

Promoting Engagement in Climate Action: Developing Global Citizenship

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Abstract

This paper begins with two assumptions: First, that untamed economic development is contributing to climate change and destroying the natural environment; second, that insufficient collective action is being taken to halt this degradation. This paper seeks to understand this dilemma by examining it through the lens of psychology, especially, Group Relations Theory. This exploration leads to practical suggestions for facilitating collective action.

Faced squarely, the loss of the natural environment evokes strong and difficult emotions. Such feelings may include: 1) Sadness and mourning for the loss of aspects of the natural environment that may never be returned to their pre-industrial state, 2) anxiety concerning future scenarios that include the dramatic uncertainties of climate change and prospects of a lifestyle lacking in such basic natural resources as clean water and air, 3) anger at those who are perceived as responsible for the degradation of the environment as well as anger at our helplessness to reverse environmental damage, and 4) feelings of apathy, hopelessness, paralysis or denial at how enormous the problem is.

No environmental problem challenges our human tendency to deny environmental impacts more than climate change. This tendency to deny environmental degradation, and, therefore to fail to take collective action to reverse and restore environmental loss is illuminated by Group Relations Theory. Group Relations Theory has pioneered the study of the ways in which social constructions help us to manage difficult emotions (Hirschhorn, 1990). This theoretical frame illuminates the question of how social structures may serve as a defense against anxiety and other feared emotions. Once defensive systems are in place, they may successfully keep troubling emotions at bay for some time, but at a cost. Defensive social structures inhibit constructive creative problem solving and collective action. They create dysfunctional systems that inhibit the best performance of organizational and social actors.

Thus Group Relations Theory is an essential perspective through which to explore the dilemma of our failure to take collective action to halt climate change and the loss of the natural environment. We begin our exploration with a brief description of relevant aspects of Group Relations Theory. We then present evidence of how the defensive mechanisms of splitting and denial are embedded in our social structures and business systems, and serve to defend us against the unpleasant emotions evoked by the loss of the natural environment.

We find evidence of these defense mechanisms in the way wealthier nations export waste to poorer countries, in the way we organize the global economy, and in

some of the fundamental constructs of business education. Each of these mechanisms will be described as it serves to defend us against the difficult emotions provoked by the loss of the natural environment.

For example, business has very "successfully" developed practices, traditions; models that support our tendency to deny environmental degradation, and create the illusion that we can clean up our own space by throwing things "away." Denial is enabled by teaching incomplete, misleading business constructs.

We conclude with implications for action based on our analysis and on Group Relations Theory's tradition of practice. Solutions address the human tendency to deny inconvenient truths and to split off knowledge and emotions that make us uncomfortable. Solutions require us to develop our global citizenship, and incorporate into our home base parts of the world that have become repositories for our discarded pollutants – both physical and psychological.

International Treaties, for example, support the development of global citizenship because they focus on the world as a single, whole system. They invite us to face inconvenient truths about the loss of the natural environment. They have the potential to draw us out of denial. In order to engage climate action, we must deal with the underlying human tendencies to deny environmental impacts and loss. We must work on both a psychological level and an international level.

The Group Relations tradition uses experiential learning to raise awareness of discarded parts of ourselves, and allow us to reintegrate inconvenient truths. The paper will conclude with a description of the workshop, *One Planet Leadership: Developing Our Inner Global Citizen*, which has been designed using Group Relations methods.

Outline

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II. Business has very "successfully" developed practices, traditions, and models that support our tendency to deny environmental degradation, and create the illusion that we can clean up our own space by throwing things "away."

II.a. Organization of global supply chains and waste streams with most polluting facilities in poorer countries.

II.b. Fundamental business constructs and assumptions obscure and ignore environmental impacts of economic activity

II.b.1. Linear value chain ignores the environmental impacts of the use and disposal of products

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III. Solutions address the human tendency to deny and split off unpleasant emotions and ideas; develop our global citizenship, and encourage us to see inconvenient truths and the whole planet as one system.

III.a. Local solutions from historic communities.

III.b. International Treaties focus on whole systems

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III.b.2 The Kyoto Protocol treats the earth's atmosphere as a commons.

IV. Conclusion

I. Human Nature has a tendency to discard unpleasant and inconvenient truths.

This paper begins with two assumptions: First, that untamed economic development is destroying the natural environment; second, that insufficient collective action is being taken to halt this degradation. This chapter seeks to understand this dilemma by examining it through the lens of Group Relations Theory. We argue that viewing environmental degradation through a Group Relations lens will help us to understand our resistances to taking collective action and produce recommendations for constructive collective action.

Already environmental problems and degradation are of epic proportions. Ecologists Paul and Anne Ehrlich (1997) of Stanford University provide us with several well-established findings that are frightening: Humanity has already overshoot earth's carrying capacity by a simple measure: no nation is supporting its present population on a sustainable flow of renewable resources. A few examples are:

- Water from ...aquifers (stores of fresh water accumulated over thousands of years) which are recharged at rates measured in inches per year is being pumped out in feet per year p.40
- Rich agricultural soils which are formed at rates of inches per millennium are being eroded at rates of inches per decade.
- Species and populations of microorganisms, plants, and other animals are being exterminated at a rate unprecedented in 65 million years – on the order of 10,000 times faster than they can be replaced by the evolution of new ones.

Faced squarely, these developments evoke strong and difficult emotions. Such feelings may include: 1) Sadness and mourning for the loss of aspects of the natural environment that may never be returned to their pre-industrial state, 2) anxiety concerning future scenarios that include the dramatic uncertainties of climate change and prospects of a lifestyle lacking in such basic natural resources as clean water and air, 3) anger at those who are perceived as responsible for the degradation of the environment as well as anger at our helplessness to reverse environmental damage, and 4) feelings of apathy, hopelessness, paralysis or denial at how enormous the problem is.

All too frequently the focus is placed on scientific controversies (e.g., the extent that human activity contributes to climate change), rather than what actions need to be undertaken to address these environmental issues. We would note that this is further evidence of how difficult it is to face these profound and complex environmental problems.

I. a. Our tendency to deny environmental degradation, and, therefore to fail to take collective action to reverse and restore environmental loss is illuminated by Group Relations Theory.

While emotions are usually discussed as individual concerns, one psychological theory, Group Relations Theory, has pioneered the study of the ways in which social constructions help us to manage difficult emotions (Hirschhorn, 1990). Although Group Relations theory is often applied to the study of small groups or clearly defined units of a workplace (Gustafson & Cooper 1985, Rioch 1985), others have pioneered the application to whole organizations, social systems and societies (Miller, 1985, 1983).

This theoretical frame illuminates the question of how social structures may serve as a defense against anxiety and other feared emotions. Once defensive systems are in place, they may successfully keep troubling emotions at bay for some time, but at a cost. Defensive social structures inhibit constructive creative problem solving and collective action. They create dysfunctional systems that inhibit the best performance of organizational and social actors.

Thus Group Relations Theory is an essential perspective through which to explore the dilemma of our failure to take collective action to halt the loss of the natural environment. We begin our exploration with a brief description of relevant aspects of Group Relations Theory. We then present evidence of how the defensive mechanisms of splitting, projection and denial are embedded in our social structures and business systems, and serve to defend us against the unpleasant emotions evoked by the loss of the natural environment.

We find evidence of these defense mechanisms in the way wealthier nations export waste to poorer countries, in the way we organize the global economy, and in some of the fundamental constructs of business education. Each of these mechanisms will be described as it serves to defend us against the difficult emotions provoked by the loss of the natural environment. We conclude with implications for action based on our analysis and on Group Relations Theory's tradition of practice.

A group relations perspective on the loss of the natural environment can help us understand how social systems develop and function as a defense against anxiety and other difficult emotions. Two aspects of GR Theory are particularly salient to understanding how social defenses may interfere with taking collective action to halt the destruction of the natural environment. First, Group Relations Theory addresses the emotional side of human organizations that underlies work activity. Second, Group Relations Theory takes a social systems perspective, focusing on whole patterns of interaction among groups or individuals (Miller & Rice 1975, Rioch 1975, Wells 1980). Each of these aspects of the GR perspective is briefly explained below.

1.a.1 by focusing on emotional underpinnings of our social structures

Group Relations Theory can illuminate the covert and irrational aspects of organizations and societies. This perspective allows its practitioners to explore what makes an organization, or a social arrangement tick on an emotional level. This understanding is especially important when an organization or society seeks to make changes but experiences difficulty in doing so, as emotional underpinnings may be supporting social structures that are the target of change efforts. If these emotions are not recognized, efforts to change the structures and practices that they support will fail.

In a classic example, Isabelle Menzies (1975) applied this theory to a case study of a hospital nursing service. Nursing, she notes, evokes strong, disturbing emotions. Nurses' work requires touching the bodies of sick and dying people. Furthermore, nurses form attachments to their patients, and those relationships are bound to be broken.

To defend themselves against these emotional difficulties, the nurses in Menzies' study organized their work in a way that minimized contact with any particular patient. Lists of

tasks dominated the work schedule rather than lists of patients to be cared for in a more holistic way. Also, schedules of frequent rotation for students and shifts for graduate nurses prevented attachments. Thus the anxieties provoked by being close to sick and dying patients was controlled, but at the cost of holistic good care for patients and diminished work satisfaction for nurses. Only with this understanding of the emotional underpinnings of the current system, would change be possible.

Applied to the environmental crisis, this perspective suggests that the environmental crisis evokes strong and troubling emotions that would likely lead to the construction of social structures that protect us from experiencing those emotions. For example, in some industries Americans have evolved a system of manufacturing that places the most polluting part of the production process in a part of the world that is as remote as possible. This arrangement allows Americans to deny the extent of their pollution problem, but at the cost of failing to develop systems for cleaner production. In addition, this system creates an environmental injustice.

I.a.2. by taking a whole systems perspective and focusing on how Social systems develop to defend us against unpleasant and inconvenient truths.

Second, Group Relations Theory is inclusive, focusing on social systems or whole patterns of interaction among groups or individuals (Rioch 1975, Miller and Rice 1975, Wells 1980). This approach emphasizes the relationship between the parts of the system and their interactions rather than just examining the individual parts. All parts of the system are seen as interconnected. This approach allows us to explore how one part of a system may, unwittingly, serve to reduce the anxiety of another more powerful part of the system.

For example, environmental justice advocates argue that locating polluting facilities in low-income, minority occupied neighborhoods unjustly assaults the health of those less powerful citizens. A Group Relations perspective would examine the ways in which low power groups are exploited or used by more privileged groups. In addition, Group Relations theory would raise questions about exploitation, fairness and the power relationships that exist behind these arrangements and the emotional impact on both the underprivileged and privileged neighborhoods. Groups Relations theory also points us to the fact that exploiting others, although it may benefit some powerful groups, has a cost to the community which is frequently hidden and unrecognized.

Siting polluting facilities out of view of the wealthier, more powerful members of society reduces their anxiety about the degradation of the environment and fosters the comforting illusion that they are clean and safe because their waste is out of sight. However, when we use analysis which takes a whole system perspective, and consider the impact on poor as well as wealthy neighborhoods, the illusion of keeping environmental degradation at a distance is stripped away (Sosnowchik 2000).

II. Business has very "successfully" developed practices, traditions; models that support our tendency to deny environmental degradation, and create the illusion that we can clean up our own space by throwing things "away." Denial is enabled by teaching incomplete, misleading business constructs.

According to Group Relations theory, splitting involves separating out or breaking apart the positive and negative aspects of a whole. The person, group, organization or object comes to be seen as solely good or bad, rather than an intermingling of the two aspects. Splitting allows a simpler, more black and white view of the world, and defends us against seeing that both good and bad exist in the same person, group, organization or object.

Projection, another emotional mechanism emphasized by Group Relations theory allows us to maintain our psychological comfort by disowning aspects of ourselves that would cause discomfort. As human beings or in groups we take these disowned parts of ourselves and project them on to other individuals or groups. Through the joint mechanisms of splitting and projection we disassociate ourselves from things that make us feel anxious, weak, helpless and place them on other individuals or groups. Wells (1980) notes, "As human beings we have a tendency to act in self-serving ways. We eschew parts of ourselves that make us uncomfortable, but readily see those parts in others (p.177)."

When splitting occurs, the focus comes to be exclusively on the positive or negative aspects of an object or process. An easy way to recognize when splitting is occurring is that there is no room for a balanced view, and no ability to recognize the positive and negative aspects of one issue, object, person, or problem.

Take greed, for example. We achieve psychological comfort by first disowning this part of ourselves because it makes us uncomfortable. Then we locate the part in another person, group or organization that comes to represent, or symbolize the undesirable characteristic. (In our example, corporate CEOs symbolize greedy behavior.) Finally, we deny that we share the undesirable attribute, viewing it as a characteristic of the other. (We condemn those greedy CEOs, seeing them as the personification of "bad" and do not recognize our own consumptive behavior patterns and its impact on the natural environment.)

GR Theory emphasizes that, through this process, we are tied to the other, as we need them to carry the undesirable trait in order to perpetuate the illusion that we are free of it. We explore how these dynamics operate in order to reduce our anxiety concerning the loss of the natural environment in the following section.

Group Relations Theory suggests that when we consistently ignore prevalent or obvious dangers we are in a state of denial. Denial can function to allow us to enjoy the benefits of something without recognizing the dangers it poses to our health, our community or our world. Denial can function as a mechanism of defense against anxiety and other

difficult emotions provoked by the loss of the natural environment. Denial allows us to only see the positive side of an event or behavior, while ignoring the negative aspects.

II.a. Organization of global supply chains and waste streams locates most polluting facilities in poorer countries

Exportation is another mechanism used by wealthier countries for denying the waste and dirt that are the by-products of our consumption-oriented life style. “Out of sight, out of mind” is the operating principle. A dynamic of the globalization of business is the exportation of “dirty” manufacturing facilities to developing countries, and the growth of “cleaner” service industries on American, and other developed countries' soil. Some of the dirtiest (most polluting) industries, such as chemicals and automobiles, have been among the first to build manufacturing facilities in developing countries, such as China and Mexico, as geopolitical developments have opened these countries to such development. Thus glue fumes in Nike factories may sicken factory workers in Southeast Asia (Greenwire 1998), but that is far away from Western consumers of Nike shoes, and only occasionally brought to their attention by news reports.

At a conference on medical waste ⁽¹⁾ in the United States, the importance of cleanliness to status in the global community is apparent in the language and practices of the health care providers in attendance. An anesthesiologist describes a program, called “REMEDY,” to recycle surgical instruments that have been brought into the operating room but not used on the patient. These instruments are collected and treated as “contaminated waste.” They are sterilized, but still considered to be *not* clean enough for use on an American patient. They may, however, be shipped to hospitals in developing countries, such as Bulgaria, Albania, and Mongolia where they are gratefully received and used in human surgeries, or veterinarians may use them on American “animals.”¹

American surgeons defend this practice, by claiming that they do believe the recycled instruments are clean enough for use on other American human patients. They do not reuse these instruments, however, because to do so would open them to malpractice suits. Thus a hierarchy of cleanliness is created, with American human beings on top, and beneath them, other types of American animals and human beings from developing nations.

These practices are illuminated by the mechanisms of splitting, projection and denial. “Dirty” manufacturing sites and “contaminated” medical waste are exported to developing countries by more developed countries. Then people in the more developed countries project onto these developing countries that they are “dirtier” less advanced more backwards, less civilized. Developing countries split off the unwanted aspects of themselves (their own dirtiness, backwardness, etc.) and project these unwanted emotions on others.

Through this process developed countries can disown their responsibility for exporting heavily polluting industries to developing countries. The problem becomes located in the developing countries rather than seen as problem for both developing and developed countries to solve. Collective understanding and action about this type of environmental degradation are undermined through the disowning of responsibility.

II.b. Basic business constructs obscure and ignore environmental impacts of economic activity

II.b.1. Linear value chain ignores the environmental impacts of the use and disposal of products

One of the most basic concepts in business education is the value chain. Traditionally, business students are taught that industrial products are produced through the activities of a so-called "linear value chain." In this process raw materials precede through a progression of technological transformations, going from raw materials at the beginning of the value chain, and ending with a finished product in the hands of a consumer.

The particular materials and technological processes of a value chain define an industry. For example, the value chain for the refrigerator industry begins with extracted materials such as sand and iron ore and oil. The next step in the sequence may be converting the sand and iron ore into glass and steel and plastic. Then the glass and steel and plastic are transformed into refrigerator parts and motors. The refrigerator components are assembled into a finished product by a refrigerator company. Refrigerators are, then, distributed to people who will purchase and use them. Thus the traditional linear value chain suggests that material flows terminate with the "end user".

When I (first author) walk students through this sequence, in a sustainable business course, we create a diagram on the blackboard. The diagram is in the form of a straight line with industrial processes positioned along the line. Then I ask, "What's wrong with this picture"?

Immediately, students point out that the use and disposal of the refrigerator are left out. The linear value chain is incomplete, as we now know that it is the use and disposal of the refrigerator that creates the greatest environmental impacts.

I then introduce the work of Gunther Pauli (1998), a global citizen who has pioneered industrial processes that eliminate the concept of waste. Pauli describes one of his projects, a beer brewery in Namibia, where "industrial clustering" creates a very different kind of value chain.

At the Namibia brewery, one component of the brewery waste is used as an excellent medium for growing mushrooms, creating a mushroom business. Another component of the brewery waste is used to grow earth worms. The earth worms become feed for chickens. The chickens lay eggs, and the chicken waste is used to fuel the brewery.

Thus a single value chain creates several different businesses: beer, mushrooms, earthworms, chickens, eggs, and biofuel. A diagram of this value chain is characterized by circular loops – not a straight line. Rather than being obscured and denied, waste is focused upon as input to new business processes in this new, nonlinear value chain.

The value chain, seen through the lens of Group Relations theory, is incomplete as it does not include an essential aspect of the system: the waste products. The value chain hides from view a major component of environmental degradation. As taught in business schools the positive view of the value chain involves splitting and denial. When the value chain is taught it is assumed that it represents a great industrial march forward, with contributions from different industries or manufacturers along the way.

The focus is on how the value chain can be enhanced, where profits can be maximized and disintermediation. Rarely, is the value chain critiqued as fatally flawed because it represents the manufacturing process as totally positive (splitting) and leaves out the last part of the chain (denial). Group Relations theory points out to us that we need manufacturing models that take into account the whole process so we can understand and recognize the environmental dangers or risks which are built into the product life cycle.

II.b.2. Marketing traditionally focuses on point of sale, ignoring environmental impacts of product use and disposal

In his chapter, *Rethinking Marketing* (1999), Marketing Professor, Ken Peattie, argues that assumptions embedded in the traditional marketing discipline obscure environmental sustainability issues. Like the linear value chain, marketing studies, traditionally focus on the point of sale, ending when the product is in the hands of the consumer. Thus the environmental impacts of a product's use and disposal are hidden.

Other ingrained assumptions of traditional marketing work against expanding consciousness of the environmental impacts of consumption. Asking consumers what they want rather than what they need fails to educate people about the environmental impacts of a product. So, for example, US automobile makers asked and customers replied that what they wanted were more cup holders in their automobiles. US automakers installed the cup holders, but failed to examine their products in terms of energy consumption and sustainability.

Peattie cites another problem with the way market research is conducted. Traditionally researchers have asked consumers whether they would be willing to pay more for a greener product. This question contains an assumption that environmentally responsible products are more costly and conflict with business competitiveness. A better approach would be to ask consumers whether they want to continue subsidizing environmental degradation by purchasing and using products that are environmentally irresponsible.

The marketing approaches cited above all rely on the mechanisms of splitting and denial. Product disposal is not considered in most marketing studies, thus a major

impact of the product is hidden from view (denial). By asking consumers only what they want manufacturers avoid any discussion of the downside. Another way of presenting this information to consumers would be to present them with trade-off situations so that they could see the upside and downside of all choices. When customers are only asked what they want or presented with positive scenarios the mechanism of splitting is involved. The marketers have split off the unwanted aspects of the product, scenario or design and act like all is rosy and positive.

III. Solutions address the human tendency to deny inconvenient truths and to split off knowledge that make us uncomfortable. Solutions require us to develop our global citizenship, and incorporate into our home base parts of the world that have become repositories for our discarded pollutants.

The mechanisms of projection and denial are defensive maneuvers and over the long term result in creating more dangerous issues or conditions. Because of the interconnectedness of our ecosystem, exporting dirt turns out to be based on false assumptions. Scientists have determined that 25% of particulates in the air in Los Angeles drift in from China (Hotz 2007). Satellite photographs reveal plumes of pollution, from factories in Southeast Asia drifting across the Pacific Ocean to Los Angeles, California in the United States.

Scientific studies have also determined that some of the lead found contaminating children's toys and jewelry in the United States originated in China (Fairclough, 2007). Analyses determined that some of the lead in the contaminated products came from the electronic waste previously sent away to China from the United States.

Both the toys contaminated with lead from exported electronic waste and the presence of air pollutants from Chinese factories on the West Coast of the United States, challenge our false belief that we have sent this pollution away. The return of the pollution in children's toys or air borne particulates reminds us that we live on one planet and there is no "away".

Just like when we project unwanted aspects of ourselves onto others, eventually we have to face our own shortcomings; exported waste eventually finds its way back to our shores. Disowning waste by shipping it to other countries is not even a temporary solution. Group Relations theory helps us to test solutions for their defensive or exploitive nature and to chart ones that are less detrimental to us and the "other."

III.a. Local Solutions from historic communities

Ostrom (1990) found examples throughout history of communities that successfully governed common resources in a sustainable way. They developed rules that allowed the resource, such as water for irrigation, to be used by stakeholders without being used

up. These examples are inspiring because the communities managed their resources sustainably for long periods of time without violent conflict and without government regulations and enforcement. These communities were driven by the reality that to fail to govern the resource sustainably would result in a "tragedy of the commons" with critical shortages for all. We find hope for the future in such collaborative efforts where responsibility for an environmental problem is shared among producers and consumers, governments and citizens, neighborhoods and international bodies.

III. b. International Treaties focus on the world as a single, whole system, and Invite us to face inconvenient truths about the loss of the natural environment. They have the potential to draw us out of denial.

III.b.1. The Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal bars the transport of electronic waste to countries that will not manage that waste in an environmentally sound manner. A 1995 amendment prohibits OECD countries from exporting hazardous waste to non OECD countries (Sinding 1996).

The Basel Convention thus eliminates the "away" of wealthier countries' citizens. It encourages individuals to be "better angels" and to face the challenge of electronic waste and to devise ways of managing and processing this waste responsibly within their own borders.

One model for processing e-waste within an OECD country comes from a project organized within the electronics industry, The Electronics Product Recovery and Recycling (EPR2) Summit². This effort seeks to address the environmental problem created by the now considerable mass of electronic products that have reached the end of their useful life cycle. These products are inappropriate for disposal in either landfills or incinerators because they contain toxic ingredients and several states are considering enacting laws to prohibit disposal in these traditional ways.

For these products "there is no away." For the people involved in this effort, the illusion that the waste created by these products can be hidden or exported has been abandoned. The problem has been faced, and solutions are emerging. Model systems have producers, distributors and consumers sharing responsibility for stewardship of these products. Producers are creating infrastructures for taking back retired products, and are designing new products for easier disassembly and recycling. Retailers are serving as collection points for consumers to drop off used products. Consumers are taking responsibility for returning the used products to collection points rather than throwing them out with the trash. Entrepreneurial recycling companies are performing the actual disassembly and sorting of parts and materials contained in these products. Government agencies serve as coordinators and supporters of all of this activity.

Symbolically this program represents more than the physical removal of some electronics hardware from the waste stream. It is a model of collective action taken with

consciousness of an environmental threat. The sharing of responsibility among stakeholders may make the consciousness more bearable. One party's acknowledgment makes it more difficult for other parties to slip into denial.

These examples represent a move away from defensive maneuvers of splitting, projection and denial and recognition of the importance of a whole systems perspective.

III.b. The Kyoto Treaty treats the earth's atmosphere as a commons.

No environmental problem challenges our human tendency to deny environmental impacts more than climate change. Evidence of climate change is more apparent in some parts of the world than others. Controversy about the contribution of human activity to increases in CO₂ in the earth's atmosphere exists even in some places where evidence is overwhelming. While witnessing drowning polar bears and thawing tundra, some residents of Alaska doubt the relationship between industrial activity and the warming climate.

But in Bangladesh, one of the countries most vulnerable to the impacts of climate change, this is not a future issue but a present one. The country's leading climatologist says with tens of millions of people living no more than 30 feet above sea level, Bangladesh is at ground zero for global warming. Dr. Atiq Rahman says Bangladesh is "pummeled from all sides, from the south by cyclones. From the north flow rivers increasingly swollen by melting glaciers in the Himalayas" (de Sam Lazaro, 2008).

If, as some scientists predict, sea levels rise about three feet by the end of this century, about a quarter of the land mass of Bangladesh will, simply, disappear. It's already happening.

No environmental problem calls on us to behave as global citizens, to stop acting defensively and to create a new set of international institutions as much as climate change. The development of the Kyoto Protocol has been a process of increasing awareness of the importance of all countries participating and an increasing sense of urgency.

Beginning at the Earth Summit in 1992 in Rio de Janeiro, the Kyoto Protocol evolved from a voluntary to a binding agreement to reduce emissions of the gasses responsible for climate change (Reinhardt, et.al., 2006). The Protocol went into force in February 2005 with the European Community, Japan and Russia, among others, on board. The United States and China did not sign the Protocol. As countries prepare for another round of talks in 2009 in Copenhagen, the urgency and the importance of having all countries on board is apparent.

The Protocol is spawning new institutions that are governing economic activity, such as the European Climate Exchange, and the Clean Development Mechanism. These

institutions are creating opportunities for global citizens to take active roles in a new world order. New activities, roles and institutions emerging from the Kyoto Protocol are creating opportunity for individuals to take up conscious membership in a diverse world. These conscious global citizens will be inoculated from the human tendency to deny the environmental crisis, and will take part in creating solutions.

IV. Conclusion

We explored evidence above that in economically developed societies splitting, projection, and denial serve as social defense mechanisms to manage difficult emotions aroused by the loss of the natural environment. The result is that citizens of these countries are, to some extent, spared the sadness, anxiety and anger that confronting environmental crises entails. At the same time, they are paying the price of environmental unconsciousness and an inability to take collective action. A group relations perspective on developed countries relationship with the natural environment suggests that the remedy is to take back the split-off parts of ourselves. Thus reclaiming our grief, our anxiety and our critical selves is key to mobilizing collective action. But how can we do this?

It is now clear, in a terrifying way, that our uncritical economic development can have grave unintended consequences for the natural environment. Group Relations Theory points out that the feelings and attitudes we neglect, split off or deny will eventually come back to haunt us in some way or other.

This is a chilling example of our ability to deny. We act like we will find a solution to these dilemmas shortly or that we can keep putting off the day of reckoning. However, numerous communities have already experienced the devastating consequences of not looking at the risks more honestly.

The term, sustainable development, was meant to de-link economic development and environmental degradation. In order to change the environmentally unjust structures of global supply chains and waste streams, we must deal with the underlying human tendencies to deny environmental impacts and loss. We must work on both a psychological level and an international level.

On a personal level we need to develop global citizenship. A global citizen considers others whose natural environments may be impacted by their economic activity. On an international level we need to work on international treaties and institutions of governance and on revisions to basic business constructs. These new agreements will create a new world order that faces the reality of the loss of our natural environment, and enables solutions through collective action.

Notes

(1) Innovations in Health Care Environmental Health and Safety, Tufts University School of Medicine, June 1998, Boston, Massachusetts, U.S.A.

(2) The Electronics Product Recovery and Recycling (EPR2) Conference and The Electronics Recycling Summit, Arlington, Virginia, USA, April, 2001.

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