Press.

(3.) Feit, H. & Penn A. F. (1974). The Northward Diversion of the Eastmain and Opinaca Riversas Proposed: An Assessment of Impacts on the Native Community at Eastmain Village. Montreal: Grand Council of the Crees (Quebec).

(2) Fullilove, Mindy Thompson M.D. (2005) Root shock: how tearing up city neighborhoods hurts America, and what we can do about it. New York: Ballantine Books.
This book examines the phenomenon of being uprooted from place due to housing and land policies. It argues that the emotional trauma affects not only the Afro- American community but all of America.

(3.) Gans, H. J. (1962). *The Urban Villagers: Group and Class in the Life of Italian Americans*. Glencoe, ILL: The Free Press.

(3.) Goodland, R. (2004). Prior informed consent and the world bank group. American University Center for International Environmental Law, Washington College of Law: Conference: Prior Informed Consent.

(4.) Hahn, S. (1983). Holding on to the land and the lord: kinship, rituals, land tenure, and socialpolicy in the rural south: southern anthropological society proceedings. *The Journal of Southern History*, *49*(2), 334-336.

(3.) Kalbach, W. E. (2001). Strangers at the gate: the "boat people's" first ten years in Canada. *Contemporary Sociology*, *30*(4), 379-380.
Report on ten-year immigration and refugee policies of Canada. Informs public debate on success and failure of large groups of refugees and adds to the literature on human resiliency. Distill policy and practical applications from the research findings using a qualitative and quantitative approach. Documents the successes and failures of the twentieth century's largest influx of refugees. Contributes to the literature on human resiliency along with distilling policy and practice implications from research findings. Half of the book is dedicated to the analysis and discussion of the migration and resettlement experiences for the refugees' mental health in relation to pre- and post-migration stress, personal and social resources of the refugees, and their sociodemographic characteristics. The two concluding chapters deal with the problem of defining and developing an objective measure of "successful adaptation" based on "ideas about success we had gleaned from studying individuals," and then "tested on the entire sample." The author presents his pro-immigration/refugee position with a mix of qualitative and quantitative research.

(4.) Katwikirize, Stuart. (2001). *Understanding Resettlement Capacities and Vulnerabilities of Displaced Male and Female Headed Households: A Case of Three Camps in Northern Uganda*. World Vision International/Cranfield Disaster Management Centre. Thesis presented at the Gender Equality and Disaster Risk Reduction Workshop (Honolulu, HI). Conference proceedings [presentations]: http://www.ssri.hawaii.edu/research/GDWwebsite/pages/proceeding.html.

Lindell, M. K., Perry, R., and Prater, C. S. 2006. *Emergency Management: Principles and Practices.* Hoboker, NJ: Wiley (forthcoming).

(2.) Myers, N. (1996). Environmentally-induced displacements: The State of Art. In *Environmentally-Induced Population Displacements and Environmental Impacts Resulting from Mass Migration,* International Symposium, 21-24 April 1996, Geneva: International Organization for Migration with United High Commissioner Refugees and Refugee Policy Group, 72-73.

(3.) Oliver-Smith A. (1982). Here There is Life: The Social and Cultural Dynamics of Successful Resistance to Resettlement in Post-disaster Peru. See Ref. 49, pp. 85-104

(3.) Oliver-Smith A. (1991). Success and failure in post-disaster resettlement). *Disaster* 1524. **:** In this article I examine the problem of the resettlement of population after disaster. After considering the complexity of the resettlement process in general and the reasons resettlement is often chosen by authorities following disaster, I discuss a theoretical perspective from development project resettlement which may have relevance for disaster research. This is followed by an examination pf those factors in post-disaster resettlement projects which proved important in affecting successful or unsuccessful outcomes. Site, layout, housing and popular input are presented as crucial issues in the determination of success or failure in post-disaster resettlement. Case material from Turkey, Iran and Peru is presented to illustrate how failure to attend t these issues produces unsuccessful resettlement villages. Case material from Turkey is used to illustrate how attention to these factors improves chances of success in resettlement. Material from case of voluntary spontaneous post-disaster resettlement in Guatemala is also presented to underscore the importance of popular inputs. The article ends with a brief consideration of resistance to resettlement and alternative policies.

(2.) Oliver-Smith, A. (2004). Addressing complexity and causality in disaster induced forcedmigration-preliminary draft. *National Academy of Science Workshop "Typologies of Relevance for the Study of Forced Migration",* (pp.1-26).

Historical look at results and examples of relocation. More personal views than political. Disasters examined: earthquakes, hurricanes, and human intrusion. Examination of how responsibility is allocated. Effects on people and adjustments to the situation. Twenty years of displacement and refugee studies and disaster research are combined for a comparative look across those. Different concerns of people and places and the commonalties. Examination of loss of home, communities, and work and the reestablishment of the people to form new social groups and replace the lost aspects. Recognition and understanding of material and social reconstruction of communities.

(1.) Oliver-Smith, A. (n.d.). Communities after catastrophe: reconstructing the material, reconstituting the social. , , 1-18.

RECONSTITUTING COMMUNITIES
Definition OF COMMUNITY--Communities come of a shared past, designated group who interact with people from that group and they have a similar understanding of values, practices, history, and identity and a certain framework. Communities who were displace typically long for what was. What needs to be the focus is what could be. There tend to be a lack of cultural resources because typically people resettle as individuals. Even as a group In the reconstruction of a community there needs to be aid distribution, resettlement programs, and a recognition that there will be a political upheaval. Refugees may group large numbers of people who claim different ethnic identities Need to examine the capacity of a community in their ability to recover and understanding that there is a limited amount of capabilities that the helpers have. Communities evolve and are transformed by a process of trial and error. Individual healing and reconstruction of the community- providing meaning to individual lives. Cultural symbols to engage social reconstruction. The total idea of having a shared past, the grief and loss in correlation. Loss of experience, material possession, personal and social relationships, loss of past present and future, loss of alliances. The rituals of mourning community recovery through commemoration of the loss to be tangible item they can hold onto (rituals). Example cases: Peru, Yungary, and Yogjing, China and Tongogara, Zimbabwe Conclusion: the role of anthropology as it shows in the past present and future, a focus on cultural resources, the power of cultural tradition to mobilize people facing the destruction of their community. This is also a repeat (see previous commentary).

(3.) Oliver-Smith A. (1977). Disaster rehabilitation and social change in Yangay, Peru. *Hum.Organ.* 36:491-509.

(2.) Oliver-Smith, A., (1996). Fighting for a place: the policy implications of resistance toresettlement. In McDowell, C. (Eds.). *Understanding Impoverishment: The Consequences of Development Induced Displacement,* (pp.77-98). Providence and London: Berghahn Books.
This text raises many questions as to the validity of the actual progress and development that has occurred in the late twentieth century. It highlights the problems and effects of this so-called evolution in processes of displacement. Is the price of development worth the cost? Is it really development if somewhere else there are detrimental effects? This text brings to light the seriousness of the situation.

(1.) Oliver-Smith, A. (1986). *The Martyred City,* 1st Ed. University of New Mexico Press.Albuquerque, NM.
Oliver-Smith conducted field research in Peru for over a decade and in this text he draws a detailed examination and embracing story of the people of Yungay. The Martyred City begins with an account of May 31, 1970 which began as a normal day; when he does this, the reader sees a typically laid back day for the people of Yungay until the earthquake began. The earthquake that day resulted in a catastrophic landslide that left about 70,000 dead, and forced change upon the people of Peru. The author then examines the meaning of change and how it applies to cultures, and what is needed for successful adaptation. The struggle to maintain their culture was an element the survivors of Yungay fought for because they lost material, political, and social ties that day. Consequences of the disaster united the survivor in their grief. It was four days before the scope of the disaster was fully understood and feelings of abandonment began to take shape, and once aid began to arrive much of it was not appropriate. The government stepped in to lend aid and relocated the survivors to four camps with the promise of assistance to rebuild in those areas. For the most part the communities were accepting of the help, but must of the aid was not equally distributed and there did exist a class difference in the distribution of aid. The communities senses of place to Yungay was extremely strong and held in many respects their sense of identity, and the people would not allow this capital to be relocated. Yungay was the center of their community and served a number of different roles; for example, it was a market, an educational environment, and a religious center. The national government wanted to move the community's capital; this relocation would keep the individuals and communities safe from future rock

slides resulting from earthquakes. The government did not encourage the idea of rebuilding because many felt it was a waste of money. The earthquake and landslide had already affected the people and culture they would not hear of the change in capital because of the need to hold on to their cultural traditions; the potential catastrophic loss of the community ties and cultural heritage. Instead of following the government's wishes they settled their new capital at Pashulpampa which served their needs and allowed them political control over their communities. The communities banded together to avoid the relocation and government takeover, and ten years after the disaster they still hold it close to them and it has become a part of the culture.

(3.) Oliver-Smith A. (1994). Peru's five hundred year earthquake: vulnerability in historicalcontext. In *Disasters, Development, and Environment, (*ed.) A Varley, pp. 3-48. London: Wiley.

(3.) Oliver-Smith A. (1979). Post-disaster consensus and conflict in a traditional society: theavalanche of Yungay, Peru. *Mass Energ.* 4:39-52.

(1.) Oliver-Smith A. (1986). The role of social relations in the response to riverbank erosionhazards and population resettlement in Bangladesh. (pp.1-35) *Disaster context and causation: an overview of changing perspectives in disaster research.*

Earthquake, Tsunami, Resettlement and Survival in Two North Pacific Alaskan Natives Villages

Details the lives form the day of the earthquake and following tsunamis through resettlement and a follow up one and then twenty years after the resettlement took place. Details extend only to where each village was resettled and how their culture advanced or declined in these new areas. Light read and author personally interviewed each person in the villages himself so his and their stories are told through his evaluation of the situations.

(1.) Oliver-Smith, A. (1977). Traditional agriculture, central places, and post disaster urbanrelocation in Peru. *American Ethnologist, 4*(1), 102-116.

In May of 1970, Peruvian people were dislocated by an earthquake and resulting rock slide that engulfed their hometown and killed thousands. The government stepped in to lend aid and relocated the survivors to four camps with the promise of assistance to rebuild in those areas. For the most part the communities were accepting of the help and relocation with the exception of their capital Yungay. Yungay was the center of their community and served a number of different roles; for example, it was a market, an educational environment, and religious center. The national government wanted to move the community's capital to Tingua which at first review was not a bad decision; this location would keep the individuals and communities safe from future rock slides resulting from earthquakes. However, the communities affected would not hear of this because of the potential catastrophic loss of their community ties and cultural heritage. Instead of following the government's wishes they settled their new capital at Pashulpampa, which served their needs and allowed them political control over their communities. The communities banded together to avoid the "… Separation from the majority of its provincial population, and denied the necessary functions of market and religious centrality, the capital of Yungay province in Tingue would have become solely administrative center dependent on Carhuaz for subsistence and the national government for revenue (p. 113). Due to the unfaltering mindset, the Peruvian people won their battle, settled Pashulpampa and renamed it Yungay Norte.

(3.) Oliver-Smith A. (1979). The Yungay avalanche of 1970: anthropological perspectives ondisaster and social change. *Disasters* 3:95-101.

(3.) Oliver-Smith, A. (1974). *Yungay Norte: Disaster and Social Change in the Peruvain Highlands*. Unpublished Ph.D. dissertation. Indiana University.

(1.) Parasuraman, S. (1999). *The Development Dilemma: Displacement in India*, New York: St.Martin's Press. Development projects in India are examined in terms of their economical, social, and political aspects with descriptions of the consequences of these actions. The author involves the state, local, international and private agencies in his infrastructure presented to compel a solution to the problems of displacement, resettlement, and development.

Perry, R.W., M.K. Lindell and M.R. Greene. 1981. *Evacuation Planning in Emergency Management.* Lexington, MA: Lexington Books.

Perry, R.W. and Lindell, M. 2003. Preparedness for emergency response: guidelines for the emergency planning process. *Disasters*, 27(4): 336-350.
Abstract: Especially since the terrorist attacks of 11 September 2001, governments worldwide have invested considerable resources in the writing of terrorism emergency response plans. Particularly in the United States, the federal government has created new homeland security organizations and urged state and local governments to draw up plans. This emphasis on the written plan tends to draw attention away from the process of planning it self and the original

(3.) Santos, L. A. de O & Lucia M.M. de Andrade. (1990). *Hydroelectric Dams on Brazil'sXingu River and Indigenous Peoples*. Cambridge, MA: Cultural Survival.

(3.) Shami, S. (1993). The social implications of population displacement and resettlement: anoverview with a focus on the Arab middle east. *International Migration Review*, *27*(1), 4- 33.
Communities which rely on the environment are arguably the most affected by relocation. Those community members have devised a niche for themselves that can only be duplicated by an environmentally and technologically similar area. In contrast, those communities that have moved away from reliance on the environment are easily assimilated into other communities since the industrialization of products and merchandising makes another such environments more prevalent and a translation to said environment simple. "…In this phase [early] of adaptation relocates are unreceptive to different or new methods or ideas (p. 13)." This separation along with a tendency to view relocates as a drain on the resources of an area leads to a separation of peoples living within the same area. There will eventually be a need to assimilate into the new surroundings and here is where the cultural widdling? begins to happen. There is a loss of culture, both social and environmental, associated with these environmentally reliant communities. Culture, history, and any conservation techniques that the communities may have devised are lost through displacement and disbursement due to relocation. The host community that accepts these individuals into its folds cannot fathom the loss of the displaced persons. This is due not only to the disassociation with the area, but again to the industrialization of the community in which they live. Having noted as such, these host communities cannot understand the bond with the land or the community.

Tierney, K.J., Lindell, M.K. and Perry, R.W. 2001. *Facing the Unexpected: Disaster Preparedness and Response in the United States.* Washington, D.C.: Joseph Henry Press.

(3.)Turner, T. (n.d.). Representing, resisting, rethinking: historical transformations of kayapoculture and anthropological consciousness. In Stocking, G. W. Jr., (Eds.) *Colonial Situations: Essays on the Contextualization of Ethnographic Knowledge* (History of Anthropology, Volume 7), Madison: the University of Wisconsin Press.

(3.) Waldram, J. (1980). Relocation and political change in a manitoba native community.*Canadian Journal of Anthropology*, 1(2): 173-178.

(1.) Wilson, W. (1998). *Hamilton park: a planned black community in Dallas*. Baltimore: JohnsHopkins University Press.
Detailed history of black urban America and its segregation from white urban American from WWII to present day.

(1.) Wisner, B., Blaikie, P., Cannon, T., & Davis, I. (n.d.) *At Risk: Natural Hazards, People'sVenerability and Disasters* (2nd ed.) Oxford: Routledge.
Deals with vulnerability as a result of many factors, the main of which is most controllable, population. By having higher populations, more people are at risk and therefore by maintaining population controls we reduce the amount of people who are in harm's way. The authors discuss famines, biological hazards (human and crop diseases), floods, severe coastal storms, earthquakes, volcanoes, and landslides. Disaster mitigation is seen largely in terms of reducing vulnerability and the development of public to help rather than exploit people. Depends on prevention rather than building ourselves into situations that, while they may seem helpful, turn out to be less beneficial when disasters strike.

(4.) Zaman, M.Q. (1989). The social and political context of adjacent to riverbank erosionhazardand population resettlement in Bangladesh. *Human Organization*, 48(3): 196-205.

B. Economics

Daley, R. W., Karpati, A., and Sheik, M. 2001. Needs assessment of the displaced population following the August 1999 Earthquake in Turkey. *Disasters*, 25(1): 67-75.

Abstract: In August 1999 and a major earthquake stuck north-western Turkey. An assessment followed to identify the immediate needs of the displaced population. A random cluster sample of displaced families living in temporary shelter outside of organized relief campus was deigned. Representatives of 230 households from the four communities worse affected by the earthquake were interviewed. Most families lived in makeshift shelters (84 per cent), used bottled water (91 per cent), obtained food from relief organizations (61 per cent), has access to latrines (90 per cent), had a member on routine medication (53 per cent), and obtained information by word of mouth (81 per cent). Many respondents reported having family members who were over the age of 65 (32 per cent) or under age three (20 per cent), who were pregnant (6 per cent), or who had been ill since the earthquake (64 per cent). The greatest immediate need reported by most families was shelter requirements (37 per cent). Ten days after the earthquake, basic environmental health needs of food, shelter and hygiene still predominated in this displaced population. Significant portions may have special needs due to age or illness

(4.) Clark, C. (1991). Economic biases against sustainable development. In: Costanza, R. (Eds.).*Ecological Economics -- The Science and Management of Sustainability, (pp.* 319-330). New York: Columbia University Press.

(4.) Edmund, C. (2005). *Environmental accounting for changes in farm land use: a Canadiancase study*. Canada: Edwin Mellen Press.
The text is an examination of the protection of the environment with a focus on the regional level. It investigates the changes of the land, the environmental assessment and management with at in-depth look at economic values.

(3.) Eriksen, J. H. (1999). Comparing the economic planning for voluntary and involuntaryresettlement. In Cernea, M. M. (Eds.). *The Economics of Involuntary Resettlement:Questions and Challenges*. Washington DC: The World Bank.

(4.) McManus, J.C. (1975). The costs of alternative economic organizations. *Canadian Journalof Economics,* 8: 334-350.

(1.) Oliver-Smith, A. (n.d.). *Communities after catastrophe: reconstructing the material, reconstituting the social*. Unpublished manuscript.
EMPLOYMENT and ECONOMIC DRIVE OF RECONSTRUCTION
The loss of the economy is also the loss of the culture as people need to improve their personal and household needs. People who are working in these communities need to realize that as long as those affected are not working that they
are relying on the assistance for life because they are not self sustaining yet.

(3.) Little, P. E. (1999). Political ecology as ethnography: the case of ecuador's aguarico riverbasin. *Serie Antropologia # 258*, Brasilia: Departamento de Antropologia, Universidade de Brasilia.
"Introduction
In this paper I look at some of the methodological and political challenges and implications of political ecology research as they are reveled through the diverse environmental conflicts of the Aguarico River Basin in Ecuadorian Amazonia. The key questions that orient this effort are: first, how can anthropology as a discipline approach situations of conflict over natural resources and territories? and second, how should anthropologists as situated individuals deal with these situations? Through the answer to the first question will be primarily methodological and the second primarily political, the two realms, as we shall see, are inexorably intertwined."

(3.) Magee, P. L. (1989). Peasant political identity and the tucurui dam: a case study of theisland dwellers of Para, Brazil. *The Latinamericanist,* 24(1): 6-10.

(4.) Norgaard, R.B., & Howarth, R.B. (1991). Sustainability and discounting the future. In:Costanza, R. (Eds.). *Ecological economics -- The science and management of Sustainability*, (pp. 88-101). New York: Columbia University Press.

(3.) Scudder, T. (1996). Development-induced impoverishment, resistance and river-basindevelopment. In McDowell, C. (Eds.). *Understanding Impoverishment: The Consequences of Development Induced Displacement.* Providence and London: Berghahn Books. pp 49-74.

(3.) Scudder, T. (1973). The human ecology of big projects: river basic development and resettlement. *Annual Review of Anthropology,* 2:45-61.

(3.) Squires, G.D., Bennett, L., McCourt, K., & Nyden, P. (1987). *Chicago: Race, Class andthe Response to Urban Decline*. Philadelphia: Temple University Press.
Private enterprise has been unchecked since WWII and its growth has been known to have strangled the classes into distinct, and almost irrevocable, sections of Chicago.

(4.) Townsend, R. & Wilson, J.A. (1987). An economic view of the tragedy of the commons. In: McCay, B.J. and Acheson, J.M. (Eds.). *The Question of the Commons, (pp.* 311-326). University of Arizona Press, Tucson.

Webb, R. Gary, Tinerney, J, Kathleen, Dahlhamer, and M. James. 2002. Predicting long-term business recovery from disaster: a comparison of the Loma Prieta earthquake and Hurricane Andrew. *Environmental Hazards*, 4: 45-58.

Abstract: This paper examines long-term recovery outcomes of business impacted by major natural disasters. Data were collected via two large-scale mail surveys- one administered to Santa Cruz County, California business 8 years after the Loma Prieta earthquake and the other administrate red to business in South Dade County, Florida, 6years after Hurricane Andrew. Based on the results of OLS regression models, we argue that long-term recovery experiences of business are affected by various factors, including the disaster impacts, including physical damage, force closure, and disruption of operations; and owner perception o the broader significantly affect the long-term economic viability of business in the two study communities.

C. Involuntary Dislocation, Relocation, and Resistance to Displacement

(1.) Black, R. (1998). *Refugees, Environment and Development*. London: Longman.

"ABSTRACT

Refugees, Environment and Development is concerned with the complex interrelationships between forced migration, natural resource management and 'sustainable development'. The book challenges the growing rhetoric that refugees 'cause' environmental degradation, and that environmental decline is promoting a new wave of 'environmental refugees'. Drawing on examples from Africa, Asia and Latin America, as well as detailed case studies of the Rwandan emergency of 1994-96, and lesser known refugee movements to Guinea and Senegal in West Africa, the book argues against a neo-Malthusian view of the relationship between population, environment and migration. The author explores alternative approaches to the dynamic processes of social and environmental change in refugee situations."

(3.) Brokensha, D. & Scudder. T. (1968). Resettlement. In N. Rubin & W.M. Warren (Eds.).*Dams in Africa*. London: Frank Cass and Company.

(3.) Dobby, E. H. (1998). Resisting dams and 'development:' contemporary significance of thecampaign against the narmada projects in india," *European Journal of Development Research*, 10(2): 135-179.

(1.) Dwivedi, R. (1999). Displacement, risks and resistance: local perceptions and actions in thesardar sarovar. In *Development and Change*, 30: 43-78.

Three resettlement policies are examined for the Sardar Sarovar, the reservoir of the Navagam dam on the river Narmada.

(1.) Fox, J. A., & Brown, L. D. (Eds.). (n.d.). *The Struggle for Accountability: The World Bank,NGOs and Grassroots Movements.* Cambridge, MA: The MIT Press.

The book is organized into four parts. Part I describes the NGOs and grassroots movements that are the book's central focus. Part II presents case studies of four projects that provoked the emergence of transnational advocacy coalitions: Indonesia's Kedung Ombo dam, the Mt. Apo geothermal plant in the Philippines, Brazil's Planaforo Amazon development project, and the remarkable campaign of Ecuador's indigenous people to influence national economic policy that led to their participation in the design of a development loan. Part III looks at the origins and politics of reform in four areas of broader World Bank policy: the rights of indigenous peoples, involuntary

resettlement, water resources, and the World Bank's institutional reforms that are supposed to encourage public accountability. In the last section, the editors discuss issues of accountability within transnational coalitions and assess the impact of advocacy campaigns on World Bank projects and policies.

(3.) Guggenheim, S. & Cernea, S. (1993). Anthropological approaches to involuntary resettlement: policy, practice and theory. In Cernea, M. & Guggenheim, S. (Eds.*).* *Anthropological Approaches to Resettlement*. Boulder: Westview Press.

(3.) Hansen, A. & Oliver-Smith, A. (Eds.). (1982). *Involuntary Migration and Resettlemen.*,Boulder: Westview Press.

(3.) Koenig, D. (2000). *Toward Local Development and Mitigating Impoverishment in Development- Induced Displacement and Resettlement*. Final Report prepared for ESCOR R7644 and the Research Program on Development-Induced Displacement and Resettlement organized by the Refugee Studies Centre, University of Oxford.

(3.) Oliver-Smith, A. (n.d.). *Displacement, Resistance and the Critique of Development: Fromthe Grass Roots to the Global*. Final Report prepared for ESCOR R7644 and the Research Programme on Development Induced Displacement and Resettlement, Refugee StudiesCentre, University of Oxford.

(1.) Oliver-Smith A. (1986). The role of social relations in the response to riverbank erosionhazards and population resettlement in Bangladesh. (pp.1-35) *Disaster context and causation: an overview of changing perspectives in disaster research*.

“Decades of Disaster: Promise and Performance in the Callejon de Huaylas, Peru”

Gives a detailed history of the peoples of this areas and their development both before and after the earthquake. Although reading the entire article adds to the readers knowledge of what these peoples went through, the article from the section “First the Earthquake, then the Disaster” to the end is the most helpful for understanding the dynamics of the post-disaster society. Even though this is a thorough depiction of the plight of this area, there is little more than a few examples that could be largely applied to the entire project.

Oliver-Smith, A., (1994). Resistance to resettlement: the formation and evolution of movements. *Research in Social Movements, Conflict and Change,* 17: 197-219.

(4.) Patridge W., (1989). Involuntary resettlement in development projects. *J. Refug. Stud.* 2:373-84.

(3.) Partridge, W. (1993). Successful involuntary resettlement: lessons from the costa Ricanarenal hydroelectric project. In Cernea, M.M. and S.E. Guggenheim (Eds.). *Anthropology and Involuntary Resettlement: Policy, Practice and Theory*. Boulder, CO: Westview Press.

(3.) Scudder, T. and Elizabeth C. (1982). From welfare to development: a conceptual Frameworkfor the analysis of dislocated people. In Hansen, A. & Oliver-Smith, A. (Eds.).*Involuntary Migration and Resettlemen.,* Boulder: Westview Press.

(1.) Scott, J. C. (1990). *Domination and the Arts of Resistance.* New Haven: Yale University Press.

(3.) Shihata, I. F. I. (1993). Legal aspects of involuntary population resettlement. In Cernea, M.M. and S. E. Guggenheim (Eds.). *Anthropological Approaches to Resettlement*. Boulder: Westview Press, pp.39-54.

(3.) World Bank, (1990). Operational directive 4.30: involuntary resettlement, The World BankOperational Manual, Washington DC: The World Bank (8 pages).

D. Long Term Recovery Issues

Alexander, D. 2002. *Principles of Emergency Planning and Management*. New York: Oxford University Press.

Berke, Philip R., Kartez, Jack, and Wenger, Dennis. 1993. Recovery after disaster: achieving sustainable development, mitigation and equity. *Disaster*, 17: 93-109.
Abstract: *This paper reviews key findings and raises issues that not fully addressed by the predominant disaster recovery literature. Achievement of equality, mitigation and sustainable development, particularly through local participation in redevelopment planning and institutional cooperation, is the central issue of the review. Previous research and past assumptions about the process by which communities rebuild after a disaster are reviewed. A conceptual and practical significance of this model is then demonstrated by presenting g case studies of local recovery experiences, Finally, conclusions on the current understanding of disaster redevelopment planning, as well as implications for public policy and future research are offered.*

Dash, N. and Morrow, B.H. 2001. Return Delays and Evacuation Order Compliance: The Case of Hurricane Georges and the Florida Keys. *Environmental Hazards*. 2(3):119-128.

Drabek, T.E. and Key, W.H. 1984. *Conquering disaster: family recovery and long-term consequences*. New York: Irvington Publishers.

Kamel, N. M. O. and Loukaitou-Sideris, A. 2004. Residential Assistance and Recovery Following the Northridge Earthquake. *Urban Studies*, 41(3):533–562.
Abstract: This paper examines the implementation of post-disaster US federal assistance programs for residential reconstruction and investigates the relationship between sociodemographic characteristics of places and access to residential assistance following the Northridge earthquake that hit Los Angeles in 1994. The paper also examines the effects of the distribution of assistance on long-term recovery outcomes. Findings suggest that areas with high levels of socially marginalized populations were at a disadvantage in accessing federal residential assistance. Findings also show that the long-term effects of the earthquake differed depending on levels of assistance relative to damage. Areas that received less assistance experienced losses in population and housing units. These findings indicate that post-disaster recovery programs in the US do not adequately address the wide range of housing needs that emerge in the case of a major disaster in a large metropolitan area. Implications for post-disaster planning as well as for planning under everyday conditions are discussed.

Kates, R.W. 1970. Human adjustment to earthquake. Pp 7-31 in Committee on the Alaska Earthquake of the National Research Council (editor), *The Great Alaska Earthquake of 1964: Human Ecology*. Washington, DC: National Academy of Sciences.

Kunreuther, H., 1973. *Recovery from Natural Disasters: Insurance or Federal Aid?* American Enterprise Institute for Policy Research, Washington, D.C.

Morrow, Betty Hearn and Walter Gillis Peacock. 1997. Disasters and Social Change: Hurricane Andrew and the Reshaping of Miami? Pp 226-242 in Peacock, Morrow and Gladwin. *Hurricane Andrew: Ethnicity, Gender and the Sociology of Disasters*. London: Routledge.

Peacock W.G., Killian, C. D., and Bates, F.L. 1987. The effects of Disaster Damage and Housing Aid on Household Recovery Following the 1976 Guatemalan Earthquake. *International Journal of Mass Emergencies and Disasters (IJMED)*, 5(1):63-88.
Abstract: This paper examines the effects of housing programs, disaster damage, community type, and other social determinants on household recovery following a major natural disaster—the 1976 Guatemalan earthquake. The domestic assets index, a measure of household living conditions, and a refined measure of household recovery are introduced and employed. The domestic assets scale is an index of the economic value of household equipment and is an adaptation of level of living scales. While reconstruction aid was the single most important determinant of recovery, it was the type and not the value of aid that was critical. Strong support exists for the conclusion that temporary housing as a form of aid retarded the recovery process while permanent housing programs actually produced net improvement in living conditions. There is also evidence that the unequal effects of different types of housing programs produced significant changes in the distribution of economic resources, thus affecting the stratification system in affected communities. In addition, while other factors associated with the social characteristics of household were found to be important, this analysis consistently suggests that household residing in small, rural, and politically removed communities experienced greater difficulty in overcoming the debilitating effects of a natural disaster.

Peacock, W.G., N. Dash, and Y. Zhang. 2006. Shelter and Housing Recovery. In H. Rodriguez, E.L. Quarantelli, and RR. Dynes, The Handbook on Disaster Research. Springer.

Rubin, C. B. 1985. The community recovery process in the United States after a major natural disaster. *International journal of mass emergency and disasters*. 3: 9-28.
Abstract: After studying first-hand how 14 U.S. communities recovered from a major natural disaster, an organizing framework recovery process was developed. That framework depicts the dynamic processes that contribute to an efficient local recovery, including the key elements of recovery and the relationships among those factors. The three key elements are personal leadership, ability to act, and knowledge of what t o do. Of paramount importance to an expeditious recovery is effective intergovernmental relations. In those communities where the speed and quality of recovery was greater, local officials had found ways to (a) ensure more productive intergovernmental relationships, (b) compete effectively for scarce resources, and (c) better manage community- level decision-making during the post-disaster period.

Vogel, R. 1998. The Impact of Natural Disaster on Urban and Economic Structure. *The Review of Radical Political Economics*. 30(3):114-122.
Abstract: This paper discusses the effects of a natural disaster upon regional economic structure. The case of Miami and Hurricane Andrew is examined. Analysis of the post-Andrew situation in Miami shows a temporary disruption at the aggregated level, but differential spatial impacts which will affect the long-run relationships within the urban economy and the social division of labor.

Wright, James D., Peter H. Rossi, Sonia R. Wright, and Eleanor Weber-Durdin. 1979. Natural Disasters and Their Long-Term Effects: An Overview of Procedures, Findings, and Implications. Pp. 15-34, in Wright, Rossi, Wright and Weber-Durbin, *After the Clean-up*. Beverley Hills: Sage.

E. Migration to and Within U.S.

Black, Richard. (2001). *Environmental Refugees: Myth or Reality?* UNHCR Working Papers(34): 1-19.
Historical examination of environmental refugees, and the three categories he outlines that a refugee falls under -(1. Fleeing 'desertification', (2. Those displaced by sea level rise, and (3. Victims of 'environmental conflict'. Next the author discusses different communities that have been displaced, and later explains why there are problems, and what can be done about them.

Bodley, J.H. (1982). *Victims of Progress*, 2nd Ed. Palo Alto, CA.: Mayfield Publishing Co.
This text deals with tribes forced to encounter progress, the methods used, and some of the results of a civilized society. The notion as to whether tribes chose to adapt and move toward a more civilized society, along with misconceptions, are outlined in this text. Some of the ways hunter-gatherer cultures tried to preserve their culture and move away from outsiders pushing progress were to totally ignore the intruding outsiders, avoid them entirely, and have a defiant arrogance. These typically peaceful and proud tribes strive to avoid outsiders by moving away and hiding to preserve their way of life. But this self-reliance did not work for the encroaching "civilized" cultures because it hindered progress. Thus a weakening of tribes begins to take shape through a thinning of numbers which allows for easier control of them. There were active approaches taken to control the frontier (the freely available land for exploration) by driving tribes off land and justifiably taking lands and lives by labeling locals as savages. They also justified military forces to decrease population unless the encroachers needed them for slaves. The Government's use of force to persuade tribes was supposed to ensure peace, happiness, and health.
The government manipulated through various courses including, but not limited to, recruiting members, poorly educating the tribes, imposing legal justice systems on them, and collecting taxes. The consequences of the civilizing of these savages were that the standard of living increased and the quality of life decreased, illness began to thrive, and malnutrition became a problem facing these tribes.

F. Physical Recovery

Drabek, T.E. and Boggs, K. 1968. Families in Disaster: Reactions and Relatives. *Journal of Marriage and the Family* 30 (August): 443-451.

(4.) Grove, D., (1972) The future and function of urban centers. In P. J. Ucko, R. Tringham, &G.W. Dimbleby, (Eds.) *Man, Settlement and Urbanism* (pp.560-565). London and Cambridge, MA: Gerald Duckworth and Schenkman.

Kamel, N. M. O. and Loukaitou-Sideris, A. 2004. Residential Assistance and Recovery Following the Northridge Earthquake. *Urban Studies*, 41(3):533–562.
Abstract: This paper examines the implementation of post-disaster US federal assistance programs for residential reconstruction and investigates the relationship between sociodemographic characteristics of places and access to residential assistance following the Northridge earthquake that hit Los Angeles in 1994. The paper also examines the effects of the distribution of assistance on long-term recovery outcomes. Findings suggest that areas with high levels of socially marginalized populations were at a disadvantage in accessing federal residential assistance. Findings also show that the long-term effects of the earthquake differed

depending on levels of assistance relative to damage. Areas that received less assistance experienced losses in population and housing units. These findings indicate that post-disaster recovery programs in the US do not adequately address the wide range of housing needs that emerge in the case of a major disaster in a large metropolitan area. Implications for post-disaster planning as well as for planning under everyday conditions are discussed.

Morrow, Betty Hearn and Walter Gillis Peacock. 1997. Disasters and Social Change: Hurricane Andrew and the Reshaping of Miami? Pp 226-242 in Peacock, Morrow and Gladwin. *Hurricane Andrew: Ethnicity, Gender and the Sociology of Disasters*. London: Routledge.

(1.) Oliver-Smith, A. (n.d.). Communities after catastrophe: reconstructing the material, reconstituting the social. Unpublished manuscript.
RECONSTITUTING COMMUNITIES
Definition OF COMMUNITY--Communities come of a shared past, designated group who interact with people from that group and they have a similar understanding of values, practices, history, and identity and a certain framework. Communities which have been displaced typically long for what was. The focus needs to be placed on what could be. There tends to be a lack of cultural resources because typically people resettle as individuals. Even as a group ?
In the reconstruction of a community there needs to be aid distribution, resettlement programs, and a recognition that there will be political upheaval. Refugees may group large numbers of people who claim different ethnic identities Need to examine the capacity of a community in their ability to recover and understand that there is a limited amount of capabilities that the helpers have. Communities evolve and are transformed by a process of trial and error. Individual healing and reconstruction of the community- providing meaning to individual lives. Cultural symbols can be used to engage social reconstruction. The total idea of having a shared past, the grief and loss in correlation. Loss of experience, material possession, personal and social relationships, loss of past present and future, loss of alliances. The rituals of mourning community recovery through commemoration of the loss to be tangible item they can hold onto (rituals). Example cases: Peru, Yungary, and Yogjing, China and Tongogara, Zimbabwe Conclusion: the role of anthropology as it shows in the past present and future, a focus on cultural resources, the power of cultural tradition to mobilize people facing the destruction of their community.

Olson, Richard Stuart and Olson, Robert A. 1993. "The Rubble's Standing Up" In Oroville, California: The Politics of Building Safety. *International Journal of Mass Emergencies and Disasters (IJMED),* 11(2):163-88. **Abstract:** Disaster researchers have long been aware that the political context of mitigation and preparedness measures has formidable impact on their initiation, adoption and implementation. Yet most discussion and reporting of the political aspects of disasters have remained anecdotal, and few scholars have attempted to incorporate systematically political forces into social science models applied to disaster phenomena. This paper represents an explicit attempt to describe and explain the impact of politics on the public policy debate over structural safety in Oroville, California, following a damaging 1975 earthquake.

Sea Grant Louisiana. (2004). Linking recreation to restoration: the case of Elmer's Island. *Louisiana Wetland News,* 1-10.
Discussion of private property and public property, and the challenges of restoring the two. 78% of Louisiana's coastline is privately owned. The concentration is on Elmer's Island.

(4.) Turner II, B.L., (1997). The sustainability principle in global agendas: implications forunderstanding land-use/ cover change. *The Geographical Journal, 163*(2), 133-140.

1. Housing issues: a. Emergency Shelter b. Temporary Shelter c. Temporary Housing d. Permanent Housing

Bolin, R. 1993. Post-earthquake shelter and housing: Research findings and policy implications. Pp. 107-131 in Committee on Socioeconomic Impacts (eds.) 1993 National Earthquake Conference Monograph 5: Socioeconomic Impacts. Memphis TN: Central United States Earthquake Consortium.

Davis, Ian. 1978. *Shelter after disaster*. Oxford: Oxford Polytechnic Press.

Davis, Ian. 1981. *Disasters and the small dwelling*. Oxford: Pergamon Press.

Drabek, T.E. and Boggs, K. 1968. Families in Disaster: Reactions and Relatives. *Journal of Marriage and the Family* 30 (August): 443-451.

Geipel, R. 1982. *Disaster and Reconstruction*. London: Allen and Unwin.

Haas, Eugene et al. ed. 1977. *Reconstruction following disaster*. Cambridge, MIT

Habitat (United Nations Centre for Human Settlements). 1989. *Human settlements and natural disasters*. Nairobi: Habitat.

Hirayama, Y. 2000. Collapse and reconstruction: housing recovery policy in Kobe after Great Hanshin Earthquake. *Housing Studies*. 15(1): 111-128.
Abstract: This paper examines the housing recovery policy carried out in Kobe, a disaster city heavily damaged by the Great Hanshin Earthquake of 17 January 1995. The housing problems in the earthquake-hit city resulted not only from direct damage by the disaster. Urban restructuring, underway beforehand, had been generating socio-economic polarization and geographical disparity in housing conditions. The earthquake caused especially heavy damage on the inner-city housing of low-income people and the elderly. Housing recovery progress in the post-disaster period has also been unequal. This paper shows the growing socio-economic and spatial polarization. The framework of Japan's housing policy is a two-tiered system. On the one hand, most people are encouraged to obtain their own houses by their own efforts on the market, whereas on the other, public housing as residual welfare housing is directly provided for those who are marginal to the market. The housing recovery policy followed this framework, and functioned to socio-spatially isolate low-income and/or elderly victims.

Kamel, N. M. O. and Loukaitou-Sideris, A. 2004. Residential Assistance and Recovery Following the Northridge Earthquake. *Urban Studies*, 41(3):533–562.
Abstract: This paper examines the implementation of post-disaster US federal assistance programs for residential reconstruction and investigates the relationship between sociodemographic characteristics of places and access to residential assistance following the Northridge earthquake that hit Los Angeles in 1994. The paper also examines the effects of the distribution of assistance on long-term recovery outcomes. Findings suggest that areas with high levels of socially marginalized populations were at a disadvantage in accessing federal residential assistance. Findings also show that the long-term effects of the earthquake differed

depending on levels of assistance relative to damage. Areas that received less assistance experienced losses in population and housing units. These findings indicate that post-disaster recovery programs in the US do not adequately address the wide range of housing needs that emerge in the case of a major disaster in a large metropolitan area. Implications for post-disaster planning as well as for planning under everyday conditions are discussed.

Kates, R.W. 1970. Human adjustment to earthquake. Pp 7-31 in Committee on the Alaska Earthquake of the National Research Council (editor), *The Great Alaska Earthquake of 1964: Human Ecology*. Washington, DC: National Academy of Sciences.

Kates, R.W. 1977. Major Insights: A summary and Recommendations. Pp 261-293 23 in Eugene J. Haas, Robert W. Kates, and Martyn J. Bowden (editors) *Reconstruction Following Disaster.* Cambridge, Massachusetts: The MIT Press.

Kates, R.W. and Pijawka, D. 1997. From Ruble to Monument: The pace of Reconstruction. Pp 1-23 in Eugene J. Haas, Robert W. Kates, and Martyn J. Bowden (editors) *Reconstruction Following Disaster.* Cambridge, Massachusetts: The MIT Press.

(4.) Levin, S., Groves, A., Lurie, J. (1980). Sharing the move: Support groups for relocatedwomen. *Social Work,* 25, 323-325.

Lindell, M.K. and Prater, C.S. 2003, Assessing community impacts of natural disasters. *Natural Hazards Review*, 4: 176-185.
Abstract: Research on the community impacts of natural disasters has yielded a wide variety of findings, but no coherent model of the process by which hazard agent characteristics produce physical and social impacts. This article summarizes the principal features of this process and describes the ways in which hazard mitigation and emergency preparedness practices can limit the physical impacts and the ways in which community recovery resources and extra-community assistance can reduce social impacts.

Murdoch, J., Singh, H., and Thayer, M. 1993. The impact of natural hazards on housing value: The Loma Prieta earthquake. *Journal of the American Real Estate and Urban Economics Association*, 21(2): 167-184.
Abstract: A large, detailed data set is used to examine the effect of the Loma Prieta (World Series) earthquake on housing prices in the San Francisco Bay area. This relationship is examined while controlling for potential confounding variables, such as location-specific risk and the timing of the earthquake. The results indicate that the Loma Prieta earthquake caused an area wide reduction in property values. In addition, it seems that individuals considered other measures of earthquake risk in their housing purchases, yielding a measurable price gradient. These results are relatively robust, remaining stable across estimated functional forms and independent variable sets.

Philips, B.D. 1993. Culture diversity in disasters: sheltering, housing and long-term recovery. *International Journal of Mass Emergencies and Disasters* (IJMED). pp. 99-110.
Abstract: Demographic shifts have put minority groups and the poor at greater risk to disaster during the last decade. Problems of sheltering and housing for these groups occurred following the 1989 Lorna Prieta earthquake in Watsonville, California. To mitigate future problems disaster planners must identify various ethnic groups and other groups in a community. Diversity must be built into the disaster response during the planning stage. Researchers should continue and expand work related to diversity and disaster.

Quarantelli, E.L.1982. General and Particular Observations on Sheltering and Housing in American Disasters. *Disasters*, 6:277-81.

Quarantelli, E.L.1995. Patterns of shelter and housing in US disasters. *Disaster Prevention and Management*, 4(3): 43-53.
Abstract: As with many other concepts in the area, until recently the terms "sheltering" and "housing" have been used with little attention to clarifying and specifying their referents. There has been and often still is an implicit assumption that the terms are self-explanatory. Until the last few years it was the atypical writer who attempted to define the terms or otherwise attempted to give them explicit referents, whether the author was a disaster researcher or a disaster planner, or someone from the operational sector of some organization. One consequence is that the terms have been given multiple and ambiguous meanings.

Sanders, Sara; Bowie, Stan L.; and Bowie, Yvonne Dias. 2003. Lessons learned on Forced Relocation of Older Adults: The Impact of Hurricane Andrew on Health, Mental Health and Social Suport of Public Housing Residents. *Journal of Gerontological Social Work*, 2003, 40, 4, 23-35.

UNDRO. 1982. Shelter after disaster: Guidelines for assistance. New York: UNDRO.

Wu, J-Y. and Lindell, M. K. 2004. Housing recovery after two major earthquakes: the 1994 Northridge earthquake in the United States and the 1999 Chi-Chi earthquake in Taiwan. *Disasters*. 28: 63-81.
Abstract: The idea of pre-impact recovery planning has recently been promoted by researchers and practitioners, but very little research has been done to evaluate its effects on disaster recovery. This study compared two jurisdictions – the city of Los Angeles, California and Taichung County in Taiwan – in their recovery from earthquakes. Although the two cases also differ with respect to variable other than the presence of pre-impact recovery plans, the available data suggest that having a pre-impact recovery plan facilitates housing reconstruction and allows local officials to make more effective use of window of opportunity after disaster to integrate hazard mitigation into the recovery process

Philips, B.D. 1993. Culture diversity in disasters: sheltering, housing and long-term recovery. *International Journal of Mass Emergencies and Disasters* (IJMED). pp. 99-110.

Abstract: Demographic shifts have put minority groups and the poor at greater risk to disaster during the last decade. Problems of sheltering and housing for these groups occurred following the 1989 Lorna Prieta earthquake in Watsonville, California. To mitigate future problems disaster planners must identify various ethnic groups and other groups in a community. Diversity must be built into the disaster response during the planning stage. Researchers should continue and expand work related to diversity and disaster.

G. Place and Social Network Attachment Trauma

(1.) Brown, B.B. and P.B. Perkins. (1992). Disruption in place attachment. In I. Altman & S.M Low (eds.). *Place Attachment: Human Behavior and the Environment*, 12(278-304). New York: Plenum.

(2.) Gupta, A. & Ferguson, J. (Eds.). (1997). *Culture, Power, Place: Explorations in CriticalAnthropology.* Durham, NC: Duke University Press.

H. Physical Health and Psychological Recovery
1. Coping with Change

(3.) Biery-Hamilton, G. (1987). *Coping with Change: The Impact of the Tucurui Dam on anAmazonian Community*, PhD. Dissertation, Department of Anthropology, University of Florida.

(3.) Bocanegra, H. T., Brickman, E., & O'Sullivan C. (2004). Vicarious trauma in aid workersfollowing the world trade center attack in 2001. *International Journal of Mass Emergencies and Disasters*, *22*(1), 35-56.
Investigates the trauma faced by those redeployed and by those involved with search, rescue, repair, or any other aspects dealing with direct or indirect contact with the trade center arena or those immediately affected by the events of that day.

(2.) Daniel, E. Valentine and Knudsen, John Chr. (1995). *Mistrusting Refugees.* Berkeley CAUniversity of California Press.

De Waal, Alex (1997). *Famine Crimes: Politics and Disaster Relief Industry in Africa.*
London: International African Institute and James Currey.
De Waal contends that the causes of famine are invariably political and avoidable. He is critical of the activities to date of many aid agencies and observes that they have in many cases paradoxically perpetuated the very crises they have been seeking to end. This book is presented as a straightforward examination of the NGO's 'Aid-Game' and their complementary 'Aid-Circus'. It details how and why famines really start and really end, as opposed to what is heard on newspapers and TV, why Black Hawk went down, what happens with Ethiopian children you thought you saved by buying tickets for charity concerts.

Drabek, T.E. and Boggs, K. 1968. Families in Disaster: Reactions and Relatives. *Journal of Marriage and the Family* 30 (August): 443-451.

Duffy, J.C., ed., 1990. Health and Medical Aspects of Disaster Preparedness. *NATO Challenges of Modern Society,* Vol. 14. Plenum Press, New York

Ecevit, Mehmet, and Kasapoglu, Aytul. 2002. Dempgraphic and psychological features and their effects on the survivors of the 1999 earthquake in Turkey. *Social Behavior & Personality: An International Journal* Vol. 30 Issue 2, p195-8.
Abstract: A survey was conducted of 500 survivors of the 1999 earthquake in Turkey to investigate their levels of alienation and forms of preparedness for future disasters. It was found that the level of alienation in general is not very significant and that level of education is the most important influential independent variable. The only alienation component found to have a negative impact on the responsible behavior related to preparedness for earthquakes was the social isolation variable. As level of education increases and social isolation decreases, responsible

Graeber, D. (2001). *Toward an Anthropological Theory of Value: the false coin of our owndreams.* NY, NY: St Martin’s Press.

Moore, H.E. et al. 1964. *…and the Winds Blew.* Austin TX: The Hogg Foundation for Mental Health.

Sanders, Sara; Bowie, Stan L.; and Bowie, Yvonne Dias. 2003. Lessons learned on Forced Relocation of Older Adults: The Impact of Hurricane Andrew on Health, Mental Health and Social Suport of Public Housing Residents. *Journal of Gerontological Social Work*, 2003, 40, 4, 23-35.

Tierney, Kathleen J. 1989. The social and community contexts of disaster. In: Psychosocial aspects of disaster. Gist, Richard (Ed); Lubin, Bernard (Ed); pp. 11-39. Oxford, England: John Wiley & Sons, 1989. xiv, 357 pp.
Abstract: This chapter reviews some of the empirical research on disasters by social scientists concerning how communities, organizations, and groups adapt in crisis. Major trends and emphases in the field are reviewed, and findings from earlier research are summarized and synthesized. Chapter also provides information on the sociopolitical context of emergency management that should help readers better understand why emergency preparedness and response activities are often fraught with difficulty. Outline of research findings is followed by a section that discusses the implications of disaster-generated community changes for organized attempts to provide mental health services.

I. Grief and Grieving of Displaced/Individual Healing

(1.) Ahearn, F. L. (Ed.). (2000). *Psychosocial Wellness of Refugees.* New York: Berghahn Books.

(1.) Doka, K. (2002). *Disenfranchised grief: direction, challenges, and strategies for practice*. 2nd ed. Chamaign, IL: Research Press.
The loss of this community can only be felt by those who had participated in the said community; outside groups typically do not recognize or sympathize with that loss, and this lack of understanding is the disenfranchised grief of the loss of their community. Material property (homes, automobiles, and belongings) is barely tolerated in today's society of mourning as society as a whole may not recognize grief that is not stereotypical such as death of a family member.

(1.) Doka, K. (1989). *Disenfranchised grief: recognizing hidden sorrow*. 1st ed. Lexington, MA:
(2.) Lexington Books.
As defined by Kenneth Doka, disenfranchised grief is "…the grief that a person experiences when they incur a loss that is not or cannot be openly acknowledge, publicly mourned, or socially supported (p.4)".

(3.) Edwards, M. L. (1998). An interdisciplinary perspective on disasters and stress: the promiseof an ecological framework. *Sociological Forum*, *13*(1): 115-132.
Main point is that each field that studies disasters brings unique aspects from that field to the arena of study that, when combined, could give academia a better understanding of what actually occurs post-disaster. The fields referenced are medical-psychology, individual and social studies, psychology, sociology, anthropology, and ecology. Focuses on the family as a key to understanding the effects of a disaster on individual stress and coping. There is break down of each person in the family's stress and coping: children, male, female, and elderly. Discussion on how social structure and cultural factors affect reactions. There's a debate about mental wellness counseling provisions after a disaster versus using those human resources to rebuild and distribute goods and other services.

Fullilove, Mindy Thompson M.D. (2005) Root shock: how tearing up city neighborhoods hurts America, and what we can do about it. New York: Ballantine Books.

This book examines the phenomenon of being uprooted from place due to housing and land policies. It argues that the emotional trauma affects not only the Afro- American community but all of America.

(3.) Fried, M. (1963). Grieving for a lost home. In Duhl L. (Eds.). *The Urban Condition: Peopleand Policy in the Metropolis*. New York: Basic Books. Hooper, D., & Ineichen, B. (1979). Adjustment to moving: A follow-up study of the mental health of young families in new housing. *Social Science and Medicine*, 13D(3): 163-168.

(4.) John Hopkins Bloomingberg School of Public Health, (2005). Katrina's aftermath: publichealth\ concerns. Retrieved Nov. 02, 2005, from Katrina Health Concerns Web site: http://www.jhsph.edu/katrina/katrina_health.html.

Along with providing food, shelter, clothing, and water to evacuees, there must be assistance to the state of normalcy? from disaster workers. The impact on the physical and mental health of individuals can be eased if normalcy (or a close similarity) can be obtained for those affected.

(1.) Marris, P. (1974). *Loss and change*. New York: Pantheon Books.

Relocated communities many experience loss and may not be allowed to mourn the passage of their prior lives and/ or environment. Chapters: III Slum Clearance - Loss of a home. IV Tribalism - Loss of "group identity". V Mourning and the Projection of Ambivalence - Denial of mourning and the grieving individual or group is isolated. VII Incoherence and Social Change - Slow growth promotes loss of attachments, environment, and meaning of life. VIII The Management of Change.

(4.) Meyer, C. (1987). Stress: there's no place like first home. *Family Relationships*, *36*(2): 198-203.

Meyer discussed the stress individuals and families face when buying a new home; these people can deal with identify confusion and stress due to the transitions.

(1.) Oliver-Smith, A. (1996). Anthroplogical research of hazards and disaster. *Annual Review ofAnthropology*, *25*: 303-328.

Discusses community, grief, and loss with relocation. Discusses the culture of those affected by the famine in Indian, the earthquake in Alaska, the bombing in Oklahoma City, the flooding and riverbank erosion in Bangladesh, the Exxon-Valdez oil spill in Alaska, the earthquakes in Peru, and the colonization of the Amazon. Also, their political, economic and cultural change due to hazards and natural disasters are expounded upon. Risk perception based on real risk versus perceived risk and the scientific recognition of risk.

(2.) Baskauskas, L. (1981). The Lithuanian refugee experience and grief. *International Migration Review*, *15*(1/2): 276-291.

Lithuanian refugees moved due to World War I into Austria, Germany, and Italy; furthermore, a later move took place in 1948 when some went to the United States of America. The author depicts identity in terms of ethnicity which is difficult to specify because of the change in self and sense of identity (the studies of refugees performed before & after). New refugees feel regret for having to leave their home, and the author measures adaptation and emotional state in reference to loss of the environment. Refugees must maintain separate identity and community because they continued to adapt to the new (both individually and community based) while also trying to maintain their traditional culture. The author examines how folksongs, art, and theatre provided an outlet of meaning. These expressions were out of respect to the changes they faced, and represented an ongoing process of grief. Further

outlines of responses to grief were compared to Marris with Conservationism, Bereavement, and Innovation. The Lithuanians strived to maintain their culture with caring on traditional practices, such as only accepting marriage from within their groups, but add new acknowledgements with grief work (which added to their healing).

Boss, P.G. (1980). Normative family stress: Family boundary changes across the life span. *Family Relations,* 29: 445-450.

(3.) Brabant, S. (1996). *Mending the Torn Fabric for Those who Grieve and Those who Want toHelp Them.* Amityville, NY: Baywood Publishing Company,Inc.
As defined by Sara Brabant grief is "…the human response to loss (p.5)", and individuals and families experience loss as the result of a number of things. "Grief work is the work that must be done to move through the pain that we experience because of a loss (p.5)." Few have taken into consideration the need they may have to reflect or the affects it may have on the people in returning to the flow of life. These actions could be seen as denial of survival. As Sarah Brabant discusses, the roles they served as functioning members of society are also questioned because they no longer fulfill those roles.

Palinkas LA, Downs MA, Peterson J, & Russell J. (1993). Social, Cultural and psychologicalimpacts of the Exxon-Valdez oil spill. *Hum. Organ.,* 52:1-13

(2.) Palinkas LA. (1990). *Ethnic differences in coping and depression after the Exxon-Valdez oilspill.* Presented at Annual Meeting American Anthropology. Assoc., 89th, New Orleans.
The results of the study suggest that cultural differences (barely expounded upon) play an important role in determining the psychological impacts of a technological disaster, particularly with respect to exposure, appraisal of an event as stressful, perceived family support as a moderator of stress, and expression of depressive symptoms.

(3.) Picou JS, Grill DA, Dyer C, & Curry EW. (1992). Disruption and stress in an Alaskan fishing community: initial and continuing impacts of the Exxon-Valdex oil spill. *Ind. Crisis Q.,* 6:235-57.
Data provided about the disruption of the small fishing town of Prince William Sound, Alaska by an oil spill.

(3.) Sutton, K. (1977). Population resettlement - traumatic upheavals and the Algerian experience. *The Journal of Modern African Studies, 15*(2): 279-300.
Details the resettlement of African settlement schemes and examines the implications and impact of what amounts to a traumatic upheaval within a hitherto fairly stable situation. Details the process of 'cultural involution' and 'regroupement'. There is a major emphasis on how stress is dealt with even though there were some positive rural developments shown. The combination of resettlement and development can actually repress stress until later if stress is not properly vented.

J. Social Recovery

(1.) Cernea, M., & McDowell, C. (2000). *Risks and Reconstructio*n: *Experiences of Resettlers and Refugees.* Oxford: Berghahan Books.
This report presents a multi-dimensional comparative analysis of two large groups of the world's displaced populations: resettlers uprooted by development and refugees fleeing military conflicts or natural calamities. The book explores common central issues: the condition of being displaced, the risks of impoverishment and destitution, the rights and entitlements of those uprooted and, most importantly, the means of reconstruction of their livelihood. Part 1 sets the stage for the following sections. Part 2 discusses landlessness and strategies for

land-based relocation, or alternatives when land is unavailable. Part 3 explores joblessness and reemployment options for resettlers in China and the productive reintegration of a group of resettled brick makers in Argentina. Part 4 focuses on urban resettlement; and provides a detailed discussion of home reconstruction by refugees. Part 5 analyzes some of the processes occurring for both resettlers and refugees, from creeping marginalization of all kinds to social reinclusion. Part 6 analyzes the many facets of food insecurity, hunger, malnutrition, and the struggle of displaces to reestablish a sustainable food basis. Part 7 comprehensively documents the social and economic complexities of losing, maintaining, or regaining access to natural resources commonly held. Part 8 brings together the many strands that have been previously addressed.

Comerio, M. (1998). *Disaster Hits Home.* Berkeley, CA: University of California Press.

Drabek, T.E. 1986. *Human System Responses to Disaster: An Inventory of Sociological Findings.* New York: Springer-Verlag.

Drabek, T.E. and Boggs, K. 1968. Families in Disaster: Reactions and Relatives. *Journal of Marriage and the Family* 30 (August): 443-451.

Drabek, T.E. and Key, W.H. 1984. *Conquering disaster: family recovery and long-term consequences*. New York: Irvington Publishers.

Dynes, Russell R., & Tierney, Kathleen J. [eds] 1994. *Disasters, Collective Behavior, and Social Organizations.* Newark: U Delaware Press, 1994.

Girard, Chris and Walter Gillis Peacock. 1997. Ethnicity and Segregation: Post Hurricane Relocation. Pp 191-205 in Peacock, Morrow, and Gladwin, *Hurricane Andrew: Ethnicity, Gender and the Sociology of Disaster*. London: Routledge.

(3.) Hewitt, K. (Ed.). (1983). *Interpretations of Calamity from the Viewpoint of Human Ecology.*London: Allen & Unwin Press.

Johnston, B. R. (2000). Reparations and the right to remedy. Briefing paper prepared for theWorld Commission on Dams, Retrieved July 2000, from http://www.dams.org/ thematic/contrib._papers.php .

Intense study of the areas affected by the construction of dams and those people's rights to reparations due to damage brought about by trying to control the world waterways. It deems the World Commission of Dams responsible for the well-being of the world's population, not just those directly surrounding the dams in question. There is a list of possible scenarios in which people can and have been affected.

(4.) La Lone, D. E. (n.d.). *The folk-urban hierarchy: central place theory in anthropology*.Paper presented the 73rd Annual Meeting of the American Anthropological, Mexico City 1974. Mintz, Sidney.

Lindell, M.K. and Perry, R.W. 2000. Household adjustment to earthquake hazard, a review of research. *Environment and behavior,* 32: 590-630.

Abstract: Data from 23 studies confirm theoretical predictions that households' adoption of earthquake hazard adjustments is correlated with their perceptions of the hazard and alternative adjustments, demographic

characteristics, and social influences. However, some findings require modification of existing theories of hazard adjustment. Examination of the methods used in previous investigations underscores a need for better theories, more complete testing of existing theories, and improved data analytic and data reporting procedures in future tests of those theories.

Lindell, M.K. and Prater, C.S. 2003, Assessing community impacts of natural disasters. *Natural Hazards Review*, 4: 176-185.
Abstract: Research on the community impacts of natural disasters has yielded a wide variety of findings, but no coherent model of the process by which hazard agent characteristics produce physical and social impacts. This article summarizes the principal features of this process and describes the ways in which hazard mitigation and emergency preparedness practices can limit the physical impacts and the ways in which community recovery resources and extra-community assistance can reduce social impacts.

(4.) Mair, L. (1984). Planned change: the creation of a new community. the 27th Bernard Mosesmemorial lecture, voluntary efforts in decentralized management: opportunities and constraints in rural development. *International Affairs (Royal Institute of InternationalAffairs 1944-*, 60**(**2), 316-317.

Mileti, D.D., and Darlington, J.D. 1997. The role of searching in shaping reactions to earthquake risk information. *Social problem*, 44: 89-103.
Abstract: We assessed public response to an earthquake prediction for the San Francisco bay Area on a sample of households form eight Bay Area counties. Descriptive findings suggested that an earthquake culture exists in the study population. We tested civisms of interactionist theory- its failure to take motives for behaviors and social position in to account – using multiple regression analysis. We conclude that motives and social position matter little in determining social action, and that more work is needed to determine how variations in new information create ambiguity, which differentially fosters searching, the formation of alternative definitions, and subsequent action.

(4.) Morrow, B.H., & Peacock, W.G. (1997). Disasters and social change: hurricane Andrewand the reshaping of Miami?" (pp.226-242) , In Peacock W.G. (Eds.) *Hurricane Andrew; Ethnicity, Gender and the Sociology of Disaster.* London: Routledge.

Nigg, J.M. 1995. Disaster recovery as a social process. Pp. 81-92 in *Wellington after the Quake: The Challenge of Rebuilding.* Wellington New Zealand: The Earthquake Commission.

(1.) Oliver-Smith A. (1986). The role of social relations in the response to riverbank erosionhazards and population resettlement in bangladesh. (pp.1-35) *Disaster context and causation: an overview of changing perspectives in disaster research*.
Focuses on the role that social links provide for those who are displaced (sometimes multiple times) due to natural events. The paper dictates the roles provided by those who are not directly affected but still are affected by the influx of those who were directly affected. The point is to highlight that strong social links can be used as a comfort area from which to regain composure and enter the stream of life again in order to more rapidly recover from the natural event.

Olson, Richard Stuart and Olson, Robert A. 1993. "The Rubble's Standing Up" In Oroville, California: The Politics of Building Safety. *International Journal of Mass Emergencies and Disasters (IJMED)*, 11(2):163-88.

Abstract: Disaster researchers have long been aware that the political context of mitigation and preparedness measures has formidable impact on their initiation, adoption and implementation. Yet most discussion and reporting of the political aspects of disasters have remained anecdotal, and few scholars have attempted to incorporate systematically political forces into social science models applied to disaster phenomena. This paper represents an explicit attempt to describe and explain the impact of politics on the public policy debate over structural safety in Oroville, California, following a damaging 1975 earthquake.

Paton, D. 2003. Disaster preparedness: a social-cognitive perspective. *Disaster Prevention and management*, 12(3):210-216.
Abstract: Despite considerable effort and expenditure on public hazard education, levels of disaster preparedness remain low. By integrating and expanding on natural hazards and health research on protective behavior, this paper proposes a social cognitive model of disaster preparedness. The model describes a developmental process that commences with factors that motivate people to prepare, progresses through the formation of intentions, and culminates in decisions to prepare. Following their critical appraisal, variables implicated at each stage are identified and their role in the preparedness process described. The implications of the model for the conceptualisation and assessment of preparedness is discussed, as is its implications for risk reduction and communication strategies.

Paton, D. and Johnston, D. 2001. Disaster and communities: vulnerability, resilience, and preparedness. *Disaster management and Prevention*, 10(4): 270-277.
Abstract: With regard to their utility in predicting the adoption of household hazard preparations, traditional approaches to public education directed at increasing awareness and/or risk perception have proven ineffective. Discusses reasons why this may have occurred from public education, vulnerability analysis, and community resilience perspectives and outlines strategies for enhancing preparedness. Describes a model of resilience to hazard effects that has been tested in different communities and for different hazards (toxic waste, environmental degradation and volcanic hazards). Drawing upon the health education literature, introduces a model for promoting the adoption on preparatory behavior. Discusses links between these models, and the need for their implementation within a community development framework.

(1.) Picciotto, R., Wicklin W van. & Rice, E. (2001) Involuntary resettlement: comparativeperspectives. *World Bank Series on Evaluation and Development*, 2. Washington DC: World Bank.
The book covers representative dam projects in India, Thailand, Togo, China, Indonesia, and Brazil. Each project was undertaken after Bank resettlement guidelines had been implemented. The widely ranging results in each country are assessed. The results are both positive and negative in situations and this text suggests some of the methods in which the positive can be increased and the negative decreased.

(1.) Schwab, J. (1998). *Planning for Post-Disaster Recovery and Reconstruction*, Planning Advisory Service Report No. 483/484 Chicago: American Planning Association. With contributions from Topping, K. C., Eadie, C.D., Deyel, R.E. & Smith R. A.

(2.) Spickard, P., Rondilla, J., & Wright , D. (2002). *Pacific diaspora: island peoples in theUnited States and across the Pacific*. Honolulu, Hi: University Hawaii Press.
The articles in this book seek to reflect the reality of these models. They are conflicting which shows the complexity of the issues of migration. One of the inherent difficulties in theorizing about migration is the fact that migration is both a group phenomenon (for example, a refugee problem during wartime) and an individual

phenomenon (for example, a decision to migrate to obtain a higher form of education). In the first instance, people have no choice but to migrate; in the second, there is no compulsion. But a third alternative factor is at work, and that is the fact that migration goals also mutate. The refugee family may, for instance, decide to reclaim its lost culture and language and reach backwards to the homeland. The indigenous Hawaiians who succumbed to missionary and colonial pressures may decide enough is enough; Hawaiians need to reclaim their lost birthright. These hidden factors are themselves agents for social change, and hence cannot be ignored.

(1.) Sutton, K. (1977). Population resettlement - traumatic upheavals and the Algerian experience. *The Journal of Modern African Studies, 15*(2), 279-300.
Details the resettlement of African settlement schemes and examines the implications and impact of what amounts to a traumatic upheaval within a hitherto fairly stable situation. Details the process of 'cultural involution' and 'regroupment'. There is a major emphasis on how stress is dealt with even though there were some positive rural developments shown. The combination of resettlement and development can actually repress stress until later if stress is not properly vented.

Tierney, K.J., Lindell, M.K. and Perry, R.W. 2001. *Facing the Unexpected: Disaster Preparedness and Response in the United States.* Washington, D.C.: Joseph Henry Press.

Wenger, D. E. 1978. Community Response to Disaster: Functional and Structural Alterations. In Quarantelli E. L. (ed), *Disasters: Theory and Research*, Beverly Hills, CA: Sage Publications.

V. Physical Vulnerabilities that Challenge Resiliency/Social Recovery

Introduction: *Dr. John Pine, Louisiana State University*

Coastal community resiliency is enhanced by a local recognition of the physical risks to which an area is exposed. The importance of vulnerability assessments is noted by Dennis Mileti in *Disasters by Design* (1999). He argues for it because of the growing impact of disasters on the world societies. For example, the United States experienced $500 billion in disaster losses during the last decade.8 That is an average of $50 billion annually and that does not include the indirect losses such as loss of jobs, market share, and productivity.

The perception of the importance of risk management or taking steps to reduce the adverse effects from disasters has increased (Covello and Mumpower, 1985).9 Experts in the area of risk management suggest that we establish a context for hazards management by identifying the nature of the hazard, the extent to which an area is vulnerable to the hazard and the nature of risks involved from the hazard. This is critical for coastal communities committed to sustainability who want to minimize the adverse effects that disasters can have on the sustainability and viability of their operations. Individuals interested in hazards and disasters are trying to examine methodologies associated with the nature of hazards and their economic and environmental impacts.

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[8] Mileti, Dennis. 1999. *Disasters By Design: A Reassessment of Natural Hazards in the United States*. Washington, DC, Joseph Henry Press.

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[9] Covello, Vincent T. and Mumpower, J. (1985). "Risk Analysis and Risk Management: An Historical Perspective." *Risk Analysis* Vol. 5 (2) pp. 103- 20.

Physical vulnerabilities of natural and built environs undermine social resiliency. Gains lessening social vulnerability lead to resiliency; likewise, lessening the physical vulnerabilities also strengthens communities. Physical integrity of the natural and built environment augments social capacity to develop resiliency. The physical as well as the social elements are key to resilience.

To fully appreciate the impacts of disasters we have included references to "hazard analysis." The Environmental Protection Agency (EPA) along with fourteen other Federal Agencies (NRT-1) adopted a national approach to community level hazards analysis to chemical hazards that are processed, stored, or transported in a community.10 The National Response Team led by EPA defined (NRT-1 1987) a common a three-step hazards analysis process: (1) hazard identification, (2) vulnerability analysis, and (3) risk analysis. While the effort was directed initially toward chemical hazards, the approach is useful for considering any other physical or environmental hazard found to impact the community.

Hazard identification provides important information to emergency personal or risk managers so that they can help prevent unnecessary injury/loss of life or damage to property and the environment such as due to a hazardous materials spill or release.

Vulnerability analysis focuses on physical, political, economic and social vulnerability. Vulnerability is the potential susceptibility to a hazard or risk. The physical losses may be measured in terms of the extent of buildings damaged, bridges lost, highways damaged or environmental losses in the form of beaches lost, wetlands damaged, trees destroyed, or direct economic impacts including crop damage, livestock losses, or business inventory loss. Indirect economic losses may be measured in the form of business interruption. The vulnerability assessment is a description or measure of what is exposed or susceptible to the hazard.

The third part of the hazard analysis process is the qualitative and quantitative evaluations of risk posed by a hazard. A key element of the hazards analysis process described by the NRT and the risk literature involves "risk analysis." The term most often implies a process of first identifying the risk (risk assessment) and then making decisions based on the assessment (risk management.)

This is especially useful in order to gain perspective about the magnitude of risk and to make decisions about the hazards causing the risks (Wilson and Crouch, 1987).11 Risk assessments typically model the impacts of an event or human activity in terms of direct harm, death, injury, disease, and environmental damage (Kasper et al, 1988).12 They do this through a systematic characterization of the probability of an adverse event and the nature and severity of that event (Presidential/Congressional Commission on Risk Assessment and Risk Management).13

The National Research Council (1999) noted that the economic losses associated with natural disasters are not consistently calculated despite the extensive damage caused by the Northridge earthquake (1994), Hurricane

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[10] Federal Emergency, U.S. Environmental Protection Agency, Management Agency, and
U.S. Department of Transportation. December 1987.
7.
[11] Wilson, R. and Crouch, E.A.C (1987). " Risk Assessment and Comparisons: An Introduction". *Science* Vol. 236, pp. 267- 270.
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[12] Kasper et al (1988) edited in Cutter, Susan L. Environmental Risks and Hazards. Upper Saddle, NJ: Prentice Hall, Inc.
c.
[13] Presidential/Congressional Commission on Risk Assessment and Risk Management. 1997. *Risk Assessment and Risk Management in Regulatory Decision Making*. Vols. 1 and 2. Washington, D.C: U.S. Government Printing Office.

Andrew (1992), wildfires in California (1993) and Florida (1998) and the flooding of the Mississippi River (1993) and the Red River in the north (1997). The NRC points out that there is no widely accepted framework or formula for estimating neither the losses from natural disasters nor any group responsible for providing such estimates (1999). The management of risks associated with natural and technological hazards is critical given urban and coastal migration population growth trends and the increasing vulnerability of large numbers of people to hurricanes. All organizations must acknowledge the potential effects that hazards can have on their communities, business operations and sustainability. A critical part of the risk management and community sustainability is the hazards analysis process. This bibliography provides resources for natural and technological hazards and their impacts on the built and natural environments as they might be used by coastal U.S. communities.

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Derby, S. L., and R. L. Keeney. (1981). Risk analysis: Understanding 'how safe is safe enough. *Risk Analysis*, 1:217-224.

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National Research Council. (1999). *The impacts of natural disasters: a framework for loss estimation.* Commission on Geosciences, Environment, and Resources. Washington, D.C.: National Academy Press.

Renee Pearce, L.D. (2000). *An integrated approach for community hazard, impact, Risk and vulnerability analysis: HIRV*. Excerpt, Doctoral Dissertation, University of British Columbia.

White, Gilbert. (1988). Paths to risk analysis *Risk Analysis*. 8(2): 171-75.

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The hazards analysis and risk assessment process includes both the characterization of natural and technological hazards but also their impacts. This section of the bibliography examines both publications that characterize the hazard and their impacts on both the built and natural environments. Many of the references focus on a single hazard but also their impacts.

A.) General Readings

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Agnone, J. G., Allen, L., Canby, T. Y, Christian, M. C.; Fisher, R., Grove, N., & Melham, T. (1995). *Raging forces: earth in upheaval.* Washington, D.C.: National Geographic Society,

Allaby, M., (1997). *Hurricanes: Dangerous weather.* New York, NY: Facts on File, Inc.

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Army Corps of Engineers. (1965). *Report on hurricane Betsy, Sept 8-11, 1965.* New Orleans, LA.

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Boyle, S.J. et al. (1998). Developing geographic information systems for land use impact assessment in flooding conditions. *Journal of Water Resources Planning and Management.*

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Abstract: The design of taxonomies can be a useful first step in theory building. Several social-science declines interested in human response to hazards and disasters have successfully employed classificatory approaches to provide foundations for more detailed theorizing. In recent years, debate regarding the appropriateness of various typologies to organize environmental and technological risk events has been particularly pronounced in the fields of sociology and psychology. In contrast, economic research regarding catastrophic phenomena has proceeded ad hoc without an appropriate means of categorizing aversive agents. To encourage development of a conceptual framework for the economic dimension of risk events, this article introduces a taxonomy referred to as a local economic impact continuum (LEIC). This classificatory scheme differentiates environmental and technological risk events into five categories: immediate-onset natural disasters, physical-impact technological accidents, human-impact technological accidents, chronic technical disasters, and chronic natural disasters. By characterizing ideal types and focusing on the relative ambiguity inherent in the aversive agent, this taxonomy can distinguish the local economic impacts generated by these incidents

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Cope, A., Gurley, K., Pinelli, & Hamid. (2003). A Simulation model for wind damage predictions in Florida. *11th International Conference on Wind Engineering*. Texas Tech University, pp. 1537-1546.

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(1.) Oliver-Smith, A. (n.d.). Communities after catastrophe: reconstructing the material, reconstituting the social. 1-18.
ELEMENTS
Process of relocation is largely a material problem. People need housing, nutrition, healthcare, how will these things be addressed. There needs to exist a balance between material needs without taking away support systems and undermining the reconstruction and degrading that process and the people involved. A community itself would be the best people to tell you what needs and the process involved are needed.

(1.) Oliver-Smith, A. (n.d.). Communities after catastrophe: reconstructing the material, reconstituting the social. 1-18.
DILECTION OF MATERIAL RECONSTRUCTION AND SOCIAL RECONSTRUCTION
What often makes the situation worse is the built environment. One cannot just recreate a community where one has been built before. This built environment cannot only make matters worse, it can prevent the community from resurfacing and it can create major social tensions and conflicts within the community. It is also very costly and an inefficient use of funds.

(1.) Oliver-Smith, A. (n.d.). Communities after catastrophe: reconstructing the material, reconstituting the social. 1-18.
RE-ESTABLISHING MATERIAL
Procedures need to be interconnected with needs. They are rarely linked to the communities key factors of community organization (long term needs). Under these community needs, home and life sustaining activities are not performed on a needs basis and there are a lot of negative repercussions from the violation of cultural and social norms.

(2.) Oliver-Smith, A., (1996). Fighting for a Place: The Policy Implications of Resistance toResettlement. In McDowell, C. (Eds.). *Understanding Impoverishment: The Consequences of Development Induced Displacement,* Providence and London: Berghahn Books.pp77-98.
This text raises many questions as to the validity of the actual progress and development that has occurred in the late twentieth century. It highlights the problems and effects of this so-called evolution in processes of displacement. Is the price of development worth the cost? Is it really development if somewhere else there are detrimental effects? This text brings to light the seriousness of the situation.

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(3.) Oliver-Smith A. (1990). Postdisaster housing reconstruction and social inequality: a challenge to policy and practice. *Disaster,* 14: 7-19

Shanahan, J., Pelstring, L., & McComas, K. (1999). Using Narratives to Think About Environmental Attitude and Behavior: An Exploratory Study. *Society and Natural Resources,* 12: 405-19.

(1.) Vorkinn, Marit, & Riese, H. (2001). Environmental Concern in a Local Context: The Significance of Place Attachment. *Environment and Behavior,* 33(2): 249-263.

B.) Loss of Built Environment

(1.) Greider, T, & Garkovich, L. (1994). "Landscapes: The Social Construction of Nature and theEnvironment" *Rural Sociology*. 59(1): 1-24.

(1.) Haque, C. Emhad & Zaman, M.Q. (1993). "Human response to riverine hazards in Bangladesh: a proposal for sustainability floodplain development", *World Development,* 21 (1): 93-108.
Bangladesh has experienced four high floods as a result of human intervention into the environment of this area and basic higher risk due to geographical location. This text argues about technological fix and how a situation, no matter how apparently contained, will eventually return to its natural state.

(3.) Fried, M. (1963). Grieving for a Lost Home. In Duhl, L. (Eds.). *The Urban Condition:People and Policy in the Metropolis*, New York: Basic Books.

C.) Loss of Natural Environment

Extractive Industries Review, (2004). Striking a Better Balance: Consultation on the Future ofthe World Bank Group in the Extractive Industries. http://www.eireview.org/eir/eirhome.
nsf/englishmainpage/about?opendocument.
"Strengthening Governance and Transparency"
"Effective revenue management aimed at poverty reduction is critical to developmental impact of mining investments. It is also a perquisite of achieving progress towards the Millennium Development Goals (MDGs) in natural resources dependent countries (p.1)."
"Ensuring that Extractive Industry benefits Reach the Poor"
"…Communities should benefit from project investments.... How Mining projects con contribute to employment, human resource development, supplier development, local social and economic infrastructure… ICMM agrees with the need to develop consistent indicators of the impact of extractive industry projects on poverty reduction (p.2)."
"Promoting Renewable Energy and Efficiency to Combat Climate Change"
Promoting a "low carbon future (p.2)."
"Mitigating Environmental and Social Risks"
"…ICMM members in their August 2003 commitment not to explore or mine in the 754 World Heritage properties (p.3)." ICMM and other organizations (like World Bank Group) requirements competed to.
"Protecting the Rights of People Affected by Extractive Industry Investments"
"Voluntary Principles on Security and Human Rights" is supported by ICMM, and is "…seeking a clarification for what is meant by free, prior and informed consent by focusing on consultation (p.3)."
"Establish a Multi-Stakeholder Advisory Group on Extractive Industries"
Need national and local commitment and input. For a group to be successful it needs, "(i) have balanced representation, (ii) be clearly focused on specific extractive industry issues…(iii) conform to terms of reference that bring all parities together; and (iv) adopt fair and efficient procedures and results orientation to provide the best possible advise to the World Bank Group (p.4)."

(1.) Haque, C. Emhad & Zaman, M.Q. (1993). Human response to riverine hazards in Bangladesh: a proposal for sustainability floodplain development, *World Development*, 21(1): 93-108.
Bangladesh has experienced four high floods as a result of human intervention into the environment of this area and basic higher risk due to geographical location. This text argues about technological fix and how a situation, no matter how apparently contained, will eventually return to its natural state.

(3.) Nelson, M. (1973). Development of Tropical Lands: Policy Issues in Latin America,Baltimore: Johns Hopkins University Press.

(3.) Penz, G. P. (n.d.). Development Refugees and Distributive Justice: Indigenous Peoples,Land and the Developmentalist State," Public Affairs Quarterly 6(1):105-131.

(3.) Rew, A.W. & P.A. Driver. (1986). *Evaluation of the Social and Environmental Impact ofthe Victoria Dam Project*. London: Overseas Development Administration Evaluation Report EV 392, Evaluation Department, ODA.

(1.) Viosca, Jr., P. (1928). Louisiana wet lands and the value of their wild life fishery resources.*Ecology, 9*(2): 216-229.
Discusses the vanishing species from the Louisiana wetlands. The basic idea of this paper is that loss of land facilitates loss of species. There is a breakdown of the physical elements of Louisiana's wetlands. There is also a tie into the economic and commercial decline as a result of these environmental declines brought about by man. The article sites an array of failing, man-made devices for nature control that contribute to the decline in life within wet areas. Beings that this was released in 1928 and these events still occur today, this lends to the validity of this research.

D.) Contamination of Natural Environment

(2.) Josephson, P. R. (2002). *Industrialized Nature: Brute Force Technology and the Transformation of the Natural World*. Washington DC: Island Press
Chapter one berates the use of science only to acquire fish for consumption as opposed to providing for all.

(2.) McCully, P. (1996). *Silenced Rivers: The Ecology and Politics of Large Dams*. London:Zed Books.
The story of dams and their controversial benefits to mankind.

(2.) Streever, B. (2001). *Saving Louisiana? the battle for coastal wetlands*. Jackson, MS:
University Press of Mississippi.
Extensively detailed account of the Mississippi River's delta and the containment of her to the detriment of wetlands throughout Louisiana. The results of the death of the marshland are also listed with global implications expounded upon. This is a problems-to-come read and should be taken into consideration as an example of areas that will be susceptible to natural disasters of the slowly encroaching variety.

IX. Relevant American Disasters

Introduction: *Gregory Button, University of Michigan*

Community resiliency depends on the ability of current inhabitants to learn from the past experiences of its own community and that of others, especially those that are similar in particular ways. No more important statement can be said for the communities that edge the Gulf of Mexico and the Atlantic coast. Location at the end of the nation's largest river and at the edge of the continent's most active hurricane area requires attention to the experiences coastal communities have had with these threats.

Hurricane Katrina is arguably our nation's worst disaster. In magnitude and scope few previous disasters come close to the harm inflicted by Katrina. Katrina is alleged to have caused $40 billion dollars in insured losses which is seven times greater than the other top ten hurricanes. As of February 2006, Katrina is credited with killing over 1,300 people with approximately 3,200 people still missing. On the other hand, the Galveston Hurricane of 1900 is said to have killed anywhere from 6,000 to 12,000 individuals and is on record of being the deadliest disaster in U.S. history.

Many people would also cite the great Mississippi Flood of 1927 as comparable in a number of ways to Hurricane Katrina. Whatever comparisons that can be made to the 1927 flood it certainly can be said to be not only similar to Katrina but, in many ways, an historical antecedent of Katrina.

When comparing the magnitude and severity of disasters certainly a number of factors come into consideration including the death toll, the size of the affected area, the economic costs, and the damage to the environment and built infrastructure. Other similarities consist, in some instances, to issues surrounding disaster response and recovery.

Below are listed some most relevant U.S. disasters. Not until formal, academic research came of age do we find many formal analytical studies of these events. In some cases, the best material available to date appears on websites. The NOAA website has a fine overview these storms.

Galveston Hurricane of 1900

The hurricane made landfall on September 8, 1900. Ranked as a Category 4 storm on the Saffir-Simpson Hurricane Scale. Barely eight feet above sea level the storm surge that hit the city was over 15 feet high. The storm surge and the high winds of 135 miles an hour left the city in ruins. Most accounts say that 8,000 people or approximately a fifth of the city were killed. Once considered a wonderful city with a great future Galveston never regained fully from the storm's devastation and development shifted north to Houston.

Introduction References

Bixel, P.B., Turner, E. H. (2000). *Galveston and the 1900 Storm: Catastrophe and Catalyst*. University of Texas Press.

Larson, E. (1999) *Isaac's Storm: A Man, A Time, and the Deadliest Hurricane in History*. New York, NY: Crown Publishers.

Websites

"The 1900 Galveston Hurricane"
http://www.disastercenter.com/texas/1900GH.htm

"The 1900 Storm: Galveston Island, Texas"
http://1900strom.com

"The Galveston Hurricane" (The American Experience)
http://www.pbs.org/wgbh/amex/1900/peopleevents/pande27.html

"Galveston Hurricane of 1900"
www.noaa.gov/galveston1900/

"The Handbook of Texas Online: Galveston Hurricane of 1900."
http://www.tsha.utexas.edu/handbook/online/articles/GG/ydg2.html

"Pomerosa Press: Great Galveston Hurricane of 1900, A Bibliography."
http://earlytexashistory.com/Pomerosa%620Press/galvbooks.html

New England Hurricane of 1938

Sometimes referred to as 'The Long Island Express'. Although this hurricane did not happen along the Gulf Coast it was a major storm, categorized as a Category 5 Hurricane on the Saffir-Simpson scale. It's highest winds recorded were160 miles an hour. The storm killed an estimated 500-700 people and caused substantial financial damage. Measured in contemporary U.S. dollars the storm is estimated to have caused around 25 billion dollars in damage. In some places, entire coastal communities where destroyed along with large forests in New England. Although ,it occurred in New England it has long been considered to be among the worst, if not worst storm in U.S. history.

Introduction References

Scott, R.A. (2003). *Sudden Sea: The Great Hurricane of 1938*.
New York, NY: Little Brown and Company.
Probably the best journalistic account of this major storm.

Websites

"Flooding from the 1938 New England Hurricane"
http://nws.noaa.gov/er/nerfc/historical/sept1938.htm

"The Hurricane of 1938" (The American Experience)
http://www.pbs.org/wgbh/amex/hurricane38/filmmore/fr.html
http://www.pbs.org/wgbh/amex/hurricane38/filmmore/index.html

"The Long Island Express: The Great Hurricane of 1938"
http://www2.sunysuffolk.edu/mandias/38hurricane/

"NCDC: Hurricanes"
http://lwf.ncdc.noaa.gov/oa/climate/severeweather/hurricanes.html

"New England Hurricane of 1938"
www.en.wikipedia.org/wiki/New_England_Hurricane_of_1938

The Great Mississippi Flood of 1927

After a summer of heavy rains the Mississippi River topped a levee in January 1927. It wasn't long before many levees were topped or damaged and the river flooded an area of approximately 27,000 square miles. By May the river was sixty miles wide in some areas. Approximately 700,000 people were forcibly displaced by the flood waters- which at the time was, until Hurricane Katrina, the largest number of displaced people in North America. Black men were forced to live and work on the levees and on at least one occasion were forced to use their bodies as human sand bags to reinforce the levees. Many blacks were not allowed to evacuate the region so they could be used to man the levees. The flood resulted in a great Diaspora of people from the delta region. The flood became a major benchmark in US history setting in motion a series of events that changed the political and social landscape of the nation.

References

Barry, J. (1998). *Rising Tide: The Great Mississippi Flood of 1927 and How it Changed America.* New York, NY: Touchstone Press.
This extraordinary book takes a panoptic, in-depth, historical look at the flood and the events surrounding it. It takes an in-depth look at the role of many national figures, the Army Corps of Engineers, and the issues of race and class.

Daniel, P. (1977). *Deep'n As It Come: The 1927 Mississippi Flood.* Oxford University Press.

References

Kosar, K. October 25, 2005, ' Disaster response and Appointment of A Recovery Czar: The Executive Branch's Response to the Flood of 1927. Washington, D.C. : Congressional research Service Report for Congress.

References

www.pbs.org/wgbh/amex/flood/ PBS' American Experience provides a transcript of their documentary movie on the flood and many fine resource materials.

Hurricane Camille (1969)

This storm was by far the strongest hurricane to come ashore in the United States. Its highest recorded winds were 190 miles an hour making it a clear category 5 storm on the Saffir-Simpson Scale. Fortunately, the winds dropped to about 100 miles an hour when it hit land. Camille hit the state of Mississippi and caused severe destruction along the coast with a peak storm surge of 24 feet. The storm killed 256 people and caused tens of billions of dollars of damage. This powerful storm actually caused water in the Mississippi river to flow backward for 125 miles. 143 deaths are attributed to the storm, but over another 100 deaths are attributed to the flooding it caused in

Virginia. As powerful a storm it was, it was in size no where near the size of Katrina and in comparison did far less harm.

References

Zebrowski, E & J.A. Howard (2005) *Category 5, the Story of Hurricane Camille: Lessons Learned from America's Most Violent Hurricane.* Ann Arbor, MI: University of Michigan Press.
This book examines the storm's disproportionate impact on poor communities and some of the lessons learned from the disaster.

Hearn, Phillip (2004) *Hurricane Camille: Monster Storm of the Gulf Coast*. Jackson, Miss.: University of Mississippi.

Monograph:
Leyden, K. *Recovery and Reconstruction after Hurricane Camille: Post Storm Hazard Mitigation on the Mississippi Gulf Coast*. Hazard Mitigation Research Program, Report No. 85-14. Chapel: University of North Carolina, 1985.

Websites
"Hurricane Camille"
http://en.wikipedia.org/wiki/Hurricane_Camille

"Thirty Years After Hurricane Camille: Lessons Learned, Lessons Lost"
http://sciencepolicy.colorado.edu/about_us/meet_us?roger_pielke/camille/index.html

Hurricane Betsy

In September of 1965 Hurricane Betsy came ashore as a Category 3 hurricane causing considerable damage to the states of Mississippi and Louisiana, eventually causing Lake Pontchartrain to flood New Orleans. Levees for the Lower Ninth Ward and the Industrial Canal were overtopped by waters from Lake Pontchartrain. Some areas of the city were heavily flooded. Eventually levee breaches in other parts of the city flooded other areas of New Orleans.

Hurricane Hugo (1989)

This Category 5 hurricane came ashore in September of 1989. It had a storm surge of 20 feet and caused billions of dollars of damage and killed 70 individuals. The storm's impact caused extensive damage in historic, downtown Charleston and caused even more severe damage in the northern suburbs and islands off the coast as well as heavily damaged vast timber tracts. While it caused the most extensive property damage up to that point in time, it did not cause as much damage as late storms like Andrew and Katrina would cause. One similarity to Katrina is that even though it do did not destroy a large portion of the City of Charleston it did destroy important historic sectors of the city.

Its greatest resemblance to Katrina is that FEMA was caught off-guard by the storm and was extremely slow in responding. The agency's failure drew a lot of criticism from both the press and politicians. There was also much criticism of the State of South Carolina, and the City of Charleston, for not being better prepared for such an

emergency. It was generally agreed that there was also very poor coordination between state and federal agencies in responding to the hurricane.

The similarity with Katrina does not end there. FEMA was further criticized for spending too much of their time on preparing for the possibility of a nuclear attack and not devoting enough time and attention to the threat of a natural disaster. This criticism eventually resulted in FEMA promising to be better prepared for an all hazards approach. In reading the federal and Congressional reports about the multiple failures to adequately respond quickly and effectively to a major disaster. A central criticism of the response effort, that would later be echoed in similar reports on Hurricane Andrew and Katrina, was the central failure of authorities to coordinate and communicate a timely and effective response.

Introduction References

Claire Rubin (1985) Disaster Recovery after Hurricane Hugo in South Carolina (Working paper).Boulder, CO: University of Colorado.

GAO Preliminary Information on the Federal Government's Response to Recent Natural Disasters T-RCED-90-75 May 1, 1990.

Mittler, E. A. (1993). The public policy response to Hurricane Hugo in South Carolina. Boulder, CO: Natural Hazards Center, University of Colorado at Boulder.

Hurricane Andrew (1992)

Hurricane Andrew was a Category 5 storm on the Saffir-Simpson Scale with winds up to 175 miles an hour. Although, it was a Category 5 it was a much small storm than Katrina, The storm came ashore in the US on August 24th. After damaging southern Florida the storm blew out in the Gulf of Mexico and came ashore again in western Louisiana. The storm surge was 17 feet high and the created massive damage in southern Florida. Only 23 deaths are attributed to the storm, but it caused severe damage to built infrastructure. The government's response raised serious doubts about its ability to respond to a major catastrophic event and whether FEMA had learned from its mistakes responding to Hurricane Hugo. Intense criticism was raised about the failures of the response. Reminiscent of Hurricane Hugo FEMA was criticized for poor coordination and communication. The affected states and cities came under similar criticism as well. A GAO report leveled many of the same criticisms of FEMA and the federal government that it would later make in the aftermath of Hurricane Katrina including 'inadequate damage and needs assessment' and 'unclear authority'.

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Peacock, W, G. Morrow & H. Gladwin (2000) *Hurricane Andrew: Ethnicity, gender, and the Sociology of Disaster.* Miami, FL: Florida International University.
This sociological account of the impact of Hurricane Andrew is one of the best in-depth, analytical accounts of disaster ever written. It's solid theoretical approach and findings are invaluable for understanding the complex ways in which this disaster affected society.

Morrow, B. and Peacock, W. (1993) 'The social impact of Hurricane Andrew', in P.H. Mann (ed) *Lessons Learned from Hurricane Andrew: Conference Proceedings.* Miami: Florida International University.

Provenzo, E. & Provenzo, A. (2002). *In the Eye of Hurricane Andrew.* Gainsville, FL.: University press of Florida. This is the shared experiences of nearly one hundred people. Their accounts of Hurricane Andrew provide a human insight into this tragedy.

Reports:

GAO/RCED-93-186, July 1993, 'Disaster Management: Improving the Nation's Response to Catastrophic Disasters. Washington, D.C.

Websites

"Hurricane Andrew" (www.noaa.gov)
www.noaa.gov/andrewsatellite.html

"Hurricane Andrew"
http://en.wikipedia.org/wiki/Hurricane_Andrew

A.) General Resources

Cumberpatch, M. L., (n.d.). Gulf coast hurricanes: selected resources in the NOAA libraries and information network. US Department of Commerce, August 2005. www.lib.noaa.gov/edocs/Gulf_Coast_Hurricanes_Bibliography_rev.pdf.

Hurricane Resources: Historical Records of the US Army Corps of Engineers Response toRecent Hurricanes.
http://hq.usace.army.mil/history/Hurricane_files/Hurricane.htm

(2.) Barry, E., (2005). Hurricane debris travel the world. Retrieved Nov. 02, 2005, from SeattleTimes: Nation and World: Hurricane debris travel the world Web site: http://seattletimes.nwsource.com/html/nationworld/2002598559_canedebris02.html.
Debris from Hurricane Katrina is beginning to surface in such areas as South Padre Island, Texas, from a location 423 nautical miles away.

(2.) Kendra, J., & Wachtendorf, T. (n.d.). Elements of community resilience in the world tradecenter attack. *Thrust Area3: Earthquake Response and Recovery*, Retrieved Nov 10, 2005, from http://mceer.buffalo.edu/publications/resaccom/02 SP09/pdfs_screen/17_KendraWachtendorf.pdf.
The resilience of the Emergency Response Center after its complete destruction on September 11 is discussed in this text. The author takes brief look at what happened after the World Trade Center attack, the quick reestablishment of the Emergency Response Center, and why they were resilient. The first obstacle faced was the need for a physical space, equipment, and organization to cope with the disaster. They were able to attain their need because of rapid response; this was successfully because they had a back up location, strategies to handle the situation at hand, and outside support. The working together toward this common goal was inspiring and constructive to the individuals involved. Another concept that is important to note about the restoration of the Emergency Response Center is they were not trying to create a new place but reproduce the old.

(1.) Louisiana Geographic Information Center, (2005). 2005 Louisiana hurricane impact atlas. *2005 Louisiana Hurricane Impact Atlas, 1*, 1-39.
This text outlines, separately, the following facts about Hurricane Katrina and Rita: the storms' history, storm impact, maximum sustained winds, wind gust, rainfall, storm surge, flooding, levees breached, damage estimates, and where the displaced people are located. The text also looks at federal assistance, economic problems, and the employment on a parish-by-parish basis. Interestingly unlike many other text examined, Louisiana Hurricane Impact The atlas also explores what is occurring on a household basis (including poverty stricken households), what homes have children under 18, and the schools that were closed.

(1.) Sea Grant Louisiana, (2005). Katrina & Rita. *Lagniappe*, *29*(10), 1-6.
This article examines the affects on the fishing and seafood industries due to Hurricanes Katrina and Rita as two separate factors. Both hurricanes were devastating on the fishing economy. The affect was not only economic, but recreationally which affects communities even further. Due to Hurricane Katrina there was tremendous land loss, more so than in the last forty-eight years combined. Loan distribution is examined and economic projection with past hurricane recovery as a basis for the model. Vehicle roundup is discussed as it assists those in need of reclaiming lost vessels essential for livelihood in the fishing industry. The Louisiana Department of Wildlife and Fisheries is also providing free copies of paperwork in an effort to jump start the fishing industries recovery. The seafood products from the affected areas are under question as to the legality of human consumption due to possible poisoning.

(1.) Tierney, K., & Trainor, J., (n.d.). Networks and resilience in the world trade center disaster. *Emergency Response and Recovery*, 157-172.
The purpose in the examination of different networks that surfaced in response to 9-11, what tasks they preformed, and why there existed a rapid response and task achievement. The author conducted this study using documentation of the attack, field work, and in-depth interviews. MCEER's goal is considering the conditions that enhance resiliency due to disasters, and effectiveness in handling disasters. Through 9-11 received massive amount of response from the government, organizations, private groups, communities, and thousands of volunteers it was still a costly devastating disaster. The stabilizing of businesses, transportation, homes, mental health are all factors that followed the attack on the Word Trade Center. The mobilization after the attack is noted as being extremely different than most disasters; this was not just a disaster but a crime scene as well. Do to the unorthodox nature of the events, the response did not follow its traditional slow hierarchy task assigned approach, due to the rareness and unprepared ness of 9-11 the mobilization was decentralized and reply rapid. The type of communities also changes the effectiveness and timeliness of the response. The area impacted on September 11 was small so many of the surrounding areas assisted, plus it was a major city that suffered major economic losses.

VII. "Hands On" Resources for Resiliency

The Rev. Richard L. Krajeski
The Rev. Kristina J. Peterson

Introduction to the Human Factors in Development and Resilience

Programs for the development of sustainable livelihoods and communities and for the creation of resilient communities are fraught with difficulties and failures. There are many reasons for these difficulties. Trying to change a complex social, economic, and political entity is daunting. Even the best theory, the best preparation, the best educational process, and the best program management can not guarantee success. Simply put working with a

community is difficult because of the many stake holders – local and distant, visible and hidden, and vocal and silent, the many change agents (academic, governmental, NGO staff – to name a few) and the many issues, environmental, economic, political, and cultural. There are a host of other difficulties that are part of the development resilience process. A common one is resistance. People (clients), stakeholders, and change agents regularly resist change. Sometimes some people resist change even when indicators are that the change can be beneficial. It is common to blame this resistance and the failure of programs on the 'clients' – they are uneducated, unappreciative, unworthy, and uncooperative. Resistance is a much deeper and more complicated issue than often appreciated. Thus understanding the nature and reasons for resistance and developing interventions to overcome the resistance are part of the change agent's work.

Humans change at different rates and in a predictable process (Rogers 1983). People live in complex but definable networks (Taylor 1984). Human beings have values and these values lead them to act in certain ways. People can have strong ties or connection to a particular location or way of life that may seem irrational to outsiders but which are consistent to the local community. Clients and stake holders do not necessarily respond to studies or science as much as they may to values and kinship relationships.

A. Understanding Basic Disaster Recovery

Disaster recovery is usually conceptualized in term of stages or phases. Although these models are questioned by present theories, disaster recovery does seem to be made up of definable components. Typically these are referred to as rescue, relief, recovery, mitigation, and anniversary. Responding organization tend to specialize in one of these components. There is some truth in the sequence of components - at least in terms of organizational response and survivors' needs. Having a sense of where organizations, communities, and survivors are in this continuum will be helpful in planning resiliency interventions.

(1) Australian Emergency Management (1996). *Disaster recovery.* Australian Emergency Management

This book on disaster recovery looks at the holistic cycles of disaster recovery. It has strong sections on the emotional and community nature of disasters and recovery. It treats disasters as community events and recovery as a community activity and not just an individual issue. This book helps one understand the psychological and social dynamics of a disaster recovery and the difficulties one faces when moving from recovery to development. This is one of the most helpful books we have seen. We believe it is on the AEM website.

(2) Schwab, Jim (1998). *Planning for post-disaster recovery and reconstruction.* Washington DC: FEMA

This is a lengthy and detailed manual on planning for recovery and reconstruction

(2) Wheelwright, J. (1994). *Degrees of disaster; Prince William sound: How nature reels and rebounds.* NY: Simon & Schuster

This is a good examination of this complex technological disaster. The recovery was complex in term of recovery and also in term of the legal issues, values expressed in priority setting, and its economic, emotional, and spiritual impacts.

B. Understanding practical development methods

Development and building towards resiliency are complex processes that include many and varied stake holders, numerous theoretical approaches, and practical strategies. The literature is expansive with many case studies.

(2) Bankoff, Greg (2004) *Mapping vulnerability: Disasters, development & people.* London: Earthscan

(1) Bilbo, David (n.d.) *The disaster handbook.* Cooperative Extension Service

This is an easy to use handbook on all aspects of disasters. It is a practical and readable book written for the non-expert that covers everything from preparedness to mitigation. It is written as a guide to those who want to prepare for a hazard event

(1) Davis, Ian. (n.d.). *Guidelines for trainer leading disaster management workshops.* Oxford: Disaster Management Centre Polytechnic

This manual for training a verity of disaster managers focus on the interpersonal, cultural, and social aspects of disaster recovery, preparedness and mitigation. It is a great piece to help train and sensitize any persons working in disaster response and recovery. We do not know if it is still available.

(2) Davis, Ian. (n.d.). *Effective management of disaster situations.* Oxford: Disaster Management Centre Polytechnic

This is an unusual and important training manual on disaster management. It deals with such topic as; attitudes and personal qualities, basic management guidelines, protective planning.

(3) Davis, Ian (1978). *Shelter after disaster.* Oxford: Polytechnic Press

Written for 'third world' building this book gives alternatives to traditional western styles and conceptions of shelter.

(1) Eade, D. and Williams, S. (1995) *The oxfam handbook of development and relief* 3 volumes. Oxford: Oxfam Press

. This is a complete handbook for development and disaster recovery. This 3 Volume work is a necessity for anyone who is engaged in long-term recovery and/or development at the policy and implementation levels.

(1) Federal Emergency Management Agency – Project Impact. (1998). *Project impact community toolbox.* Washington, DC: FEMA

This is a collection of resources for local communities to help them do mitigation and build disaster resilient communities. The concept and materials in this toolbox have been successfully used in communities ranging from small rural communities to large metropolitan areas.

(2) Johnson, Bruce (1982). *Redesigning rural development: A strategic perspective.* Baltimore: John Hopkins

Development is always a factor in disasters and in hazard mitigation planning. Poor development – any development that does not take natural and technological hazards and human vulnerability into account is the leading cause of disasters. Development that incorporates risk assessment and reductions and disaster mitigation that is sensitive to sustainable livelihood development are what we need today. This book is one of a growing number of books on urban and rural development that is taking vulnerability reduction and local sustainable development seriously.

(2) Pound, Barry, Snapp, Sieglinde, McDougall, Cynthia: Braun, Ann (2003). *Managing natural resources for sustainable livelihoods: Uniting science and participation.* London: Earthscan.

The development and management of sustainable development and resilience has a better chance of being successful when there are real partnerships between local people and external agencies. Drawing on

extensive and relevant case studies this book presents innovative approaches for establishing and sustaining participation and collective decision-making, good practice for research and challenges for future development. This volume also has over 20 case studies.

(2) Sillitoe, Paul, Bicker, Alan and Pottier, Johan (2002) *Participating in development: Approaches to indigenous knowledge.* London: Routledge
Development has often failed. The policies imposed from above by agencies have frequently not met the needs and aspirations of local people. This work seeks to correct this failure. This volume focuses on two issues. One, how indigenous should be defined and who should define it? Second, once this is achieved what methodologies should be used? This book provides good theoretical bases and practical strategies for intervention.

C. Understanding motivations

The motivation of individuals, neighborhoods, and communities are essential to the acceptance and adoption of programs for resilience. Change, even positive change creates anxiety and therefore may create resistance. Acceptance and resistance are themselves complex and often hidden phenomena. Success in innovation is a combination of acceptable information, trust, and relationships.

(1) Davis, Mike (1998). *Ecology of fear: LA and the imagination of disaster.* NY: Metropolitan Books.
A history of the 'making' of southern California's disasters. For those who want an understanding of the interrelations of culture, economics, race, land use, human arrogance and foolishness, and politics to natural hazards and disasters this is an important book.

(2) Davidson, Glen W. (1984). *Understanding mourning.* Minn: Augsburg Press
An important book on understanding the importance and dynamics of mourning. Survivors, caregivers, managers, and planners must understand the cultural and personal dynamics of individual and community mourning if they are to get beyond the disaster. Mourning is a natural part of human behavior and is to a large degree determined and directed by culture. People and communities have differing patterns of mourning and different abilities to recognize and 'tolerate' the mourning process. This book contains some practical strategies to help people mourning.

(3) Edelstein, M.R. (1988) *Contaminated communities.* Boulder: Westview Press
An important book on technological disasters. Technological create their own kind of dynamics and management problems. Technological disaster (and almost all disasters have technological aspects) seem generate much more anger and resistance than 'natural' disasters.

(1) Erickson, Kai (1976). *Everything in its path.* NY: Simon and Schuster
This is a classic ground braking work that stresses the community nature of disasters and recovery. This is the classic work of the social and community impact of disasters.

(1) Erickson, Kai (1994) *A new species of trouble: The human experience of modern disasters.* NY: Norton
In this book Erickson expands on *Everything in Its Path* and examines the nature of 'new' types of disasters.

D. Understanding the local identification of community

Community can not be defined by political or geographic maps. Communities are living moving organisms. In one sense they can only be defined by those who are part of them. There are a number of models that have shown success in understanding and defining communities.

(1) Aberly, Doug (1993). *Boundaries of home: Mapping for local empowerment.* Philadelphia: New Society Publications

This book look at 'mapping' in interesting and important ways for those who wish to understand how community define and map their geography and for those interested in community organizing and development. This is a cross-cultural approach to space and its meaning and definition. It helps identify community assets and how communities 'map' their environment. Understanding neighborhoods and communities and how they relate is important to successful sustainable and resilient development. This book literally shows that all maps are not the same.

(3) Gupta, Akhil (1997). *Culture power place: Exploitations in critical anthropology.* Durham: Duke University Press

This book address the importance of place in the lives of people, particularly those who have been displaced. Understanding a particular stake holder group's relation to a particular geography and history is vital for development and resilience projects.

(2) Lukas, Carol (1996). *Consulting with nonprofits: A practitioner's guide.* St Paul: Amherst H. Wilder Foundation

A comprehensive guide to working with nonprofits and community groups.

(2) Marsden, David (1990). *Evaluating social development projects.* Oxford: Oxfam

A manual on development. Oxfam produces great materials. This is a good handbook on evaluation because it looks at human factors and not just numbers.

(2) Maskrey, Andrew (1989). *Disaster mitigation; A community based approach.* Oxford: Oxfam

A manual on involving local communities in sustainable mitigation and resilience. Community approaches, generally are important in recovery. This is particularly true for mitigation which to be really successful must be accomplished regionally.

(1) Mohr, Doug (1999). *Fostering sustainable behavior: An introduction to community-based social marketing.* Gabriola B.C.: New Society Pub.

Sustainability and resiliency are in the final analysis concrete behaviors. This is a good book to begin a study of sustainable development. Understanding mitigation and resilient communities in terms of sustainable development is a necessary skill for those who are serious about providing helpful service to recovering and at risk communities. This is a practical methods book with good basic theory and key elements and process for introducing sustainable behaviors.

(1) Nakagawa, Yuko and Shaw, Rajib (2004) Social capital: A missing link to disaster recovery. *International Journal of Mass Emergencies and Disasters*. Vol 22 (1)

Post-disaster recovery, mitigation, and sustainable resilient community building are opportunities to revitalizing local economies, and upgrading livelihoods and living conditions. The authors content that understanding 'social capital' is important for building resilience and sustainability Social capital is defined as a function of trust, social norms, participation and networks. This paper shows how the use of social capital was critical in recovery from a major disaster.

(1) Winer, Michael and Ray, Karen (1994) *Collaboration handbook: creating, sustaining, and enjoying the journey.* St Paul: Amherst H. Wilder Foundation

This handbook shows how to begin the collaborative process, determine the various roles, create an action plan, and evaluation processes. The book includes case studies, tips on how to avoid pitfalls and worksheets.

(2) Wilder Research Center (2001). *Collaboration: What makes it work.* St Paul Amherst H. Wilder Foundation

This is an in-depth review of current collaboration research. Major findings are summarized, critical conclusions are drawn, and nineteen key factors influencing successful collaboration are identified.

(2) Wilder Research Center (1987). *Community building: What makes it work.* St Paul: Amherst H. Wilder Foundation

This book shows what really does and what does not contribute to community building. It reveals 28 key factors in building community. It includes detailed descriptions of each factor, case examples of how they play out and practical questions to help in assessments.

E. Understanding resistance

Resistance takes the form of both 'no' and 'yes'. Resistance can be violent or silent. There is active and passive resistance. Resistance exists on a continuum that can take the form of passive compliance that means failure for the project on the one end to outright rebellion at the other end. Resistance can be around facts, ideas, concepts and values. Resistance can represent power struggles, misunderstanding, fear, or lack of trust. There now exists many tools for identifying the roots of the resistance and tools for reducing resistance.

(1) Angelica, Marion Peters (1999). *Resolving conflict in nonprofit organizations: The leader's guide to finding constructive solutions.* St Paul: Amherst H. Wilder Foundation

This book helps identify conflict, to tell when to intervenes, and how to develop intervention strategies. It includes exercises to help the user learn and practice conflict resolution skills.

(3) Barkun, Michael (1974) *Disaster and millennium.* New Haven: Yale Press

An old book that reads like today's newspaper. Barkun links disasters of all kinds to millennium thinking. He shows how disasters can lead to millennium thinking, totalitarianism, and terrorism. In the last chapter entitled 'Changing Patterns of Disaster' he says "Since spontaneous events cannot be counted upon to produce disaster after disaster, men take it upon themselves to generate catastrophe…. As the means for inducing disaster at will have been developed and used, millenarianism has become as much the instrument of oppression as its by-product. Millenarianism has emerged from its old haunts – the ghetto, small town, and backland – into the modern urban society. In the process, it has increasingly left behind the oppressed for whom it was the last resort in adversity and become the creature of those who seek power and dominion." Barkun's ideas deserve careful attention because they do relate to disaster response policy and practice and they have important implication for foreign and national policy. Words like "EVIL" are indications of millennium thinking. This is an important book for those who want to reflect on the long-term impact of September 11 and Hurricanes Katrina and Rita.

(2) Caruth, Cathy (1995). *Trauma; Explorations in memory.* Baltimore: John Hopkins

Caruth background is literature not psychology and she brings a fresh prospective to trauma. Her psychological roots seem to be Freudian. This is an important book for those with an interest in trauma and how trauma affects people's ability to make decisions. Traumatized people have trouble sorting out their experience

and planning for their future. It helps those working with disaster impacted communities understand the psychological dynamics of those impacted communities. The above book has many important articles by a number of authors including Robert Lifton and Kai Erickson

(2) Caruth, Cathy (1996). *Unclaimed experience; Trauma, narrative, and history.* Baltimore: John Hopkins Press

The importance of 'story' and the difficulty of telling one's story and making decisions for the future are analyzed. The book helps the reader understand why survivors can not make good decision shortly after a traumatizing experience and why 'quick' interventions or interventions that do not take the client/stake holder trauma and story seriously are counter productive for long-term sustainability and resilience.

(2) Gilligan, Carol (1982). *In a different voice.* Boston: Harvard U. Press

This is an important book on value decision making and gender. Gilligan points out that humans think, moralize, and make decisions in significantly different ways. Gilligan's focus is on gender differences which are very important in disaster preparedness, recovery, and mitigation (see also Enarson and Morrow). But her book has great value beyond gender. Reading her book can help sensitize the reader to the great differences that exist in the way humans think, feel, decide, and value.

(1) Marris, Peter (1974). *Loss and change.* NY: Pantheon

(1) Nelson, Hildi (2001). *Damaged identities; Narrative repair.* Ithaca: Cornell University Press

This is an important book for anyone who wants to understand how stories of narratives impact the self understanding of individuals and groups. The book gives helpful clues to helping people create new or 'counterstories' that will be helpful as they deal with adversity. Program designers should read this book to understand how their 'master narratives" (world views and their views of certain groups of people) impacts their designs.

(1) Scott, James C. (1990). *Domination and the arts of resistance.* New Haven: Yale Press

Scott's books are important for anyone who is working with racial, ethnic, and minority groups and local communities. Scott provides a detailed analysis of communication systems between different groups and classes. His insights are most important for those who want to understand what is being said and what is not being said. Every policy make, educator, organizer, and change agent should read his books. He has important section on how people talk about and experience what is often call the inevitable. He also helps the readers understand the hidden communication of groups and how language reinforces oppression and domination.

(2) Scott, James C. (1985). *Weapons of the weak: Everyday forms of peasant resistance.* New Haven: Yale Press

F. Understanding decision-making processes

Decisions are made in many ways – individually, collectively, by the will of the majority, by consensus, by visible elected representatives, by hidden back room deals, and by default. Different cultures have different ways of making decisions. Some decision making is based on the best scientific information, some is based on tradition, and what some call superstition. Some decisions have a better change of success than others.

(1) Avery, M. et.al. (1981). *Building united judgment: Handbook for consensus making.* Madison: Center for Conflict Resolution

There are many models for understanding how people make collective decisions. This is a good handbook on decision making. Decisions are not always clear cut after a disaster. Often some groups are left out of the process or decisions are arrived at too quickly. This book is helpful in understand the nature and importance of consensus. It helps identify blocks to agreement and ways to involve people. Building consensus is important for real vulnerability reduction and sustainable local capacity development.

(2) Barry, Bryan (1997). *Strategic planning workbook for organizations: Revised and Updated.* St Paul: Amherst H. Wilder Foundation

This workbook gives tested practical step-by-step guidance, real life examples, and easy to use work sheets.

(2) Burleson, B. (1994) *Communication of social support: Messages, interactions, relationships, and community.* Thousand Oaks: Sage Pub.

This is a rather academic book and is not easy but more and more research is showing that communicating personal and community support are critical in disaster preparedness, response and mitigation.

(1) Friedman, Paul and Yarborough, Elaine (19850. *Training strategies from start to finish.* NY: Prentice Hall

(2) Nichols, Paul (1991). *Social survey methods.* Oxford: Oxfam

This is a good and practical handbook for those looking for information on social survey methods.

(1) Nored, Ron (1999). *Renewing the fabric: How congregations and communities come together to build their neighborhoods.* Montgomery: Black Belt Press

More and more religious communities and religious groups are involved in sustainable community building and resilience. This is a very valuable book for anyone interested the religious communities' abilities to build community. The basic skills taught are transferable to nonreligious settings and groups.

(1) Park, Peter (1993). *Voices of change; Participatory research in the United States and Canada.* Westport: Bergin & Garvey

This book, while written for the social research community is an important book for anyone involved in community development. Park et. al. show who the participation of 'locals' is vital to any change or development project. Participatory research is important for a number of reasons. First, it is democratic. Second, it involves the stake holders closes to the issues. Third, it surfaces crucial data that can only be surfaced in the context of local citizen participation.

(2) Pandey, Shashi (1991). *Community action for social justice.* New Delhi: Sage Pub.

(3) Pearson, Richard (1990). *Counseling for social support.* Newbury Park, CA: Sage Pub.

This is an important book for those involved in any kind on stress and trauma interventions to read. It demonstrates the importance of social support. Helping rebuild or build "natural' community support is one of the most important and effective things any caregiver – particularly a mental or spiritual health caregiver, can do. Building this natural social support for survivors and local caregivers is far more important than any clinical programs.

(1) Pratt, Brian (1990). *The field director's handbook, Oxfam manual for development workers.* Oxford: Oxford U. Press

This is a complete and detailed handbook for development. All of the Oxfam manuals are based in the best theory and written in a practical way so they will help people who are in the field developing, implementing, and evaluating programs.

(1) Rogers, E. (1983). *Diffusion of innovation.* NY: Free Press

Rogers' book is a valuable contribution to our understanding of how, when, why people adopt new idea and change. It will be a most helpful book for those interested in changing behavior around issues of disaster preparedness, disaster mitigation, and building sustainable resilient communities. We can not overestimate the importance of this book. Anyone working in the areas of sustainable development and community resilience can avoid a lot of frustration and increase their likelihood of success by reading this book.

(2) Roseland, Mark (1998). *Toward sustainable communities: Resources for citizens and their governments.* Gabriola Island B.C.: New Society Pub.

This book is a practical guide to building sustainable and resilient communities.

(1) Schermerhorn, Jr, John R., Hunt, James G., and Osborn, Richard N (1995). *Basic organizational behavior* NY: John Wiley and Sons, Inc.

Basic Organizational Behavior brings to its readers the essentials of organizational behavior. Each chapter has organizing questions and ending summaries.

(2) Stanfield, R. (2000). *The art of focused conversation.* Gabriola B.C.: New Society Pub

This book teaches ways to focus conversations to make them more productive. It is a good book for consultants, planners, and teachers.

(1) Susskind, L. and Cruikshank, J. (1987). *Breaking the impasse; Consensual approaches and to resolving public disputes.* NY: Basic Books

Conflicts are present in almost all development programs. Conflicts occur at many levels and in many places. There are conflicts between and among stake holders. There are conflicts about content of the planning, the processes used, and the appropriate structures. There can be conflict over the 'facts', concepts, and values. This is a helpful book on resolving conflicts.

(1) Taylor, Donald (1984). *Pre-crisis management.* Denver: SRM Corporation

This is the most valuable resource we know of. It helps the do a 'holistic' analysis of a community. This manual teaches the user to analysis many different aspect of community. For example – work and recreation patterns, social and political boundaries, interest groups, and communication network. The manual is based on the concept that it is as important to understand and work within the 'informal structures of a community as it is to work with the formal structures. It stress discovering and addressing potential community and stake holders crisis.

(1) Taylor-Ide, Daniel et.al. (2002). *Just and lasting change; When communities own their future.* Baltimore: Johns Hopkins Press

Just and Lasting Change is a comprehensive guide to understanding and transforming communities rapidly and in locally appropriate ways. Based on a diverse range of case studies, this book describes how the SEED-SCALE model can be effectively implemented. This manual and the community asset and needs assessment method it teaches is the best intervention methods we know of. Taylor stresses the importance of real partnership.

(2) Ury, William (1991). *Getting past no - negotiating with difficult people*. (A companion to *Getting to yes).* NY: Bantam

Getting past no is often as important as getting to yes. This is a short and practical book. This and G*etting to Yes* are short easy to read books packed with useable information. It is a must read for any consultant or planner.

(3) van Beck, Aart M. (1996). *Cross-cultural counseling.* Minn.: Augsburg Fortress Press

Understanding different cultures is necessary in disaster response, mitigation, and sustainable development. Although this book is aimed at counselors its basic concepts are of real value to anyone working in a culture other than their own. What appears to be religious fatalism, for example, often is something quite different.

(1) Vineyard, Sue (1984). *Marketing magic of volunteer programs.* Downers Grove Ill.: Heritage Arts Pub.

Sustainable development and building resilient communities are in the final analysis about marketing. Vineyard speaks of marketing in terms of friend **raising.** She shows how organizational self-knowledge is important for raising funds. She gives a step by step account of the marketing process. Those working to develop sustainable development and resilient communities are 'marketers' – they are trying to sell a program – in vineyards terms raise friends.

(2) Williams, Suzanne (1994). *The oxfam training manual.* Oxford: Oxfan Press

Everyone engaged in disaster response at any level. The book has valuable background articles on gender and a host of training exercises. Although the book focuses on gender, the theories and exercises can be shifted easily to address issues of race and class.

G. Understanding values and world views

Values impact all decisions by all groups. Values are inherent in all systems and theories. Values impact what people think is important, what they set as priorities, how people make decisions, and the amount of time, energy, and funding they will give any project. Values are not irrational but they do generally carry with them strong emotions. Values can be understood as motivators, process determiners, and goals. The driving values of any individual or group are not necessarily universal, consistent, well articulated, or acted upon in awareness.

(2) Ackroyd, Peter (1968). *Exile and restoration.* Phila: Westminster Press

This is an important book on the human and historical meaning of Exile. We believe that the experience of disaster recovery and the historical exile has much in common. We see exile as a valuable and productive metaphor for understanding disaster response. Since many people think of their situation in 'religious terms' it is important to have some sense of their understanding of their experience.

(2) Berger, Peter (1987). *The sacred canopy: Elements of a sociological theory of religion.* NY: Doubleday

Berger makes important contributions to the study of theodicy and its social construction. Anyone engaged in disaster policy making or the delivery of services needs to understand Berger's insights. Religion plays a critical role in how people understand the causes of disasters and how they understand and participate in preparedness and mitigation activities.

(1) Beversluis, Joel (1999) *Sourcebook of the world's religions.* Grand Rapids: CoNexus Press

This is an excellent reference book for the world's major religions and their social, political and environmental understandings.

(2) Boff, Leonardo (1998). *Ecology and liberation: A new paradigm.* NY: Orbis

Ecological and human rights issues always play a significant part of disasters and recovery. This is a good introduction to ecological and human rights problems.

(1) Brueggemann, Walter (1977). *The land: Place as gift, promise, and challenge in biblical faith.* Philadelphia: Fortress Press

People relate to land in different ways. For some land is something to use and use up. For others land is about family history. For others land is about one's inanity with self and the cosmos. This is a theological book on the relations of humans and land and landlessness. It has important implications for disaster recovery and mitigation.

(1) Dudley, Carl (1991). *Basic steps toward community ministry.* NY: Alban Institute

Dudley book is a classic on community based development

(2) Federal Emergency Management Agency (1998 draft). *The role of voluntary agencies in emergency management.* Washington DC: FEMA

This is a good introduction to the roles of voluntary agencies and disasters, and lists most voluntary organizations, active in disasters.

(2) Perkins, John (1993). Beyond charity: *The call to Christian community development.* Grand Rapids: Baker Books

Charity can be and often is oppressive because it does not reduce the vulnerability or increase the sustainable capacity of people in need. This book takes the reader beyond charity to real grassroots development.

(3) Ricoeur, Paul (1995). *Figuring the sacred: Religion, narrative, and imagination.* Minneapolis: Fortress Press

VIII. Maps

Introduction: NOAA- Sandy-

IX. Important Relevant Websites

ActionAid International

http://www.actionaid.org/

American Planning Association

http://www.planning.org/

Coastal 2050: Toward a Sustainable Coastal Louisiana

http://www.lacoast.government/Programs/2050/MainReport/report1.pdf

Gender Disaster Network. Retrieved on June 12, 2006, from www.gdnonline.org
This website is devoted to gender and social vulnerability issues in broader hazard areas.

Grassroots/Low-income/People of Color-led Hurricane Katrina Relief:
http://katrina.mayfirst.org/
Emergency Capacity Building Project: A collaborative effort of the Interagency Working Group on Emergency Capacity
http://www.ecbproject.org/

FEMA Higher Education Project
http://training.fema.gov/EMIWeb/edu/highpapers.asp.fV.

FEMA-U.S. Fire Administration Training & Education Learning Resources Center (EMI)
http://www.usfa.fema.gov/training/lrc/

Housing Assistance Council- resources on housing issues in the United States
www.ruralhome.org

Hyogo Framework- United Nations
www.unisdr.org
hyogoframework.org

Katrina Map Website developed by John Logan and other at Brown University
http://www.s4.brown.edu/katrina/index.html

North American Interfaith Network
http://www.nain.org

Natural Hazards Center, Holistic Disaster Recovery
www.hazards.edu/holistic

National Low Income Housing Coalition- poverty, income, gender and racial data pertaining to housing policies, practice and trends- during a disaster, it assembles all available housing data
www.nlihc.org

National Oceanic & Atmospheric Administration
http://www.noaa.gov/

Public Entity Risk Inst (PERI). www.riskinstitute.org/

PROVENTION. Retrieved on June 12, 2006, from www.proventionconsortium.org/index.htm
A website devoted to reducing vulnerabilities with many examples and tool kits.

Wisner, Ben & Fordham, Maureen. *Radix – Radical Interpretations of Disaster*. Retrieved on June 12, 2006, from www.radixonline.org

A website devoted to a "Radical Interpretations of Disasters *and* Radical Solutions" developed by Ben Wisner and Maureen Fordham (two leading hazard/disaster/sustainability researchers) that offers many good suggestions and links.

Understanding Katrina: Perspectives from the Social Sciences
http://understandingkatrina.ssrc.org/

United Nations Inter-Agency Secretariat of the International Strategy for Disaster Reduction (UN/ISDR) – This link provides information on the Hyogo Framework for Disaster Reduction and community resiliency and to other members of the international taskforce who are committed to the goals of the Framework.
www.unisdr.org

UNECLAC. (2002). *Manual for Estimating the Socio-Economic Effects of Natural Disasters.* Retrieved on June 12, 2006 from http://www.proventionconsortium.org/toolkit.htm

UDSA Extension Services- Project Eden<http://www.proventionconsortium.org/toolkit.htm
www.csrees.usda.gov/

World Conference on Disaster Reduction 18-22 January, Kobe, Hyogo, Japan
http://www.unisdr.org/wcdr/
http://www.mofa.go.jp/policy/un/conf0501.html
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World Parliament of Religions
www.cpwr.org

Worldwatch Institute
www.worldwatch.org.

X. How to Get Copies of the Referenced Articles and Books

How to get copies of the referenced articles and books?

Some of the references which we have provided you will be available on the Internet; try using Google Advanced Search. If they are not, be persistent. Your local public library or library at a local college or university may be able to acquire them for you. If they don't have the article or book on their shelves, befriend a professor or contact a professor with whom you already work. Universities often have special services called "Interlibrary Loan" that permits professors to obtain books and journal articles that their own libraries don't have. Ask the librarian at your government agency if you work with or within one that is large enough to have a librarian. The National Emergency Training Center/Learning Resource Center, a FEMA-funded facility in Emmitsburg, Maryland is another source.14 They may be able to help you. Also, the Cooperative Extension Service in your state should be

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able to help. The Cooperative Extension Agent in your area may assist you in connecting with their librarian at their headquarters in your Land Grant university (school that has the state's agriculture program). Finally, many of the journals have an on-line version that can be accessed by paying a fee for a particular article. Locate journal website through Google.

Again, be **persistent**. There is a way to access all of the documents that we have referenced.

Previously existing abstracts and team member comments and guides utilized for the reference sections.
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*6/13/2006

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[14] The LRC is closed to the general public; only NETC personnel and students may use the facility or borrow materials. However, via interlibrary loan through local libraries, the general public can access the LRC's collection of books and research reports. Audiovisuals, magazines, and general reference materials are noncirculating. Call (800) 638-1821 or (301) 447-1030 for more information. Our fax number is (301) 447-3217 and our email address is netclrc@dhs.gov. **Include your full name, mailing address and phone number in all email messages.**
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