CONFLICT, CLIMATE CHANGE, AND ENVIRONMENTAL CATASTROPHE: HOW MEDIATORS CAN HELP SAVE THE PLANET

*Kenneth Cloke**

"Human history becomes more and more a race between education and catastrophe."

H.G. Wells

The recent oil spill by British Petroleum in the Gulf of Mexico highlights an escalating set of difficulties in our responses to environmental catastrophes, with echoes that resonate and reverberate with experiences responding to Hurricane Katrina in New Orleans, earthquakes in Haiti and Peru, firestorms in Russia, flooding in Pakistan, the tsunami in Indonesia, and others.

As population, technology, and globalization continue to increase, so will environmental deterioration, including global warming, allowing us to reasonably anticipate, and perhaps predict the following outcomes:

1. That environmental disasters will become more widespread, severe, impactful, costly and common;
2. That conflicts will be triggered by these events, and escalate as more individuals, groups, nations and eco-systems are impacted;
3. That these conflicts will accumulate around the failures in local, national and global emergency response systems;
4. That the ability to resolve these conflicts quickly and effectively will have a direct impact on the degree of damage they create;

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5. That mediation, collaborative negotiation and allied conflict resolution methodologies will increasingly be used to address and resolve disputes that result from environmental disasters.

I. The Logical Chain

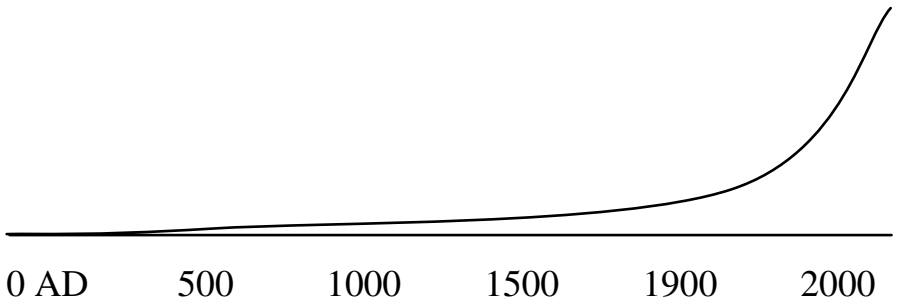
There is a more detailed chain of logic that can be offered to support these ideas that proceeds as follows. As human populations have grown more numerous and technologically advanced, we have naturally had a greater ecological impact on the planet. Simply by not paying attention for centuries and seeking to maximize our separate competitive short-term advantage as nations, corporations, and separated communities, we have wasted exhaustible resources, despoiled and desecrated our environment, and created the preconditions for mass extinction and global catastrophe.

As a consequence, it is no longer possible to pursue non-sustainable approaches to survival, particularly those that aggravate the problems we already face. Instead, these problems demand not only the collective attention of everyone, but respectful, collaborative, democratic ways of communicating; complex, creative, paradoxical ways of solving problems, and interest-based methods for resolving conflicts over how to address them. Without these shifts, it is likely that many people around the planet will not survive.

How do we know that this is true? A number of far-reaching environmental changes are taking place on a global scale, and increasing in their pace, momentum and potential to inflict disastrous consequences on human societies internationally. Perhaps the most important of these changes is that the *rate of change* is itself changing in an exponential direction.

Changes in the natural world can, of course, take place incrementally and piece by piece or exponentially and with increasing rapidity. Exponential changes look something like this:

EXPONENTIAL CHANGE



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Many of the most serious problems we face today reveal rates of change that can arguably be plotted along this curve. These changes include, but are by no means limited to:

- The size and density of human populations;
- CO2 and methane emissions that increase global warming;
- Species extinctions;
- Loss of bio-diversity;
- Loss of tropical rainforest and woodland;
- Desertification, erosion and loss of arable land;
- Decreasing genetic diversity in agricultural commodities;
- Loss of potable water;
- Loss of fish stocks;
- Resistance to antibiotics;
- Pollution, loss of bio-degradability, and use of toxic chemicals;
- Vulnerability to pandemics;
- Rising cost of medical care;
- Disruption of weather patterns;
- Increasing severity of natural catastrophes and weather conditions; and
- The global effect of local, relatively minor environmental decisions

In addition, we are facing worldwide problems in other areas that can easily trigger severe environmental consequences, escalate conflicts, and make it more difficult for us to solve these problems, including:

- The increasing destructive power and availability of military technology;
- Nuclear proliferation;
- Willingness to use war and resort to violence;
- Intentional targeting of civilians in warfare;
- Terrorism and unending cycles of revenge and retaliation;

- Acceptability of the use of torture and cruelty in response;
- Global financial crises;
- Financial cutbacks in government services, especially in education, corporate regulation and science and technology;
- Unregulated economic transactions;
- Increasing poverty, social inequality and economic inequity;
- Destabilization due to political autocracy and dictatorship;
- Rise in prejudice and intolerance;
- Hostility to immigrants, refugees, minorities and outsiders;
- Genocidal policies and "ethnic cleansing"; and
- Growth of the drug trade, sexual trafficking, and organized crime

In *Collapse*,[1] Jared Diamond argues from somewhat different premises that we are presently facing twelve sources of ecological and social collapse, each of which is growing steadily and has to be solved correctly in order to avoid catastrophic consequences:

1. Deforestation and habitat destruction
2. Soil problems (erosion, salinization, and soil fertility losses)
3. Water management problems
4. Overhunting
5. Overfishing
6. Effects of introduced species on native species
7. Human population growth
8. Increased per-capita impact of people
9. Human-caused climate change
10. Buildup of toxic chemicals in the environment
11. Energy shortages
12. Full human utilization of the Earth's photosynthetic capacity

In Diamond's well-researched account, it was rare for earlier societies to face more than one these crises at the same time or for them to spread beyond local limits, yet *all* seem to be occurring today, and no place on the planet is safe. Moreover, globalization has introduced a *synergistic* element into the feedback loop, allowing each of these crises to deepen and aggravate the others, speeding the rate of collapse and spreading it around the world.

Diamond also provides a framework for assessing the likelihood of environmental collapse, which includes a quantitative and qualitative assessment of the following criteria:

1. Environmental damage

[1] JARED DIAMOND, COLLAPSE: HOW SOCIETIES CHOOSE TO FAIL OR SUCCEED (2005).

2. Climate change
3. Hostile neighbors
4. Friendly trade partners
5. Society's responses to its environmental problems

Diamond does not explicitly cite funding for education, science and technology, or support for the use of a rich array of conflict resolution methods. However, the willingness to use mediation, collaboration negotiation, public dialogue, group facilitation, conflict resolution systems design, and similar conflict resolution techniques needs to be included in any realistic assessment of the likelihood of eventual ecological collapse. This is extremely important for our purposes, as we will see, since it places mediation at the very center of international efforts to prevent and respond to environmental disasters.

In a different, calmer, and therefore more shocking analysis, a number of scientists were asked earlier this year by *Scientific American*[2] to estimate the limits on growth, citing preindustrial levels, current levels, and their best estimate of the boundary beyond which more serious consequences might occur. Their results were as follows:

1. Climate Change:
   - Preindustrial CO^2 = 280 ppm
   - Current = 387
   - *Boundary = 350*
2. Ocean Acidification:
   - Preindustrial Aragonite saturation = 3.44 Omega units
   - Current = 2.90
   - *Boundary = 2.75*
3. Stratospheric Ozone Depletion:
   - Preindustrial value = 290 Dobson units
   - Current = 283
   - *Boundary = 276*
4. Nitrogen Removal:
   - Preindustrial value = 0 tons/year nitrogen removal from atmosphere
   - Current = 133
   - *Boundary = 39*
5. Phosphorous Cycle:
   - Preindustrial value = 1 ton/year flow into oceans
   - Current = 10
   - *Boundary = 12*

[2] *Boundaries for a Healthy Planet*, SCIENTIFIC AMERICAN (Apr. 2010), *available at* http://www.scientificamerican.com/article.cfm?id=boundaries-for-a-healthy-planet.

6. Freshwater Use:
   - Preindustrial value = 415 cubic kilometers/year
   - Current = 2,600
   - *Boundary = 4,000*
7. Land Use:
   - Preindustrial value = Negligible conversion to cropland
   - Current = 11.7%
   - *Boundary = 15%*
8. Biodiversity Loss:
   - Preindustrial value = 0.1 to 1.0 species per year
   - Current = 100
   - *Boundary = 10*
9. Aerosol Loading:
   - Preindustrial value = Negligible particulate concentration in atmosphere
   - Current = Undetermined
   - *Boundary = Undetermined*
10. Chemical Pollution:
   - Preindustrial value = Negligible amount emitted to or concentrated in the environment
   - Current = Undetermined
   - *Boundary = Undetermined*

In most of these cases, there is growing scientific consensus that we are well beyond the boundary conditions that permit environmental sustainability. A wide range of scientific reports from around the world confirm the existence of these problems, the urgent need for solutions, and the devastating consequences of failing to address them. In addition, several of these problems are synergistically related to others, so that deterioration in one will likely cause increased deterioration in others.

How is it possible for any of us to read this information calmly and do nothing about it? We have buried our heads in the sand for far too long and ignored escalating evidence that we are tilting our world in an unsustainable direction that will predictably result in environmental catastrophes.

Narrowing our focus to the issue climate change, even conservative scientific studies document the following recent significant shifts, with each appearing to increase irregularly on an annual basis, but significantly over decades. To demonstrate that global warming is happening, the following statistics for the 20th century

were presented in scientific papers that were circulated at the United Nations Copenhagen Climate Change Conference in 2009[3]:

- Global-average surface temperature has increased by about 0.6 °C over the 20th century
- The 1990s were the warmest decade and 1998 warmest year in last 1000 years in Northern Hemisphere, exceeded only by the decade that followed it
- Over the last 50 years, night-time minimum temperatures have increased by about 0.2 °C per decade
- There has been a 10 percent reduction in snow cover ice since late 1960s
- There has been a reduction of about two weeks in the annual duration of lake and river ice over the 20th century
- There has been a widespread retreat of mountain glaciers during 20th century
- Northern Hemisphere spring and summer sea-ice extent decreased by 10-15 percent since 1950s
- There has been a 40 percent decline in late summer Arctic sea-ice thickness in recent decades
- Global-average sea level has increased by 10-20 cm during 20th century
- There has been a 0.5-1 percent per decade increase in Northern Hemisphere mid-latitude precipitation during 20th century
- There has been a 2-4 percent increase in frequency of heavy precipitation events in Northern Hemisphere mid- and high-latitudes over latter half of 20th century

More recent studies have developed forecasts for the future impact of climate change that conservatively, to my mind, include the following projections:

- Global-average surface temperature is expected to increase by from 1.4 °C to 5.8 °C by 2100, a rate of warming that is unprecedented in the last 10,000 years
- Land areas will warm more than the global average
- Global average precipitation will increase over the 21st century, with more intense precipitation events and irregular precipitation in areas that have become accustomed to stable rainfall
- Snow cover and sea-ice are projected to decrease dramatically
- Glaciers and icecaps are projected to continue their widespread retreat

[3] These statistics were presented in various fliers and handouts that were collected by the author at the Copenhagen Conference.

- Global mean sea-level is projected to increase by 9 to 88 cm or more by 2100, and in some reports, by as much as 3 to 5 meters
- There will be a loss of agricultural stability as crops requiring temperate weather such as cereals move steadily north

The list of evidence continues, but somehow exceeds our ability to grasp it. One reason may be that we are surrounded with so many other, more immediate and palpable catastrophes. Another may be that the news media makes so much of catastrophe in order to attract customers and secure the advertising that pays their way and does not want anything that might be bad for business done about it.

A third reason may be that while these changes are taking place rapidly, and in some cases exponentially, a number of interdependent yet equally critical changes are taking place only gradually, slowly and incrementally, allowing us to feel something is being done about them. In other cases, changes are taking place that are actually reducing our ability to mount a global response to environmental problems and catastrophes. Collectively, these changes include:

- Implementation of solutions to poverty and hunger
- Reductions in bigotry and prejudice
- Assertions of territoriality
- Willingness to use warfare, torture, and threats of force
- Vulnerability of civilian populations to terror
- Ineffectiveness of national and international regulatory institutions
- Openness of political institutions, including in the US, to corporate influence, bribery and control
- Regulation of currency speculators, hedge funds, and multinational corporations
- Increased life expectancy and declining child mortality
- Vulnerability to infectious diseases
- Rising cost of medical care
- Elimination of illiteracy
- Mistreatment of women and children
- Slowness of government responses to ecological problems
- Antiquated methods of securing international cooperation to halt environmental destruction
- Lack of acceptance, training, and institutionalization of conflict resolution
- Awareness of the extent, seriousness and exponential change in environmental deterioration

The last item deserves special attention. One of the problems in responding to exponential change is that our awareness and understanding lag behind even the hardest scientific evidence. As Albert Einstein ominously wrote following the explosion of atomic bombs over Hiroshima and Nagasaki, "Everything has changed, except the way we think." But the way we think is perhaps the largest part of the problem, reminding us that, as Einstein also observed, "The significant problems we face cannot be solved at the same level of thinking we were at when we created them."

There is a wonderful story told by science writer K. C. Cole that illustrates the difference between exponential and incremental change and highlights its importance: Assume for a moment that two bacteria are living inside a bottle, and that they reproduce and double in number once each minute, allowing us to predict that at the end of one hour they will completely fill the bottle. How much advance warning will they have that they are about to do so?

The answer is nearly none, because at 58 minutes before the hour, with only two minutes remaining, the bottle is only a quarter full. At 59 minutes, the bottle is still only half full. In one more minute the bottle will be filled, and in another, the bacteria will fill an entire second bottle. It is likely, where change is exponential, that we will have a similar warning time to cope with environmental disaster.

A similar example comes from an ancient story involving a king who offered a mathematician who had performed an important service anything he wanted in return. Seeing a chess-board close-by, he asked for a single grain of rice on the first square, two on the second, four on the third, etc. The king agreed, not realizing that before reaching the 64th square, he would be giving more grains of rice than there are grains of sand on Earth.

II. Global Interdependency

We know from the scientific study of chaos and complexity that the flapping of a butterfly's wings in Brazil can trigger a tornado in Texas. Is it not equally possible for the killing an unarmed civilian by a US soldier in Baghdad to spark a hurricane of political anger that results in the death of equally unarmed civilians in an unrelated city elsewhere on the planet? Or, with similar hindsight, for a small mistake in the hierarchical transmission of information at BP to devastate an entire ecosystem?

The scientific definition of chaos is "sensitive dependence on initial conditions." As any system approaches criticality and begins to undergo a "phase transition," its previously stable systemic character becomes increasingly unstable and dependent on minor fluctuations in its environment. This scientific metaphor suggests that instability in the social, economic, political, or environmental conditions in one region can dramatic impact people in other regions.

The science of ecology reveals that the loss of even a single important species can quickly turn catastrophic, triggering a cascade of consequences vastly greater than anything we could have imagined beforehand. The same can be said of seemingly isolated events, such as those that followed the elimination of apartheid in South Africa, the collapse of Enron, or the assassination of Archduke Ferdinand prior to World War I.

If we consider, for example, avian influenza, or bird flu, it is clear that extreme poverty and a consequent reliance on domestic poultry for survival anywhere in the world will create favorable conditions for the H5N1 virus to mutate into a form transmissible by air between human beings. The ease of international travel, panic, and a desire to escape infection could then spread the virus rapidly to other countries, creating a platform for global pandemic.

Similarly, with regard to global warming, without a coordinated international response, scientists are nearly unanimous that significant temperature increases will occur before the end of the current century, leading to rising sea levels that will inundate many of the world's urban centers, triggering mass migrations, heightened competition for scarce resources, militaristic responses, and political polarizations that will make environmental problems more difficult to solve.

As we become more interdependent, a disaster in one part of the planet can easily turn into a catastrophe elsewhere, making it clear that global problems require global solutions.

III. The Problem with Existing Solutions

To solve any of these problems, and others we will inevitably confront as we proliferate, develop and expand, our disparate races, religions, cultures, societies, organizations, and institutions need to learn how to work together. To do so, we need better ways of communicating with each other, expanded skills in open and honest dialogue, and better techniques for solving problems, nego-

tiating collaboratively, and resolving disputes without warfare, coercion, and other adversarial methods.

This may sound simplistic, even idealistic. Clearly, our history of working together to solve pressing social, economic, political, and ecological problems offers few reasons for confidence. Instead, it reveals an astonishing record of avoidable disasters, pointless miseries, and needless deaths. For centuries, we have gotten away with murder, and no longer have resources to waste.

What is worse, these escalating problems *cannot* be solved completely or in time by nation states, or even by large groups of countries, or by the use of military, bureaucratic, and autocratic methods. Indeed, none of the following well-established, centuries old problem solving mechanisms by themselves can succeed in solving these problems:

- Military force
- Treaties and international agreements
- Legal interventions and rule of law
- Administrative rules and regulations or policies and procedures
- Power-based diplomatic negotiations
- National political leaders and institutions
- Capitalism and market principles
- The United Nations, as presently constituted

So what is left? The answer is, *we* are. While it sounds ridiculous, when it comes to solving global problems, mediation can make a difference. The good news is that as our problems have multiplied, so has our social and technological ability to solve them. We have vastly increased our scientific and technological capabilities in recent years, and have also enormously improved our understanding and skills in effective communication, group facilitation, creative problem solving, public dialogue, conflict coaching, collaborative negotiation, prejudice reduction and bias awareness, mediation, conflict resolution system design, and similar methods. And it is *precisely* these skills that we now need in order to "save the planet."

If we consider the BP gulf oil spill as an example, there were numerous well-recognized problems that led to that environmental disaster or contributed to making it worse. In my mind, these include:

- Dependence on fossil fuels

- Powerful oil and gas companies with assets and sales larger than the gross domestic products of all but a handful of nations
- Inadequate market mechanisms to dampen the lust for quick profits, creating an incentive to cut corners on costs, including safety
- Regulatory agencies that are led, managed and lobbied by people who pay greater attention to corporate influence than public safety and environmental sustainability
- Disputes over how to managing the off-shore platform that were resolved hierarchically, bureaucratically and autocratically, leaving those with direct experience of the problem without the power or authority to solve it
- Concentrating the problem solving authority in the hands of those who were more concerned with company profits than safety or environmental damage

In the BP spill, as in the Exxon Valdez spill before it, there was a concerted effort in political circles and in the media to find someone to blame for what happened. Yet a secondary effect of blaming individuals is that the system that permitted, caused, or encouraged the mistake is ignored and let off the hook, increasing the likelihood that there will be fresh occurrences in the future.

As described above, it is likely that environmental catastrophes are increasing in frequency, reach and cost, and in the process, are generating conflicts around the world, including arguments over causation, responsibility, and competition for scarce aid resources. Without mediation, open dialogue, collaborative negotiation, and a common approach to implementing solutions to these problems, improving aid and recovery, and systemic preventative approach to future disasters, relief will be less effective, and delayed by years, if not decades.

In BP and most similar disasters, and in negotiating climate change and similar international agreements, political leaders, envoys, and delegates continue to rely on classic international diplomatic processes, which are, for the most part, adversarial, distributive and power-based, and tend to be characterized by:

- Complex rules, protocols, policies and procedures that make the process arduous, bureaucratic and confusing, and discourage conversation, participation and informal problem solving
- Large, formal, highly-structured meetings with processes that are influenced by political agendas, and that attempt to consider multiple proposals to modify the language of legal documents

- Limited opportunities for small, informal, unstructured conversations with open agendas, collaborative dialogues, and creative processes designed to satisfy common interests
- Public declarations, official statements and pronouncements in which positions are elaborated without engaging in genuine exchanges, admitting mistakes, or stopping to discuss important questions, critiques and alternatives
- Traditional behind the scenes "hardball" negotiations, with arm-twisting, hidden agendas and adversarial, competitive bargaining tactics in which the largest, most powerful and wealthiest parties "win," while others "lose" and leave feeling excluded, disempowered and disrespected
- Disagreements over diverse approaches and proposals that escalate into hardened positions and avoidable conflicts that result in impasse because there are no conflict resolution professionals available who are empowered to assist in clarifying communications, brainstorming options, facilitating dialogue, and mediating solutions

Mediators, facilitators, ombudsmen and other conflict resolution professionals have had considerable experience designing effective negotiation processes over several decades, and most would agree that there are much better ways of reaching agreements and unsuccessful outcomes are not inevitable. It would be possible for the United Nations, without significant financial investments, to significantly improve the quality of conversations and negotiations at important climate change meetings in at least twenty ways, for example, by:

1. Conducting an in-depth, broadly inclusive, collaborative evaluation of the process used in Copenhagen and other climate change meetings to identify what worked and what could be improved
2. Consulting widely with diverse public and private sector organizations and individuals who have experience designing dispute resolution systems and can provide ways of improving the entire negotiation process
3. Developing a comprehensive set of process recommendations for future talks and securing agreement to implement them prior to the session, and brief delegates on them before they arrive
4. Creating international collaborative negotiation and conflict resolution protocols, model mediation language, and annexes to existing agreements that encourage a broad range of collaborative interest-based dispute resolution processes, including informal problem solving, mediation, ombudsmen, facilitated dialogue, and similar methods (see,

for example, the Mediators Beyond Borders proposal for language on inclusion of mediation language in climate change agreements)

5. Asking each delegation to future talks to include among their members one or more trained mediators, collaborative negotiators, ombudsmen, or small group facilitators who can assist in bridging differences as they occur
6. Assigning one or more UN mediators or ombudsmen to every delegation, and to each small group and problem solving meeting
7. Sending experienced negotiators, facilitators, ombudsmen, and mediators to meet with the parties in advance of conferences and negotiating sessions to help set targets and timetables and encourage compromises that could lead to better and quicker agreements
8. Drastically simplifying and reducing the rigidity and formality of protocols, rules and official processes, especially as they effect the negotiation and agreement writing process
9. Shortening large meetings and breaking participants up into small, diverse, informal teams to brainstorm alternatives, agree on common goals or shared values, and reach consensus recommendations on specific problems, led by facilitators and mediators
10. Offering free trainings throughout the process for individual delegations and teams in collaborative negotiation, group facilitation, and conflict resolution
11. Reaching agreement on a variety of next steps that can be taken when consensus is *not* reached, including dialogue, informal problem solving, collaborative negotiation, and mediation
12. Appointing fast-forming, diverse problem solving teams with experts representing all nations, regions, groups, types of alternatives and ranges of opinion, with professional facilitators and recorders to aid them in their work
13. Facilitating meetings of climate change experts and scientists to develop consensus-based recommendations, including them on problem solving teams, and convening meetings of diverse specialists to advise delegates on specific topics
14. Conducting open dialogue sessions on critical topics without attempting to reach agreement and providing multiple opportunities for free-ranging small group discussions, and open recommendations for ways of reaching consensus

15. Appointing facilitators, ombudsmen and mediators in advance for every meeting and asking them to recommend ways of improving the meeting
16. Focusing not only on reaching a single comprehensive agreement, but also on smaller, specialized, limited, tentative, provisional, national, regional and bloc agreements as well, then work to accumulate and amalgamate them into a single draft
17. Periodically conducting process checks to make sure everything is on track and making improvements as needed
18. Allowing facilitators to stop the process if it isn't working, discuss it openly, invite suggestions, and propose ways of improving it
19. Considering the entire multi-year agreement drafting process as a conflict *system* and use conflict resolution systems design principles to develop better ways of responding to obstacles, impasses, and conflicts as they occur
20. Continuing to search for preventative measures that can be adopted by all parties and UN organizations, that will help reduce the severity of future problems

The purpose of these ideas is to suggest that it is possible for professional mediators, collaborative negotiators, ombudsmen, group facilitators, and conflict resolution systems designers to contribute to making climate change meetings more effective and collaborative. Informal problem solving, collaborative forms of negotiation, mediation, and conflict resolution can also be used to resolve disputes that arise after agreements have been reached, and a culture of conflict resolution can be systematically reinforced.

A great deal is riding on the success of these negotiations and the world's most experienced conflict resolution professionals, if asked, would be pleased to work together to create a more thoughtful and acceptable set of recommendations for action. Thus, there is little to lose and much to gain from analyzing new approaches and experimenting with them.

This does not mean it will be easy to move away from existing processes or alter methods that are familiar and understood, even when they prove in practice to be ineffective, inefficient, and time-consuming. But mediators and conflict resolvers have faced similar difficulties before, and with the right approach, have experience convincing the parties to try new ways of achieving their goals and creating more successful agreements.

IV. What Needs to Be Done

Our ability to act in consonance with ecological limits is also reduced by our dependency for social status on luxuries and material possessions, our unrelenting economic expansion and competitive pursuit of profits, and our division into competitive undemocratic nation-states, adversarial political parties and factions, and intolerant religious orthodoxies. Each of these sources of chronic conflict reduces our ability to think and act globally.

A revealing report by an official British commission on global warming chaired by Sir Nicholas Stern recently reported that climate change "is the greatest and widest-ranging market failure ever seen." And former head of the US Fish and Wildlife Service, Mollie Beattie, wrote, "In the long term, the economy and the environment are the same thing. If it's unenvironmental, it is uneconomical. That is the rule of nature."

Still, the US and other governments continue to act in isolation, and use aggressive and hostile bargaining techniques, competitive market principles, power diplomacy, and threats of economic sanction or military force to achieve their goals, all of which reduce the likelihood of solving environmental problems globally and sustainably.

If we are to solve environmental problems internationally and sustainably over a period of decades, if not centuries, it is increasingly clear that we will not be able to deny people in less developed countries the right to improve the quality of their lives, or mandate the changes we want through military force or coercive adversarial negotiations. Instead, we require honest communication, genuine collaboration, democratic decision-making, and a massive infusion of interest-based processes, conflict resolution initiatives, and interest-based interventions on all levels.

As a result, we cannot adopt problem solving methods that allow the wealthiest countries to predetermine outcomes and processes in advance, or that pursue selfish economic policies, or that stack the deck in favor of nations that are already technologically advanced. If we do, others will resist and change efforts will falter. Instead, we require a collaborative *attitude* that encourages participatory problem-solving, greater use of consensus, and a shift from relying on power or rights to satisfying everyone's interests.

Over the last several decades, we have developed a powerful set of complex methods and techniques that enhance collaboration and conflict resolution. These have proven highly successful, even

with committed adversaries. While our skills have improved substantially, we have yet to fully acknowledge the need to adapt them to reducing either environmental conflicts or the chronic social, economic, and political hostilities that fuel them; or the need to implement them globally in a large-scale, organized, and coherent way.

At the moment, we are not even close to being able to respond sensibly or successfully to global disasters, let alone able to accept responsibility for solving the far more arduous problem of becoming ecologically sustainable in the long run. What is worse, the skills we need to leverage these changes are widely regarded as optional, too expensive, "touchy-feely," and threatening to the social, economic, and political status quo. How, then, do we overcome these obstacles?

V. Saving All Sentient Beings

There is an ancient Buddhist command that directs each of us to *personally* save all sentient or conscious beings. I have always thought this meant that no matter how difficult or seemingly impossible the task, it is important to extend compassion to others, focus on what blocks our growth and commitment, be mindful of our impact on others, and dismantle the pessimistic attitude that assumes it can't be done.

Changing times, however, require fresh interpretations, and I now believe this command needs to be taken quite literally. I believe it is uniquely the task of this generation to harness the power of conflict resolution and associated techniques and contribute to *actually* saving as many sentient beings as possible, principally by bringing conflict resolution to bear on environmental problems, building preventative global systems, and working to transform and transcend conflicts at their chronic internal and external sources.

There is a story about two people walking along a beach that is strewn with thousands of dying starfish washed up from a storm. As one of them began tossing the starfish back into the ocean, the other remarked, "What difference can that make?" The first person answered, "It made a difference to that one," and they both began throwing them back. More deeply, the Dalai Lama wrote, "'We' and 'they' no longer exist. This planet is just us. The destruction of one area is the destruction of yourself. That is the new reality."

Just as our personal development reaches a limit in our capacity for affection and compassion, as revealed in our *external* relationships with those who differ from us, our ability to make heartfelt connections with others rests on our *internal* capacity for affection and compassion. We cannot save ourselves without saving the world, or the world without saving ourselves.

Thus, the original paradoxical meaning of the command endures. In order to save others *and* ourselves, we need to become more aware of the environment and the impact we are personally having on it. This leads to the profound realization that we and the environment are not two, but one. We will only finally succeed in dismantling prejudice, greed, and brutality by becoming aware of their chronic sources internally within ourselves, and by redesigning the social, economic, and political systems that sustain them, transforming and transcending them in both their locations.

As science and technology revolutionize our understanding of natural phenomena, they exponentially expand our capacity to manipulate and change the world. But our compassion, open-heartedness, and wisdom have not grown at the same pace. And in the past, when science has outstripped wisdom, we have discovered that a lot of knowledge and little heart can be an extremely dangerous thing.

VI. The Way Forward

So how do we help save the planet? I believe that we start by educating ourselves about global problems and accept responsibility for improving them, including ourselves. Next, we realize that neither we nor any group or nation can succeed in isolation, and that the depth, seriousness, and reach of our problems *require* international collaboration. Finally, we recognize that our capacity for collaboration will remain limited in the absence of:

- Profound appreciation for the value and importance of diversity as a basis for unity
- Strategic insight into the chronic sources of social, economic, and political conflict
- Willingness to apply advanced communication, negotiation, and conflict resolution skills to the ways we interact socially, economically, and politically
- Concerted efforts to develop more skillful approaches to resolving conflicts before they result in intolerable, irreversible damage

- Readiness to redesign our social, economic, and political institutions and practices from a conflict resolution perspective

It is possible that we will not succeed. But are these not worthwhile goals in any event? Might they not lead to significant improvements in the quality of our communications and relationships, regardless of their eventual outcome? And do not our very lives, and those of our environmentally inseparable cousins in other species, increasingly depend on our doing so?

As the brilliant anthropologist Margaret Mead presciently wrote, "We are continually faced with great opportunities which are brilliantly disguised as unsolvable problems." The unsolvable problems we now face offer immense opportunities for improving our condition and rethinking our social, economic, political, and ecological relationships. Doing so will develop our capacity to prevent, resolve, transform, and transcend conflicts at their chronic sources, and allow us to see that the solutions to our problems are already imaginable and being lived every day. Historian Howard Zinn wrote: "We don't have to wait for some grand utopian future. The future is an infinite succession of presents, and to live now as we think human beings should live, in defiance of all that is bad around us, is itself a marvelous victory."

Mostly what is lacking is our realization that we can indeed make a difference. The world is waiting. As the surrealist artist Andre Breton wrote, "What are we waiting for? A woman? Two trees? Three flags? Nothing. What are we waiting for?"

[Portions of this article were excerpted from Kenneth Cloke, *Conflict Revolution: Mediating Evil, War, Injustice and Terrorism*, Janis Publications, 2009]