

Comprehending Chaos

A Framework for Understanding Disasters



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Acknowledgements

This text is a simple framework designed for individual or classroom expansion. It is a Service-Learning text meant to be utilized with related experiences and reflections. It is an open text, lending itself to use in conjunction with factual stories from survivors. References are included at the conclusion, including some basic ideas for classroom expansion.

This manuscript belongs to all of us – and most particularly, it belongs to the survivors of catastrophe.

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Thinking Ahead

The purpose of this course is to move you beyond yourself and beyond the thinking that we all have: that the organized, institutional world as we know it will continue to exist.

This course ties together ideas and evidence about resilience. How do we keep ourselves and our children resilient in the challenging period of an unknown future catastrophe? What are some of the survival skills that have been handed down from our ancestors which we have taught to our children through cultural and religious practice? How do we maintain the importance of these rituals and practices when facing globalization and the breakdown of individual cultures and belief systems?

Catastrophe implies the individual's and the community's utter loss of the very things that psychologists and psychiatrists believe to be vital for maintaining our resilience. So how do we then "bounce-back" from catastrophe? This course moves us through the reality that we don't "bounce-back" from this amount of calamity. Rather, we go through a one-way transformation into a different reality. This is not mental illness. This is a human adaptive mechanism of response to cataclysm. We simply change. Or more accurately, we are changed.

The authors of this course join the many others who believe that practiced preparation is vital to help ward off the feelings of defeat, loss of control and hopelessness associated with catastrophe.

As always, we believe that education lays down the foundation of moving forward.

Pat and Eunice

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Thinking Ahead

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Introduction

The ***primary stakeholder in catastrophe is the survivor***, not the outside humanitarian responders nor the multinational corporations nor the foreign governments. The community of survivors has within itself the ability to reconstruct but the ability is often overrun by external forces.

Survivors are momentarily stunned and need that moment to grieve and then to reorient themselves to their new situation, taking inventory of who and what is left. They are able to do this task on their own whether or not outside help arrives. But if the outside help does arrive, they can be present with the survivor, walk beside the survivor and give the survivor a safe place to cry.

Catastrophe creates chaos, the condition of complete disorder and confusion. Rapid response in finding those left behind in a disaster and connecting with them is critical in recovery. Empowering local and individual ability faster improves the outcome of relief efforts. The mission of disaster relief, **whether initiated by survivors themselves or by outsiders**, is to help stabilize and encourage areas to self-heal and regenerate.

Both good and bad things happen in the chaos environment while the area tries to stabilize and regenerate. In this course, we will be looking more closely at some of these outcomes.

Part One

During a Catastrophe



Comprehending Chaos
A Framework for Understanding Disasters

Class #1

The Phoenix

The Phoenix is symbolic of this course. It is an ancient symbol, found in many cultures and eras of history. It stands at the doorway of extreme human experience and reminds us that we are creatures who periodically and spontaneously transform from one thing into another. It is part of our life-cycle. Transformations are not consciously thought out because they occur within events that are beyond human comprehension.

If you are reading this text, you have already passed through two transformations. The first was when your pre-mortal self came together. This transformation event is called conception.

The second time you transformed was when you changed from an unborn fetus to a newborn infant. This event is called birth.

You have not yet transformed from life to death.

For some of us these will be our three transformations.

For others, there will be another. This “other” or 4th transformation happens when **terror** and **heartbrokenness** happen together. It happens when an event burns indelibly into our neuron and psyche systems. The event is imprinted into who and what we are at every level. It shatters our individual internal compass and leaves us lost and totally disoriented. It becomes a new template against which all future experience is compared. In the void that it creates, both good things and bad things can potentially happen to us. This transformative event is recorded throughout history and is at the root where religion, psychology and psychiatry diverge.

This transformative event is known as catastrophe, the home to chaos.

Our class focus is the “**Phoenix Effect**”: the coexistence of loss and regeneration.

Human transformations are not reversible.
Regeneration is defined as rising from the ashes.
Regeneration is based in a transformative event.

Reflect on the question:

What was it like to be born?

Class #2

Serve to Survive

This course is devoted to natural disasters with a large human death toll. (Other disasters, including war, genocide, and environmental and economic disasters have striking similarities.)

Disaster is defined by the following terms.

Natural vs. Human-made

Localized vs. Catastrophic

Contained vs. Uncontained

When thinking about a disaster, compare it with injuries to your body.

Example #1: A superficial cut to your finger while preparing dinner.

This would be a *Man-made, Localized, Contained* situation.

Example #2: Your legs are torn and crushed under three stories of building rubble in a 9.1 earthquake with frequent aftershocks and you have lost touch with your family. There is a dead person lying next to you.

This would be a *Natural, Catastrophic, Uncontained* situation.

Questions:

Would you need help to survive either of these injuries? Why or Why not?

What if there is no help available? What if not enough help arrives?

Would one or both of these injuries be a transformative event (entire event burned or imprinted into your neuron and psyche systems)? Why or why not?

Some examples of *Catastrophe* include massive earthquakes, tsunamis, hurricanes, war (including nuclear war), acts of terrorism and genocide.

When we look at data of catastrophe throughout history, it is mindboggling to see how many people lost their lives. Each of these death tolls also represents something else:

1. The countless numbers of survivors of these catastrophes; those who witnessed firsthand the deaths of others but have been left behind to survive the initial shock.
2. Those who came after the initial deaths; those who were second-hand witnesses to what happened (outsiders who responded to the catastrophe).

Our focus for this class is on #1, the survivors whose lives are being changed by the situation.

In Catastrophe, survivors suddenly become:

non-paid volunteers who *serve to survive*.

When we serve, we build survival resilience.

Contact a local non-profit organization and volunteer. After each time you volunteer, write a reflection page.

Class #3

Breakdown

Our study of chaos will be limited to the event which allows transformation to occur. This event is called Catastrophe. It is an event that defies human comprehension. It takes us from order to disorder. It is the utter failure of the “normal way of life.” Within chaos, **our means of survival are destroyed.**

Catastrophe is like the moment the Phoenix bursts into flames and ends up as a pile of ashes. There is no more heart beat because there is no more heart. The beautiful Phoenix is a pile of ashes.

That is the effect of catastrophe on order and the “normal way of life.” It takes things that are beautiful and sacred to us and rips them up into nothingness, leaving us feeling powerless and without control of our lives.

For the next few chapters, we will be focusing on the *ashes* side of chaos. Then we will move on to the *regeneration* side although both are happening simultaneously.

What are Essential Needs?

Safety

- Rescue from injuring debris

- Shelter

- Illumination

- Connections/relationships

- Jails, prisons (destroyed/prisoners go free into the void)

 - Law enforcement/local governance

- Freedom from child abductors, fraud, rape, gang rape, murder

Sustenance

- Water (drinking water) and food

- Life sustaining air and soil/land

Health

Orientation (Person, Place, Time)

Sanitation, clean water, toilets

Medical and surgical needs

Hospitals

Public Health network/disease prevention

Communication

Information: receiving

Local

Global

Information: sharing

Local

Global

Family and Community

Physical connections to family/friends

Community Resources/Networks/schools

Faith community

Mobility to move in and out of the immediate area

Questions:

What would happen if you suddenly lost one of the essential needs?

How would you adapt to the loss? Give an example.

What would happen if you suddenly lost two of the essential needs?

How would you adapt to the loss? Give an example.

Humans have an extraordinary ability to adapt to changing and dynamic surroundings. What happens within chaos that prevents humans from simply adapting to the new surroundings?

Class #4

What Remains?

Humans have an incredible ability to adapt to our ever changing and dynamic world with one exception. That exception is catastrophe, home to chaos, where the circumstances overwhelm our ability to comprehend.

Chaos creates a void – a place of nothingness where things that order our lives have disappeared completely.

What is gone?

Orientation (Person, Place, Time)

Law and order

Governance/authority/chain of command

Professional rescue teams and equipment (ambulances, fire trucks, etc)

Best laid plans

Transportation

Hospitals/doctor offices/pharmacies/medical records

Glasses, hearing aids, medication, pain killers, sleeping pills

Identity and ownership documents

Information connections

Power sources

Safe shelter

Safe space, privacy

Street signs

Illumination

Safe drinking water

Food

Stores/shopping

Financial resources

Family

Community
Personal Cleanliness
Toilets, toilet paper, showers
Tools (might be able to find some in the rubble)
Formula, diapers
Cook stoves
Phones (possible minimal use of texting)
Internet
Mail
Sleep/rest

What is left?

Disorientation (Person, Place, Time)
Lawlessness
Homelessness (everybody is now homeless)
Dehydration/starvation
Non-comprehending (circumstances overwhelm computation)
 Terror and broken heartedness
Dead bodies – some in pieces
Unresolved life-threatening injuries/trauma
Possible nuclear, chemical, and/or biological contamination
Injured people/injured and trapped people/dying people
Orphaned children and children lost from their relatives
(indistinguishable)
Breeding Diseases (no Public Health protections)
Unstable structures
Darkness
Continuous and permeating smell of death and rot
Debris/brokenness everywhere
Loneliness
Immobility
 Roads are broken, full of debris

Fuel delivery has stopped, gas stations are shut down

Railroad tracks are destroyed

Airports are unsafe for landing and traffic controllers are missing

Water/gas pipes sheared off – huge fire danger

Some starving/wounded/heartbroken animals (pets)

Some displaced dangerous animals

What else is left?

You (possibly injured and/or trapped)

Some others (possibly injured and/or trapped)

Questions:

If this suddenly happened to you, what would be your first thought?

Is it possible for one person to experience this degree of loss by himself/herself?

In the immediate aftermath of atomic bomb blasts in Hiroshima and Nagasaki, what did the survivors do?

Class #5

Voices from the Void

The purpose of this course is to move you beyond yourself and beyond the thinking that we all have: that the organized, institutionalized world as we know it will continue to exist.

To accomplish this, we are going to get some practical experience. For today's class, contact 4 local non-profit organizations and ask them these 4 interview questions. Be sure to thank them for the interview. Then write a reflection page on what you have learned. Be sure to include the names of the agencies you interviewed.

Interview questions:

1. Please give me an overview of your organization's mission.
2. In what capacity does your organization work with people in catastrophe?
3. From your own experience, please give me an example of dealing with people in loss (i.e. disorientation, physical, mental, emotional situations).
4. Has the economic climate affected your clients? What is the experience of loss people are experiencing related to the economic climate?

Assignment:

Choose one of these organizations and volunteer.

The goal is to experience the helplessness of the people who have lost one or two of the essential survival needs – a partial disruption in essential survival needs – and to help you visualize what it would be like to experience a total breakdown of essential survival needs.

Class #6

Into the Void

Today begins with a review of the material presented so far in lessons 1-5.

There are three transformative events common to all people: conception, birth and death.

These three events change us from one stage of human existence into another.

These transformative events aren't consciously thought out. They are part of our survival mechanisms. They each create a new reality, a re-creation, a new "birth."

There is another event that happens to some people and not to others. This 4th event happens in catastrophe when terror and heartbrokenness burn indelibly into every part of a person's being. This is a transformative event – it creates a new reality.

This class is about the 4th event. It is captured in symbolic form as a Phoenix in many cultures, including ancient cultures. It is also captured in depth in religions throughout history. It is at the extreme of human experience and is beyond human comprehension.

For the purpose of this class, we are focusing on disasters with large human death tolls.

Catastrophes create chaos: a void where order used to be. Chaos is defined as disorder. It also creates a point of pure potential, a new beginning, a conception.

There are **4 sides** to what happens in catastrophe:

1. Those who die
2. Those who survive (the ones who go through transformation)
3. Those who respond to help the survivors
4. Those who have agendas ready to implement in chaos

Each of these **4 sides** potentially has a **stake-hold** in the disaster. A stake-hold is a claim of some kind in the situation or the land or the outcome. Let's look at this more closely.

1. Those who die in the disaster: their stake-hold is their lost life.
2. Those who survive (the ones who go through transformation): their entire future depends on what happens in the regeneration (including reconnection with family). They have traumatically lost everything except their own life. Catastrophe unravels families, friends and communities. It is experienced individually.
3. Those who respond to help the survivors: they are utilizing their skills and abilities and resources to improve the outcome for the survivors. They often drop what they are doing to go and help. They would be personally and financially vested in the situation.
4. Those who have agendas or missions ready to implement in chaos: these are the corporations, governments and investors who have vast resources and networks to move in to a devastated area and are able to use their influence and politics to determine the land's and the survivors' future.

Question:

Who is the **Primary** Stake-holder in a catastrophe?

Ultimately, in the Void (Ground Zero) there is potential for both amazing good things and horrific bad things to happen. The usual business of life has tragically stopped.

If you were a survivor of a catastrophe, what would be the most important thing to do first?

Part Two

Immediate Aftermath



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Class #7

Filling the Void: Power Play

This chapter is devoted to looking at the official documents of the United States Department of Homeland Security's Federal Emergency Management Agency (commonly known as FEMA) and you will also look at documents of the United Nations which relate directly to how to manage a disaster incident.

Examine how these documents might affect your rights as a survivor and note how relevant and realistic they are. Be sure to answer ALL of the questions.

FEMA/Homeland Security Documents related to Catastrophic Disaster

National Incident Management System

<http://www.fema.gov/emergency/nims/>

Who specifically are the emergency management/response personnel?

Find and quote bullet point #5 under Mitigation.

National Response Framework <http://www.fema.gov/emergency/nrf/>

In catastrophic disaster in the US, who has authority?

Who responds to a catastrophic disaster?

United Nations Documents relating to Catastrophic Disaster

Protecting Persons Affected by Natural Disasters - IASC Manual and Operational Guidelines on Human Rights and Natural Disasters

<http://www.brookings.edu/idp>

What is meant by internal displacement?

Give a brief overview of this document.

Give an analysis statement of C.2.9

IASC Guidelines on Mental Health and Psychosocial Support in Emergency

Settings

http://www.who.int/mental_health/emergencies/guidelines_iasc_mental_health_psychosocial_june_2007.pdf

On pages 168 and 169 (Action Sheet 9.1), read Background (pg 168) and then briefly state the impact of hunger and food insecurity on mental health and psychosocial well-being (pg 169).

Who is the IASC? <http://www.humanitarianinfo.org/iasc/>

Final Question: Who were these FEMA and UN documents written for?

The disaster survivor?

The disaster responder?

Investors, corporations and governments?

Additional sites to research:

Thomson Reuters Foundation <http://www.Alertnet.org> ;

UN www.un.org

Class #8

Grassroots Response

Creating a “community center” or a “coordination and relief center” in the heart of a catastrophe can be useful in reestablishing communication within the new community of survivors. Once a location is determined, survivors can communicate where it is located to other survivors – and to those who arrive to help.

In a catastrophe, the surviving community leaders need help to think through what to do next. What has happened is beyond their ability to understand as well. If you are able to locate a pre-existing community leader, you can work together to assess the situation and support each other. This is a moment when there is so much to do and so few to do it. Two-way communication is one of the first things that need to be established to gather information.

Some uses for an emergency community center include: pooling resources, gathering resources, identifying resources, distribution of knowledge and resources, building communication, building a safety net and being a focused location of coordinating other community efforts.

Today’s assignment:

Go and visit a community center and be a volunteer for a couple of hours. Each community center develops its own character. While at the center, find out what it does for the community.

Write a Reflection page on what you learned today.

Questions:

Considering what you have learned about *what is lost* and *what is left* in a

catastrophe, how would you spread the word about the location of a new survivors' coordination and relief/communication center?

What would you use for transportation to spread the word (no gasoline, generators, etc.)?

Would you develop questions to ask while you are spreading the word around?

Government aid is often distributed based on collected data showing need rather than on stories, reports or pictures of need.

What information would the government decision-makers be looking for?

How would you collect and compile the data to show your need? (without electricity, without generators, without gasoline, etc.)

Class #9

Not an Easy Fix

Catastrophe does not have an easy fix.

There is no timeline.

There is no completion date.

We don't **rebuild**.

We don't **restructure**.

We create a new environment brought out of the memory of what once was and how it once functioned.

If left alone, much of regeneration happens spontaneously.

Question:

Look up and read 6 news articles from recent catastrophes.

Do the media influence the decisions that are made during regeneration?

Explain.

Class #10

Options

Regeneration, or rising from ashes, involves stabilizing to a new situation, a new environment and a new “normal way of life.”

For the survivors, regeneration is re-growing, re-creating and re-connecting using what is left with a memory of what it was before the event that transformed the community. This is done while experiencing extreme terror and heartbrokenness.

The possibilities of what can happen during regeneration are numerous because not only are survivors involved in this process, but, because of the nature and scope of catastrophic disaster, unknown outside influences play a huge part in how the regeneration is ultimately shaped.

While the survivors are assessing what is lost and what remains and making progress in re-connecting, **outsiders are putting their organizations’, their companies’ and their governments’ dollars and agendas into the heart of the chaos.** Each sees itself as a significant stakeholder in the outcome. Sometimes there are massive financial pledges at the beginning of the disaster but in reality, the pledges do not materialize. And sometimes there are massive financial pledges made in the beginning but they are tied to conditions which become impossible to meet in chaos. In this way, politics are used to exert outside influence in the survivors’ future.

Ultimately, there are two choices of how a survivor and a community can proceed:

Option #1 Wait for Rescue and Aid to arrive from the outside (needs based).

Option #2 Begin immediately organizing with who/what is left (assets based).

Let's look at these options more closely.

Option #1 Wait for Rescue and Aid to arrive from the outside (needs based).

Problem: rescue and aid may never come or may be too late.

To wait is to give up your vote in your future's outcome. When you wait, others assume you are too distraught to put things together and they will put it together by their standards, not yours. The work of regeneration defaults to outsiders because they have clear thinking, money, agendas to implement and a bigger picture to work from.

Option #2 Begin immediately organizing with who/what is left (assets based).

Benefit: not dependent on "if help arrives."

The survivor is taking responsibility for his/her own future. This option is based on continuous rapid assessments and creativity in the face of extreme fear (terror) and heartbrokenness.

There are ramifications to both of these Options. Whichever Option is chosen, the Essential Needs **must** be addresses and dealt with rapidly to survive and reduce worsening outcomes and risks. Here are a few ramifications of these choices.

Choosing Option #1

This means you are leaving your essential survival needs to be addresses by the unregulated Humanitarian, Corporate and Governmental responders who arrive from outside of the disaster location (from unknown locations and possibly other countries).

Ramifications:

One of the most glaring deficiencies of outside response to

catastrophic disasters, repeated over and over with each new event, is a lack of coordination and lack of ability to distribute relief supplies to the survivors. This has horrendous outcomes for the survivors including increased loss of life, starvation, justified anger and rioting. The lifetime outcome for growing children who have experienced both the transforming event and then starvation and dehydration is not good.

A common occurrence in disaster relief is to move survivors completely away from ground zero (the rubble and dead bodies). They are relocated into temporary camps which often turn into permanent slum communities. Since there is no transportation back to ground zero, the survivors are stranded away from their homes, their voice in decision-making is not heard and they are not given the jobs of recovery. They are left out and left behind. People who arrive from the outside often don't know the local language and customs which can further delay assistance.

Choosing Option #2

This means you will do what you can for yourself and community survival and you will enlist other survivors to do the same (grassroots action). Survivors become unpaid volunteers to survive. It begins on the day of disaster.

Ramifications:

If friendly outside help arrives, they can fit in to what is being done. Regeneration happens from the bottom up and from the top down or regeneration is a joint effort.

If outside help does not arrive, you have not wasted any time waiting around wondering when it will arrive.

If those who arrive from the outside bring tyranny, you will already have established networks of communication and information flow.

Questions:

You are in Hawaii on vacation with your friend. The two of you were eating dinner on the balcony of your 10th floor hotel room overlooking the setting sun on the Pacific Ocean. Your friend feels too tired to go swimming but wants you to go and enjoy yourself. You change into your swimming suit, grab a towel and go down to the lobby floor and then out to the outside pool. Suddenly the earth begins shaking and rolling. This seems to be going on forever. Buildings sway, begin crumbling and imploding. Some buildings fall into the street.

Based on this information, explain what would your next 24 hours be like?

Would you choose to wait for outside help to arrive or would you choose to act with what you have left?

In order to establish a new “normal,” how would you begin to address the Essential Needs? (See the revised list below.)

Did you remember that this event might be followed by a tsunami?

Revised Essential Needs for Survival – regardless of which Option you choose

- 1 Safety
 - a. Rescue from injuring debris and contamination
 - b. Shelter: Blankets, Tarps, stable buildings
 - c. Illumination (It gets very dark without lights)
 - d. Connections: maintain and build relationships
 - e. Protection against abduction, rape and murder (Jails, prisons are destroyed)
 - f. Discipline/law enforcement

- 2 Sustenance
 - a. Safe drinking water and food (newborn to elderly)
 - b. Life sustaining air and soil/land
- 3 Health
 - a. Medical and surgical needs
 - b. Orientation (Person, Place, Time)
 - c. Sanitation, clean water, toilets
 - d. Warmth
- 4 Communication
 - a. Information receiving and sharing
 - 1. Local, global
 - 2. No place to store information - must be carried in your head
- 5 Family and Community
 - a. Establish Physical connections: find family/friends
 - b. Establish Community Resources/Networks (rudimentary)
 - c. Faith community: call to worship or prayer reestablishes time of day/day of week
- 6 Document and Bury the dead
- 7 Mobility to go beyond immediate location and return again

Class #11

Ramifications, Part 1

Unreachable Supply

We are now going to look at social justice issues arising out of catastrophe. There are 4 we will look at in 2 class periods but the scope of social justice issues arising out of catastrophe is much greater. Each catastrophe unwinds our lives and our communities in its own unique and unpredictable way.

There is now mounting data to show that people who are already experiencing difficulty recovering from traumatic experiences are at a higher risk of more traumas happening to them. If this is in fact true, then how we care for those in catastrophe has profound impact on their future.

Social Justice Issue #1.

When a catastrophe strikes, money and resources begin to flow to the region that has been affected. Large aid organizations begin immediately advertising for funds to support disaster victims in their time of need. Millions of dollars of essential supplies start arriving to the nearest airport to the destroyed region if a runway is still intact or they arrive at an open port of entry.

Disaster response is an open-source format, and each involved organization generally does not do *everything* that needs to be done within a disaster. Tasks such as gathering money, purchasing supplies, shipping supplies, distributing supplies and providing feedback to donors on how their money improved the lives of the survivors are done in piece-meal. A single organization doing everything might work well in “third-world” humanitarian efforts. But what generally happens in catastrophe is a disconnection of aid-flow between supplies arriving and the actual distribution of supplies to the survivors. The supplies purchased with donated money arrive at the airport or port of entry and sit there. The distribution piece is missing or is inadequate.

In catastrophe, infrastructure is destroyed. This means that creative distribution to unknown numbers of survivors with unknown needs and in unknown locations must be carried out by strangers to the area with no maps of any use, no street signs, no gas stations to fuel vehicles, no back-up repair stations for debris-punctured tires and blown engines and quite possibly with no electronic communication ability. Even if there are vehicles available for immediate use, the roads might all be blocked with rubble or be three-feet deep in mud. And to top it off, the aid distributor must figure out how to get back safely before dark since there is only moon-light after dark.

And so the aid supplies sit at the airport or port of entry waiting for distribution. While security of some sort is set up to protect the arriving supplies.

Fences or barriers are created to keep the supplies safe. This is sometimes done by the national government or if the national government is overwhelmed, by another nation's military forces or by paid mercenaries. This sets up a layer of protective "red tape" around the aid supplies. Since these supply-protectors are part of an organization of some sort, they are bound by their organizational policies and procedures in performing their jobs. And once this happens, it becomes an administrative nightmare to accomplish distribution of the supplies.

In the meantime, the survivors starve and die of dehydration and infection while the millions of dollars of donated food, water and antibiotics vitally needed are being held behind barriers. And the survivors cannot access the supplies meant for them because they do not have proper authorization including proper papers.

Initially, when the disaster strikes and the survivors see the airplanes fly in and hear that aid is on its way, there is hopefulness and much is accomplished in rescuing each other and meeting the immediate needs as best they can with what they have left. Their bodies are pumping adrenaline so hunger is not an urgent need. By the time they comprehend that aid has not arrived to their location – perhaps days to a week or two - it is too late to try to locate the supplies and try to access them. The survivors are now weak, starving, dehydrated and their wounds are infected. The fences separating them from the humanitarian aid are

up and they do not have the proper authorization to access the supplies that were meant for them.

Briefly stated, the source of supply is immediate and generous; the suppliers are willing. Breakdown comes in the distribution where suddenly the flow halts. Suppliers feel the need to protect the supply. The supply becomes unreachable.

This same scenario repeats itself over and over with each new catastrophe. This is the great humanitarian disconnect that tragically destroys the lives of countless initial survivors. It makes their struggle much more complicated and makes it impossible for surviving children to reach their full potential. The source of the supplies is not the problem. The problem is a broken or incomplete pipeline for rapidly moving essential aid from donor to recipient (survivor).

Social Justice Issue #2.

Once supplies pile up and are confined behind a barrier, there will be an attempt to get a flow of supplies to survivors. One of the policies will now be: how to determine who gets what supplies. This is decided through triage. In general, there are two main extremes of triage.

The first method of triage is to divide the people with needs up into most-in-need and least-in-need. Since the most-in-need are overwhelmed with need and there is a limited supply of aid, the most-in-need are excluded from the distribution. They are set outside the tent to die, so to speak.

The other method is to use the available aid on the most-in-need since they cannot possibly survive without it. This is at the other end of the extremes of possibility. Most real triage takes form somewhere in between the two described here.

Questions:

In lesson/class #7, we looked at the FEMA and UN documents related to disaster management. The UN documents we reviewed were written by a consortium or partnership of major UN and non-UN humanitarian aid organizations known as

Inter-Agency Standing Committee (IASC). Within those documents are standards of practice for disaster response.

What standard of practice is being violated when food and water is delayed and survivors are forced to wait in line to receive aid?

What happens to people who are forced to wait for weeks to receive essential survival aid?

What happens to children who are put into this situation?

Is survivor anger justified if aid, meant for them, is not distributed?

If I have given money to an aid organization that claimed that the money would go to the survivors in their time of need and I saw that the aid was held undelivered at the airport for days or weeks, would I have a reason to be angry?

Is it possible that I might decide never to give to disaster survivors again? Was it the survivor's fault?

How could this problem be solved?

Class #12

Ramifications, Part 2

What Am I Dealing With Here?

The term, *Hosting*, is used by international government officials when describing nations who have events such as the Olympic Games. For instance, the host nation for the winter Olympics 2010 was Canada. The traditions of hosting go back to ancient cultures. It was the responsibility of the *host* to “equalize” the stranger. *Host* is the root word for hospital, a place for a “stranger” to be brought back to health. It is the root word for hospitality – the stranger is fed and lodged and basic needs are met.

Now consider catastrophe. The *host* is not the location where the event occurred. Nor is it the survivor. The *host* is the responder, whether individual, organization, government or foreign nation. As responders, what kind of hospitality are we providing?

Social Justice Issue #3.

Relocating the survivors away from the disaster rubble is the next step in organizing an “efficient” aid distribution pipeline (see previous class). Securing a location and land enough for hundreds of thousands of internally displaced persons of all ages and need levels is not easy. Sometimes it just takes form on its own and at other times it is negotiated with formal contracting.

As mentioned in Class #10, these locations are away from the jobs of clean-up and rebuilding. Transportation to those jobs is generally non-existent in the early months after a disaster. They are also located away from where decisions of importance to the future of these survivors are happening. While the survivors are away, major development begins transforming the disaster site – utilizing contractors from international locations. Without the voice of the survivors, the area is developed, not regenerated.

Since survivors need money to survive, they are often stuck in a hard spot of selling their land for whatever they can get for it. Since public records are destroyed, often there is no way to even claim ownership rights to the land. So, even former homeowners can become homeless.

Once land is declared destroyed, it may be argued that it is *available or open* land regardless of former ownership. Both FEMA and the UN documents have included information on how to deal with *open* land.

Social Justice Issue #4.

Slum development begins with temporary housing of the crudest kind – cardboard, tin sheets, blankets or tents – whatever is available. In catastrophe, the temporary housing is for hundreds of thousands of people along with a promise that the destroyed area will be rebuilt with donated funds. The reality is that the slums often become permanent homeless housing while the survivors wait and wait to be absorbed into a newly developed landscape.

As time goes by, the acute needs of the survivors for safe and adequate housing and to be reestablished back into their community ends in disappointment. Absorption back into the redeveloped landscape does not happen well and rapidly. There is no room for brokenness in the world of order.

As time progresses, the homeless survivors continue to be dislocated as people or organizations or businesses claim or reclaim the land beneath them.

Question:

The United Nations world population projection for 2050 is: 9 billion people will be living on earth. The United Nations also projects that there will be 3 billion people living in slums at that time. That means 1/3 of the entire world's population will be living in slums in less than 40 years from now. This projection was made including all the efforts we currently have underway to reduce homelessness and improve life quality worldwide.

Based on the information you have learned so far in this course, what is one thing you could do (related to catastrophe) to help reduce homelessness?

Part Three

Survival Tools



Comprehending Chaos
A Framework for Understanding Disasters

Class #13

Renewed Vision

Catastrophe taps into the primal mechanism that is beyond fight or flight, into the switch button that changes us from one existence into another. And because we can neither fight nor flee the situation, it rearranges our thoughts, our hopes, our dreams, our identity, our reality. It shatters our foundation.

The concepts of “here” and “there” no longer make sense. The internal compass simply spins, its adjustment out of control. All assumptions are terminated. How do we function in an uncertain world?

The brain tries to resolve or make sense of the situation but simply cannot do it.

From Lesson #3 we learned about the ashes side of disaster. It takes things that are beautiful and sacred to us and rips them up into nothingness, leaving us powerless and without control of our lives.

From an outsider’s viewpoint, those shattered and torn pieces of our lives look like trash that needs to be cleaned away. It is simply disordered junk with no purpose any more. But to the survivor, each torn photo, each playing card, each broken toy all have memories attached that help make the transition from the old reality to the new reality. Sometimes survivors gather broken and torn remnants together into a shrine representing what has been lost. That shrine is a sacred space within the rubble, a place where a person can cry and seek their way again.

The broken pieces are memories in the ashes. They are the connection to the past as we connect past to future.

However, it is worth noting that the disaster area is often restricted by externally enforced regulations. Access may be denied even to legitimate property owners. Often the survivor is denied the rite/right to physically connect to these memories and becomes even more traumatized.

In order to move forward in finding yourself again – with your new identity in your new reality, you need a Focal Point. A Focal Point helps you go into the fear of the unknown by keeping your internal vision on something fixed. The Focal Point helps you rise above terror and heartbrokenness.

For many, “God” becomes the Focal Point. Religions have preserved rituals and language, imagery and symbolisms to help us dissociate from the painfulness and fear of a new reality. They also help reestablish a connection to time and place. In the gray void following catastrophe, a simple call to worship at sunrise and sunset triggers a memory of what to do next. Or a Saturday or Sunday call to worship with music can help reset the cycles of life.

For some, “Paradise” or “Heaven” becomes a Focal Point – a place where those who died are now located. A place where we will meet again.

Grieving over what is lost is one of the most natural human expressions. We can be blinded by the horrific reality of the situation and need to find a vision of the future that is not too frightening. When the grieving is intense and associated with terror and heartbrokenness, it may be described as a **Vision Quest**. In a Vision Quest, each torn piece of the past or torn memory could potentially become a “clue” for the survivor to find a way into the future, to find meaning in the words “here” and “there.” This is a time when there are no “road signs” to point a survivor in the right direction and the path forward is unknown.

Learning to trust the unknown future again after a catastrophe is a miracle of courage and faith. Survival depends on using whatever resources are available – even odd ones. Reflex and imagination are used when comprehension is not working. Broken pieces of the past can become symbolic “clues” to finding oneself again. They may be seen as messages of help and hope from the unknown.

Since this is a time of great vulnerability and great emotion, it is also a time for “miracles” and “synchronicities.” Whether these manifest themselves as out-of-the-ordinary strength or as something found in the nick of time or as something

that gives a sense of confirmation to a situation, “miracles” and “synchronicities” are outstanding when they happen and lend a sense of hope in the devastation.

Hope-dependence is a very real part of individual survival.

With modern technology, it is fairly easy for people on the outside of the event – those who were not directly affected – to know the scope and extent of the physical damage. Being on the inside of the event is another story. You do not have communication or news so you may not know if the event is localized or world-wide. Regardless of size, one of the sensations of catastrophe is a feeling of “Armageddon,” “Doom,” “Day of Destruction,” “Day of Judgment” or “End of the World.”

Question:

You just survived 5 days of massive earthquakes and aftershocks to your city. It is the middle of winter and it has been snowing heavily. Fierce fires have spontaneously erupted from broken gas lines. You haven’t heard anything from your family. There is no news from the outside – only rumors. Dead and dying people, young and old, are everywhere. Newly dead and injured are added every day. Hospitals are burned out and so are places of worship. The leaders and healers who are still alive are themselves lost and confused, just trying to survive and understand what happened.

You find a broken piece of glass with one word on it: design.

What would that mean to you?

You find a torn photo of someone smiling. What would that mean to you?

You find a single playing card. It is a 7 of Hearts. What would that mean to you?

Class #14

From Maze to Labyrinth

We have been raised in a society that values *choice*. Having choices gives us a sense of control over our own lives. We make a choice and then get to experience the ramifications of that choice including its unintended consequences. It is like having a luxury.

For people who are overwhelmed and in need of simplicity, having choices can be a reminder of what has been lost. It might even be fear-inducing. Consider the maze for a moment. A simple maze on paper that has only a few blind turns might be easily maneuvered with a finger sliding from beginning to end. Applying that to life, a few simple twists and turns might be an enjoyable journey.

A more complicated maze on paper might take some pondering and might result in a few dead-end turns and backtracking before getting to the end. Apply that same maze to life so that the maze is no longer on paper but is life-sized and you must now find your way through to the end. Unless you have the ability to “rise above it,” you may be forever lost in the twists and turns.

In our next class, we will look at how our thoughts can guide us through troubled times. Today we will look at a more visual way of “rising above it.”

The labyrinth is an ancient concept, found in many regions and cultures throughout time. There are many patterns, some more elaborate and some very simple. When you look at a labyrinth, it has many similarities to the maze except for one very striking difference: the way in is the way out. The entrance is also the exit.

There is another very different concept in the labyrinth: it is meant to be simple. You simply follow the path. Your mind can wander all it wants. It is a walking space that can be used for meditation since it takes no thought to maneuver its twists and turns and to make it through.

For those whose lives have been fragmented and maze-like, experiencing the labyrinth's simplicity for the first time might feel strange.

Catastrophes create a huge leadership void and when leadership does appear, it happens spontaneously. Under the circumstances, a high school or college degree is not necessary. In catastrophe, leadership is a natural gift, not necessarily something studied or acquired by age. Leadership is created when someone looks at a situation, decides something needs to be done and then does it. Others follow. It is that simple. It is that change from a maze to a labyrinth.

Being a leader in catastrophe's aftermath might mean assisting in reestablishing a cultural or sacred place for people to safely congregate, grieve and reset their lives. It might mean giving teenagers a sense of responsibility in building their future by doing community building activities like distribution of food and drinking water or passing messages/information from one location to another. It might mean to calm the situation so others can think more clearly.

It might mean setting up a data base of lost children and of parents who have lost their children. It might mean finding orphanages and making sure they have supplies to nourish and protect the children.

But, above all else, being a leader means building reliance between the leader and the people.

While the outside world response has high-tech communication at its disposal, the survivors don't have that luxury. Disaster survivors' communication is verbal or it is simple words written on tee shirts, encouraging and orienting. Being a leader can mean you are suddenly a primitive communication specialist.

Medicines we have come to depended on to survive in better times - insulin, high blood pressure pills, heart pills, transfusions, chemotherapy, antibiotics, pain killers, etc. - are non-existent or in very limited supply in the aftermath of catastrophe. Being a leader might mean helping people through a modern medicine withdrawal into more primitive forms of medicine. The reality is that not everyone who survives the event will survive the loss of medicines, food, water, shelter and protection.

This is the time to discard the restrictions of *who* you had become in your ordered life and be led by the simplicity of the spirit and the heart to do and be whatever is needed in the moment. For instance, I may be a nurse in good times but in catastrophe, I become a distributor to be sure that clean water, food, and medical supplies get to the people in need. My mode of transportation to accomplish this is whatever I can find – bike, horse or on foot if that is what I have.

This is a time to lead by example. Disorientation is real. Leading by example is the most effective way to lead.

In Lesson #7 we studied documents pertaining to catastrophic disaster. One of those was the National Incident Management System.

<http://www.fema.gov/emergency/nims/> Remember this question? Here is the answer.

Question: Who specifically are the emergency management/response personnel?

*Answer:and **individuals who take a leadership role.***

Assignments:

Locate a walking Labyrinth near you and walk it. If you are unable to locate one near you, look up some examples of labyrinths throughout history. Reflect on this experience.

What you will need for the second assignment: two mirrors and one other person.

Stand back to back with the other person. Looking straight ahead, each of you tell the other person what is in your view. This represents your point of view. These points of view will not be the same. Spend a moment arguing about whose point of view is the correct point of view. Next, hold up your mirrors so that you each can reflectively see the other person's point of view.

In catastrophic disaster, why would this be an important skill to have: to be able to see the other person's point of view?

Class #15

The New Reality

All the former props, best-made plans and best practices are gone but you can still use your mind and imagination – even when everything is beyond understanding.

Positive Psychology is a new term for an old concept. Within this discipline, scientists are meticulously collecting data in a verifiable manner about how the mind works... and more specifically, how positive thoughts change our reality. The goal of this discipline is to help build communities of individuals that don't just survive, but who thrive.

Research has now clarified the assets of people with resilience to stressors. By looking at this data, we can see that in catastrophe the normal things that would give us resilience are not there or are in a state of disruption, like supportive family and a sense of community structure.

We cannot depend on others or on a support system to pull us through the terrifying and heartbreaking moments, days and months ahead. What we must be able to depend upon is what we have at that moment.

Although having a bag of emergency supplies might be good for some smaller situations, it will most likely be destroyed in a catastrophe. If you should miraculously end up in the same space or somewhere near those supplies, they might be useful for the first few days of the extended search and rescue phase. (To learn more about what supplies FEMA recommends every person/family has on hand in case of emergency, see their website.)

It would also be helpful to take one of the Red Cross First Aid courses to learn some basic injury repair techniques. For those with more ambition in this area, becoming a volunteer Fire Fighter or Emergency Medical Technician (EMT) would certainly hone skills to help with individual and community survival. While

attending survival and disaster preparedness classes on line and in person and being physically fit are all important, there are more preparation tools available.

In catastrophe, the reality of our external environment's destruction may render our physical preparation totally inadequate. What might matter most may be our individual internal environment preparation. How have we prepared our mind?

A practiced mental attitude of (1) believing we have protection, (2) being grateful and (3) thinking, "I have everything I need" may be the most powerful internal environment preparations we can have to move forward into the unknown future.

And it would be easy to say that if we *believe* that we are protected and have everything we need, that it would be real in the physical world as well.

But these are two different dimensions of our human existence and may not be at all in sync with each other. We cannot just permanently retreat into the inner environment and disassociate ourselves from the external physical environment. We live in a good and evil world where bad things can and do happen to good people and good things can and do happen to bad people. So regardless of our situation, we need to be aware of both our inner environment and our physical environment, no matter how painful one may be.

Simply put, paint reality in true colors.

Questions:

What are some words of encouragement that were given to you at some point in your life?

How have those words alone carried you through tough times?

Part Four

Recapping



Comprehending Chaos
A Framework for Understanding Disasters

Class #16

Humanity After Calamity

Today is the last day of class. We hope through this course that you have developed some critical thinking skills related to catastrophe.

Our hope is that you will never experience first-hand the event described here, but if you do, the “learned memory” created through this class will be useful to lessen the blow.

Here are the basics recapped.

Respond to the disaster.

Step forward, be a leader and lead by example.

Assume the world has not ended even if it feels otherwise.

Use your mind and imagination to survive and to help others survive.

Within the world of the mind and imagination you are protected and have everything you need.

Practice gratefulness. Gratefulness attracts rather than repels good things.

Practice balancing reality with imagination.

Build and awaken resilience in yourself and in other survivors by removing fear. Sometimes a simple hug, eye contact and smile will do the trick.

Work together whenever possible.

Involve all ages in creating the new tomorrow.

Figure out where food and safe drinking water are located.

Set up a coordination and relief center.

See other points of view reflectively.

One of the first things to do is establish two-way information sharing.

Mysterious and unusual things might happen – you aren't in control.

There are hidden ingredients in the world of hope. Regeneration is a powerful force.

As the disaster unfolds, you are being changed.

Bury the dead with dignity if you are able.

And most of all take care of the living (including yourself).

The last thing we need to do before we finish this class is consider what would be appropriate to give or send to a catastrophe survivor and how can it best be done.

Using what you have learned in this course, what are characteristics of something appropriate to send or give in this situation?

Obviously, rescue, safe drinking water and food, medical and surgical care, warmth and protective shelter are the most basic gifts we can give. But if we give them out-of-sync with the survivors' needs, then these gifts are no longer gifts but rather become wasted aid. Instead of reestablishing self-sustainability, we create a dependency relationship. So, **Appropriate Timing** becomes one of the most powerful gifts we can give.

Remember our discussion on mobility. While relief money is spent to make the outsider aid agencies mobile in climate-controlled vehicles with high-tech communication, those who are living the nightmare are left on foot and must use low-tech communication like word of mouth. Getting **Reliable Alternative Transportation** to survivors up front in the first days is also a gift. With reliable alternative transportation they can participate in their own recovery, communicate with each other and distribute supplies.

One of the primary issues with the way disaster relief is currently managed is lack of coordination. At the same time, a common occurrence in this intense environment is to see otherwise exclusive groups of people of faith all working together in coordination. **Coordination** is a gift.

One very noticeable thing is the loss of color in many catastrophes. **Color** is something you might consider as a gift. In a gray and drab landscape, things that bring definition and dimension back might be an appropriate gift. Signs of life in the ravaged landscape can give a sense of hope and rejoicing in the midst of death.

Questions and Reflections:

Using one or more of the following: **Appropriate Timing, Reliable Alternative Transportation, Coordination and Color**, and using your imagination, what might a survivor's gift look like?

How would you get that gift to a survivor? (Think back to the Social Justice Issues we looked at.)

Reflecting on what you have learned, write a brief course evaluation.

Congratulations on completing this course!

References & Resources

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Research Findings on the Traumatic Stress Effects of Terrorism

by Jessica Hambley, PhD and Laurie B. Stone, PhD

<http://www.ptsd.va.gov/professional/pages/research-findings-traumatic-stress-terrorism.asp>

<http://www.ptsd.va.gov/PTSD/professional/pages/fslist-natural-disasters-terrorism.asp>

...(the) rates of distress and posttraumatic symptoms have been found to be high in individuals studied following terrorist events. Ultimately, reducing the risk of traumatic stress reaction is best accomplished by

- 1. abolishing trauma in the first place by preventing war, terrorism, and other traumatic stressors.*
- 2. The next best approach is to foster resilience and bolster support so that individuals have a better coping capacity prior to and during traumatic stress.***
- 3. The third best option is the early detection and treatment of traumatized individuals to prevent a prolonged stress response.*

(Authors' Note: Number 2 has been bolded by us. This course text falls under number 2.)

The American Psychological Association suggests “10 Ways to Build Resilience”

<http://www.apa.org/helpcenter/road-resilience.aspx>

Make connections. Good relationships with close family members, friends, or others are important. Accepting help and support from those who care about you and will listen to you strengthens resilience. Some people find that being active in civic groups, faith-based organizations, or other local groups provides social support and can help with reclaiming hope. Assisting others in their time of need also can benefit the helper.

Avoid seeing crises as insurmountable problems. You can't change the fact that highly stressful events happen, but you can change how you interpret and respond to these events. Try looking beyond the present to how future circumstances may be a little better. Note any subtle ways in which you might already feel somewhat better as you deal with difficult situations.

Accept that change is a part of living. Certain goals may no longer be attainable as a result of adverse situations. Accepting circumstances that cannot be changed can help you focus on circumstances that you can alter.

Move toward your goals. Develop some realistic goals. Do something regularly -- even if it seems like a small accomplishment -- that enables you to move toward your goals. Instead of focusing on tasks that seem unachievable, ask yourself, "What's one thing I know I can accomplish today that helps me move in the direction I want to go?"

Take decisive actions. Act on adverse situations as much as you can. Take decisive actions, rather than detaching completely from problems and stresses and wishing they would just go away.

Look for opportunities for self-discovery. People often learn something about themselves and may find that they have grown in some respect as a result of their struggle with loss. Many people who have experienced tragedies and hardship have reported better relationships, greater sense of strength even while feeling vulnerable, increased sense of self-worth, a more developed spirituality, and heightened appreciation for life.

Nurture a positive view of yourself. Developing confidence in your ability to solve problems and trusting your instincts helps build resilience.

Keep things in perspective. Even when facing very painful events, try to consider the stressful situation in a broader context and keep a long-term perspective. Avoid blowing the event out of proportion.

Maintain a hopeful outlook. An optimistic outlook enables you to expect that good things will happen in your life. Try visualizing what you want, rather than worrying about what you fear.

Take care of yourself. Pay attention to your own needs and feelings. Engage in activities that you enjoy and find relaxing. Exercise regularly. Taking care of yourself helps to keep your mind and body primed to deal with situations that require resilience.

Additional ways of strengthening resilience may be helpful. For example, some people write about their deepest thoughts and feelings related to trauma or other stressful events in their life. Meditation and spiritual practices help some people build connections and restore hope.

The key is to identify ways that are likely to work well for you as part of your own personal strategy for fostering resilience.

Appendix A Additional Resources

Concepts in this text could be expanded, developed and utilized in such classroom courses as:

Dynamic Earth Science
Psychology
Sociology
Social Justice
Pre-Medicine
Nursing
Public Health
International Policy
Government

Some popular books and movies with themes on *Resilience* include:

Harry Potter Series
Hunger Games Trilogy
Awakenings
United 93
World Trade Center
P.S. I Love You
Hotel Rwanda
Apollo 13
Charlie Wilson's War
The Kite Runner
The Fisher King
The Postman

