

FINDING THE BALANCE
FOR THE FUTURE OF GLOBALIZATION

*A HISTORICAL PERSPECTIVE ON THE
POLITICAL ECONOMY OF GLOBALIZATION AND THE ENVIRONMENT*

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ABSTRACT

Finding the Balance for the Future of Globalization:
A Historical Perspective on the Political Economy of Globalization and the Environment

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This study explores the connection between globalization and the degradation the Earth's biosphere by examining how the philosophy of economic integration between nation states throughout the history of global trade has led to the current global environmental crisis. Beginning with the first global trading system of colonialism, the process of economic integration, known as globalization, has led to economic patterns of production and consumption that have diminished the Earth's resources and created widespread environmental pollution. Over the past 500 years, a historical and philosophical link is drawn between the early global trade models of colonialism and the current laissez-faire model of global capitalism. Beginning in 1945, a contemporary model of globalization was institutionalized under the first world governance system directed by the Bretton Woods Institutions. Since then, global trade has rapidly accelerated to an unsustainable scale resulting in the Earth's sixth largest mass extinction. This author asks, what changes in our political economy must take place in order to create a balance between global trade and environmental protection? In response, two alternative models for the political economy are presented. The first is a reform model called sustainable development that is currently underway. Sustainable development seeks to balance the needs of the economy, society, and the environment for current and future generations to come. The second model is called restorative development and it seeks to fundamentally restructure the political economy away from a culture of imperialism and towards a culture of peace. The restorative development model fosters a society with spiritual and scientific consciousness and uses new forms of technology to restore abundance to nature's web of life. In conclusion, this work suggests that both models must be implemented in order to find a balance for the future of globalization.

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CHAPTER 1: Executive Overview

1.1 Introduction

“If the success or failure of the planet and of human beings depended on how I am and what I do...How would I be? What would I do?”

~Buckminster Fuller

Since my earliest childhood memories, I have been deeply concerned about the destruction of the natural environment and its effects on humanity. Throughout my undergraduate education I searched for answers. When I enrolled in the Graduate Program on the Environment at the Evergreen State College, I had a very broad and burning question, “How can we solve environmental problems worldwide?” Early on in my research I discovered that environmental destruction is a systemic problem that is rooted deep within the socioeconomic and political framework of imperialism. Its history is a complex series of events in human evolution and cultural behavior. I concluded that, in order to solve environmental problems worldwide, changes would have to be made through political and economic policy. Therefore I chose to focus my research on environmental degradation and its relationship to the political economy of global trade as it developed over the past 500 years. Political economy deals with political science and economics as a unified subject. It is the study of the interrelationships between political and economic structures and processes. In conclusion, this work offers recommendations for how to reform the political economy towards life-restoring policies that can bring humans back into balance with nature.

Research for this master’s thesis includes empirical and secondary investigations on economic globalization and its effects on the environment. Research was collected over seven years and fieldwork included attendance at over a dozen international conferences including the 2002 and 2003 World Social Forums (Porte Alegre, Brazil) and the 2002 United Nations World Summit on Sustainable Development (New York, Bali, Indonesia). I attended economic

conferences hosted by European and Asian central banks as a delegate with the Global Interdependence Center¹ in the Czech Republic and France (2004), Italy (2005), Estonia (2006), Ireland (2007), France (2008), and China (2010). Additionally, I was an attendee at the National Association of Business Economics (NABE) in Chicago (2005), the US Green Building Council conferences in (2005, 2007, 2010), and a delegate with the International Sustainable Institute on an eco-planning study in Curitiba, Brazil (2006).

During these conferences I participated in dialogue, policy formulation, and interviews with leading experts from around the world on a number of issues pertaining to the politics, history, and future of economic globalization. Using data compiled through formal and informal professional meetings with economists, central bankers, politicians, government officials, academics, indigenous peoples, women, youth groups, scientists, business people, and non-governmental organizations around the world, this study explores the history of events in our political economy that led to the depletion of the Earth's biosphere and what changes must be made to the political economy in order to avoid human extinction and restore ecological health.

1.2 Globalization and The Environment

The first chapter is an executive summary of the main concepts found in this body of work. It begins by tracing back the history of our political economy to the early trade models of European *colonialism* in the 15th century. Global trade subsequently continued through the post-colonial period, called *classical liberalism*, and the export-led development model, referred to as *neoliberalism* (IFG, 2002). Since the advent of the global trading system approximately 500 years ago, economic integration between all nation states of the world has been increasing.

Globalization is now the modern term for this continuing process of economic integration (IMF,

¹ www.interdependence.org

2000) and is historically rooted in the practice of imperialism² (Parenti, 1995). This imperial ideology in the development of the political economy has led to an ongoing war against man and nature.

Chapter 2 explores the historical process of globalization that started with the spread of colonialism and (*Northern*) European military power, religion, science, governance, and institutions to (*Southern*) colonies in the Americas, Africa, India, and East Indies. It involved the occupation of land, the subjugation of native people, the spread of poverty, the rapid exploitation of natural resources, and the destruction of ecosystems. In the 20thth century, a contemporary form of globalization came under the first world governance system for global trade directed by the policies of the Bretton Woods Institutions. Contemporary globalization (1945-present) is a time of economic imperialism in trade that has accelerated to an unsustainable scale, resulting in widespread poverty and environmental destruction worldwide. Contemporary globalization is explained in detail in Chapters, 3, 4, and 5.

Chapter 2 continues by examining ecological thought and behavior as it developed along dominant (Imperial) and subdominant (Arcadian) philosophical and scientific trajectories (Worster, 1994). The subdominant ethic towards nature called the Arcadian tradition of science is rooted in pre-Christian, pagan cultures and honors the interconnectedness and kinship between man, god, and nature. The Arcadian ethic has been subdominant to the Imperial ethic towards nature rooted in the Western philosophy of Christianity. The Christian belief that nature was man's domain to be controlled, rearranged, or altered as he so desired, led to an imperial approach in both the political economy and the fields of science. As a religion, Christianity held an indifference and antagonism towards nature. This detached, external view of nature was made possible by overthrowing the pagan, earth-based, feminine, and native views of spirituality. As a

² Imperialism is the state policy of extending a nation's authority by territorial acquisition (using military force) or by the establishment of economic and political hegemony over other nations. Before the 15th century imperialism had a long history in the succession of empires in Asia, and the Mediterranean.

result, Christianity detached man emotionally and morally from nature, allowing him to be exonerated and justified for his violent conquest over native people, animals, women, and the environment. Consequently, the political economy was developed for the advancement of human empire. The scientific tools used for this advancement were developed with a disregard for the natural environment, thus resulting in technology that lacks a complete understanding of the principles of mathematics, engineering, and physics. This led to centuries of inefficient technologies and unabashed environmental destruction.

By the early 20th century the quest for human empire led to worldwide financial collapse and the devastation of two World Wars. In the aftermath, Western nation states banded together to create a more peaceful and just system for global trade under the global governance of the Bretton Woods Institutions in 1945. This new, unprecedented model of contemporary economic integration was conceived to help make trade more efficient and predictable. It has undergone three phases in the development of the political economy since 1945, all of which have favored the Imperial ethic over the Arcadian ethic in global trade, resulting in decades of economic imperialism. This has exacerbated the problems of ecological devastation at the global scale.

Chapter 3 explores the first phase of contemporary globalization in the post-WWII years between (1945 and 1971). During this time global governance institutions were formed and put in place through an agreement between allied countries, signed in Bretton Woods, New Hampshire in 1944. The newly created Bretton Woods Institutions (BWI)³ adopted Keynesian⁴ economic models of regulated capital flows in global trade. Keynes's models were subsequently transferred

³ International Monetary Fund (IMF), The International Bank for Reconstruction, and Development (later renamed the World Bank) and the International Trade Organization (finalized as the General Agreement on Tariff and Trade [GATT] in 1948 and the World Trade Organization [WTO] in 1995).

⁴John Maynard Keynes was a British economist and author of *The General Theory of Employment, Interest, and Money* (1936). He was a revolutionary in the sense that he challenged the assumptions of the earlier classical liberal schools of economic thought. He suggested that free market systems had a propensity towards instability and proposed a new range of vigorous government action to remedy it. The Keynesian policies of regulated capital flow and full employment through mass consumption and production held sway over economic policy in the political economy from 1936 to 1971.

to the economies of the Third World where development became the task of BWI economists who believed that the problems of poor countries could be rationally assessed and technically managed with the aid of Western guidance (Brohman, 1996). For American workers, the first phase of contemporary globalization was a time of unprecedented growth, US expansionism, and government policies supporting social welfare. During this phase, growing awareness about the loss of wilderness and the impacts of industrialization on the environment began to surface.

Chapter 4 describes the second phase of contemporary globalization when regulated exchange rates and controls over the movement of capital between nation states began loosening, allowing the deregulation and privatization of public goods between (1971-1989). During this phase, US corporations and the Bretton Woods Institutions worked to dismantle Keynesian economic models of global trade in favor of laissez-faire neoliberal models.⁵ Corporations grew in size, wealth, and political power. By 1981 neoliberalism became the economic model advocated by the United States and the Bretton Woods Institutions, which primarily benefited Northern corporations. Conversely, many Southern developing countries fell into spiraling debt with Northern corporations and the BWIs as they attempted to use development loans to build a free market economy. Free trade had destructive impacts on the environment in developing countries during this time because of the unregulated and rapid extraction of their primary natural resources at volatile commodity prices. Emerging environmental scientists and activists launched a global movement to warn humanity of the environmental consequences associated with the capitalist model of global trade. Several ecological fields emerged and, in some countries, such as the United States, legislative action took place in order to protect air, water, and food quality. In the United States the social contract that American workers enjoyed in the first phase of contemporary globalization began to erode as Northern corporations downsized and shipped

⁵ Neoliberal economics is a new form of neoclassical liberal economic theory. Neoliberalism places a new emphasis on supply-side factors, private initiative, market-led growth, and outward-oriented development, while turning away from older development policies based in demand stimulation, import-substitution, state intervention, and centralized development planning (Brohman, 1996).

good-paying US jobs with benefits overseas to the South at lower wages. By the end of the second phase of contemporary globalization, regulatory and state-controlled economies worldwide were largely abandoned by nation states in favor of free market liberalization under neoliberal models of global capitalism.

Chapter 5 outlines the third phase of contemporary globalization, when the concept of globalization was popularized worldwide (1989-present). It is associated with the fall of state-controlled economies in Eastern Europe, and the subsequent institutionalization of neoliberalism into the Bretton Woods Institutions. During this era, neoliberalism went on to change US laws and national sovereignty through the ratification of new, far-reaching global trade agreements, including the North American Free Trade Agreement (NAFTA) in 1994, and the World Trade Organization (WTO) in 1995. New laws for deregulated global trade diminished environmental protection and made it difficult for individual nation states to enact any law that would restrict access to the extraction of natural resources by corporations. During the third phase of contemporary globalization, a plethora of scientific publications linking the global trade model to environmental degradation were published. However, the political economy remained immune to environmental warnings from research groups and laws that might hinder corporations from extracting, polluting, and rapidly exploiting natural resources. As a result, the third phase of globalization culminated in a financial crisis and multiple environmental crises. Chapter 5 concludes that society can guard against the loss of biodiversity needed to sustain a global economy, however the current *laissez-faire* model of neoliberalism must be replaced with a new political economy that can integrate protection for society and the environment into international trade agreements that are enforceable by law from the local to global levels.

Chapter 6 begins with the assumption that in order to address the root of environmental problems worldwide a change in the present political economy must take place. Change is possible through both models of reform and restructuring of the global trading system, and in some cases these two models overlap and coexist (Khor, 2002). Chapter 6 explores the reform

political economy known as sustainable development. The reform model of sustainable development seeks to balance the needs of the economy, society, and the environment for current and future generations. Sustainable development reform does not necessitate a change in the Imperial ethic, rather it is an internal reshuffling of priorities and incremental policy change implemented by established organizations such as the Bretton Woods Institutions. Direction for sustainable development reform is being articulated by the United Nations, with the help of civil society organizations, at the global governance level and being adopted through many national, regional, and local governments. The business community is also adopting sustainable practices in some cases and voluntarily reforming production processes to save money by reducing wastes and inefficiencies. There is hope that sustainable development reform will mitigate the impact of global trade on the environment and create strong economic growth through a new green economy. Chapter 6 discusses new tools for a sustainable development approach to the political economy including natural capitalism, ecological economics, and environmental accounting.

Chapter 7 explores restructuring the political economy towards a paradigm shift in science, spirituality, and human consciousness called restorative development. Restorative development necessitates the rejection of its time-honored philosophy of imperialism in favor of a new culture of peace, incompatible with the Imperial ethic. Restorative development heralds a return to the Arcadian ethic towards science, god, and nature, where holism and interdependency shift the human view of separateness with nature towards an understanding of interconnectedness with the whole of the universe. The restorative political economy seeks to reestablish the health of human and ecological relationships from the bottom-up, with strong emphasis on personal responsibility, community involvement, and participation in local decision-making. Restorative development reverses negative cultural and ethical behaviors such as the use of exclusion, violence, and war in international trade. Chapter 7 discusses global and local initiatives for a restorative political economy, including replacing the Bretton Woods Institutions, restorative local economics, and the new age of consciousness in science and spirituality. This thesis concludes in

Chapter 7 with the recommendation that both models of sustainable development and restorative development are necessary to create balance between the global trading system and the environment for the future of globalization.

CHAPTER 2: A History of Globalization and Ecological Thought

2.1 Imperial Beginnings

Globalization is a modern term for an objective and subjective process of economic integration between nation states that is not, “an outcome or a condition, but rather a process that the world is currently experiencing” (Gordon, 2001, p. 5). The International Monetary Fund describes it as “ a historical process, the result of...increasing integration of economies around the world, particularly through trade and financial flows” (IMF, 2000). Globalization has been evolving since global trade began over 500 years ago. The common use of the term was popularized in the late 1980s to describe expedited international trade, communication, and financial flows (IMF, 2000). Currently, globalization has reached a scale where its policies now threaten ecological integrity on the planet. In order to prevent further ecological decline, a historical perspective on the evolution of globalization is helpful to understanding how to correct imbalances in the future.

Initially European countries brought about a rise in global trade and engendered the first global trading system, known as colonialism. Colonialism was a crude method for trade and wealth accumulation. It was accomplished by conquering new land and cultures, then subsequently removing their resources by force. In 1492, Christopher Columbus became the first in a long line of infamous conquerors to invade the Americas and her inhabitants in the name of the Spanish Crown.

The phrase "discovery of America" is obviously inaccurate. What they discovered was an America that had been discovered thousands of years before by its inhabitants. Thus, what took place was the invasion of America -- an invasion by a very alien culture. (Chomsky, 1999, p. 63)

When Christopher Columbus arrived in the Bahaman Islands from the war-torn continent of Europe he was greeted by the Arawaks, an indigenous people remembered for their culture of

hospitality and belief in sharing (Zinn, 2003). Columbus on the other hand, was conditioned by a culture of imperial wars and feudalism in Europe. Therefore, he later wrote in his travel log:

They...brought us parrots and balls of cotton and spears and many other things, which they exchanged for the glass beads and hawks' bells. They willingly traded everything they owned...They were well-built, with good bodies and handsome features....They do not bear arms, and do not know them, for I showed them a sword, they took it by the edge and cut themselves out of ignorance. They have no iron. Their spears are made of cane....They would make fine servants....With fifty men we could subjugate them all and make them do whatever we want. (Jennings, 1975)

Shortly after his first voyage, Christopher Columbus and his predecessors began a 500-year imperial expansion of Western ideology around the globe that claimed over 100 million Native American lives in its first hundred years (Chomsky, 1999). The colonial system grew into a competitive mix of European *imperial* countries, commonly situated geopolitically in the *Northern* Hemisphere (e.g. Spain, Portugal, Netherlands, England, France). Imperial countries used military power to forcefully take economic and political control over a *colony* or country, primarily located further in the *South* (Africa, India, Latin America). Japan joined Northern imperialists in the 19th century and came to dominate other Asian countries.

The colonial trade system was the first organized political and economic relationship between the global North and South. Through a system of tax and tariff exchange, slavery, and servitude, wealth in the form of land, labor, and natural resources, was transferred from Southern colonies to Northern imperial countries (Zinn, 2003). It was unabashedly a relationship of domination. Resources and labor were forcibly extracted from the colonies as raw materials for export industries in imperial countries (Korten, 1996). Imperial nations such as England forbade their colonies to develop industrially even though they had the resources to do so. This was done in order to maintain a cheap supply of natural resources that could be remanufactured in England and sold in European markets or back to colonies as finished goods. This began centuries

of inefficient and wasteful global patterns of trade that continue presently, in which natural resources are shipped back and forth between continents multiple times during commodity production, costing enormous amounts of time, labor, and energy.

European social conduct in the New World reflected the conditioned behavior of imperial oppression in Europe under the feudal system. The conquering of indigenous people therefore came naturally. They were labeled as backward nomadic savages and therefore justifiably made into slaves and legally treated like beasts. Native cultures were intentionally destroyed to make way for Christianity and the laws of Europe's imposed settlements. Colonialism sought to systematically destroy existing native traditions and reorganize them into "civilized societies" that adopted Western culture. Religion played a key role in the social transformation of indigenous people. Christianity was exported to the New World through the most influential sociopolitical organization of the Western world at that time, the Roman Catholic Church. Natives were forced to worship the strange and foreign European god Jesus Christ, who justified their ill treatment on Earth, and promised them salvation after death.⁶ Exonerated by the Church, merchants and conquerors set out to claim rights to new land and resources in the name of god, similar to the ways in which feudal kings violently claimed divine ownership over land and resources in Europe. Millions of indigenous people became victims of the same imperial governance and servitude that had plagued Europe for hundreds of years.

⁶ In March of 2000 Pope John Paul II released a formal document and performed a special mass at St. Peter's Basilica to ask forgiveness for centuries of sins. He acknowledged the church's acts of violence and oppression against women, natural healers, midwives, native people, scientists, people perceived to be heretics and non-believers over the centuries. The document references jailing, burning alive of individuals, torture, and genocide against entire religious faiths. Pope John Paul II acknowledged the violation of human rights and the enforced conversion of non-believers. He also apologized for the church's crimes committed against Jews, and for not speaking out against the Holocaust. Retrieved from www.religioustolerance.org/pope_apo.htm.

2.1.2 Imperialism, Spirituality and Nature

Christianity played a key role in detaching humanity spiritually and morally from nature. As a religion, Christianity held an indifference and antagonism towards nature, excluding all but man from the realm of divine grace. It promoted the view that the Earth's bounty was designed by the creator for man to dominate and control (Worster, 1994). Animals were declared to have no souls, and thus, no claim on man's moral sympathies. Women were subordinated to men in society and often given no equal rights, education, or decision-making power.

In pre-Christian societies and religions men and women often saw their place together within nature's garden, rather than expelled from it. Spirituality was deeply rooted in nature, and deities often took on the persona of animals such as the pagan goat-god Pan piping on his flute, or the Hindu god Ganesha who was depicted in the image of an elephant. Many agriculture societies worshipped the Earth Goddess and respected the feminine principles in nature including fertility and reproduction (Campbell, 1998). Even in cultures where empire was present, such in Egypt and Mesopotamia, female goddesses were often worshipped and held in high regard. In indigenous cultures, native people felt deeply connected to spirits in nature and prayed to them. They believed that guardians and spirits lived in every tree, every stream, and every hill.

Christianity on the other hand did not idealize humankind's relationship with nature or the divine gifts of the feminine. Rather Christianity removed the feminine principle from the sacred holy trinity and idealized instead the relationship of an obedient son to his father, or a faithful flock of believers in Jesus Christ to their pastor. The image of Pan (and nature) became the source of demonic threats and fleshly desire caused by animal instincts, which Christianity asserted must be forcefully repressed. By discrediting Earth worship and recreating god and his saints in man's image, Christianity made it possible to exploit nature with a mood of indifference towards the natural world.

As the study of science evolved under the influence of Christian religious society, it developed a subdominant and dominant philosophical ethic towards the human relationship with nature (Worster, 1994). The subdominant ethic towards nature, called the “Arcadian” tradition of science, expressed man’s interconnectedness between god and nature. The Arcadian ethic was first popularized in the 16th century classic poem *Arcadia*, by Jacopo Sannazaro (1534). *Arcadia* idealized a pastoral lifestyle based on a peaceful and artful co-existence with nature. This ethic subsequently developed into a naturalist science, which spawned the concepts of organicism, conservation, and the field of ecology. The Arcadian scientific view was antithetical to the growing machine culture in Western science isolated from the natural world. It rejected the advent of industrial society and its methods of scientific analysis. Arcadians saw the factory system as increasingly isolated from nature and ripping at the moral fabric of the village community (Emden, 1956). Early Arcadian scientists such as parson-naturalist Gilbert White wrote about the concepts of holism, and held reverence for the divinity of all living things. Arcadian philosophy was epitomized in White’s (1789) publication, *A Natural History*, where White found himself part of the interconnected and benevolent splendor of the creator’s web of life, in which abundance and purpose was provided to all.

The Arcadian view of science was subdominant to the Imperial view of science rooted in Christian society, which sought to conquer the Earth physically, spiritually, and technologically. Early Western philosophers such as Francis Bacon shaped the development of scientific thought with several published works including *The New Atlantis* (1597), which promised a new Garden of Eden designed by scientists. His view reinterpreted the relationship between man, nature, and god as one of control, domination, and acceptance. Bacon wrote that the Earth was made for man, not the other way around, and that god wanted man to use the bounds of nature to build a Human Empire. Bacon’s view towards nature increasingly fragmented and ignored the complex whole of nature’s relationships. Bacon’s sentiments encouraged society to forge ahead and conquer nature with the Imperial ethic that nature was man’s domain to be controlled,

rearranged, and altered, as he so desired. As a result many in the scientific community adopted the Imperial ethic and belief that human knowledge and technology was superior to that of nature.

As Western science developed, imperialism continued to play a prevailing role in the growing theory of the political economy. Consequently, the tactics of the colonial economic era continued through the more sophisticated mercantile era of trade, when advances in technology were used to benefit the rise of European empires.

2.2 Mercantilism

By the early 17th century increased global trade spawned a new economic philosophy known as Mercantilism. Mercantilism stimulated the first efforts to formulate what we now call the study of political economy (Heilbroner, 1999). European statesmen and merchants began developing principles for trade based on national policies of accumulating bullion, establishing colonies, maintaining a merchant marine, and developing industry to attain a favorable balance of trade. Export surpluses with foreign countries were preferable to deficits for trade, and state-imposed regulations were legitimate if they helped to attain those objectives (Beyon, 1999). Mercantilism did not become a formal doctrine but, rather, a new philosophy of shared beliefs and practices for trade amongst elites (Heilbroner, 1985). According to mercantilism, the wealth of a nation depended primarily on how much gold and silver it possessed. Great power and wealth only came to those kings and elite merchants who were successful at extracting and accumulating vast quantities of gold and other precious metals. Gold extracted from colonies allowed a country to hire more ships and militia to go on expeditions for more land and gold. It was the perfectly lawful way of obtaining more wealth for a nation.

The first director of the East India Company, Thomas Mun, explained in his (1664) *England's Treasure by Foreign Trade*, that England's best means as a nation for increasing its wealth

and treasure was by trade, “wherein we must ever observe this rule; to sell more to strangers yearly than we consume of theirs in Value” (Mun, 1664). Mun also suggested exporting goods with inelastic demand because of higher yielding prices. The governor of the East India Company at the time, Josiah Child was also a proponent of competitive trade and advocated for low interest rates regulated by state authority in his (1668) work, *Brief Observations Concerning Trade and the Interest of Money*.

As trade increased an interdependent relationship between the ruling class (state) and the merchant class (capital) emerged. This was because mercantile trade relied on strong state enforcement by monarchies to impose heavy regulation on imported goods to protect domestic merchants (Heilbroner, 1985). The accumulation of capital and private property also needed a legal framework of protection and legitimacy of ownership. Political philosopher John Locke⁷ wrote in *The Second Treatise of Government* published in England in (1698), “The great and chief end...of men’s uniting into commonwealths and putting themselves under government is the preservation of their property” (Locke, 1698). Henceforth, both the state and capital class became dependent on each other (for wealth creation and protection of wealth) yet, at the same time, they became rivals for economic advantages and political control. Nonetheless, as with colonialism, the benefits of mercantile trade pertained only to the economic and political elite class in imperialist countries, and excluded the poor (labor class) at home and abroad.

⁷ John Locke was an influential economic thinker who published his book during a time when the English were rebelling against tyrannical kings and setting up a parliamentary government. His book was explicit on defining political rights and the role of government for the bourgeois, while ignoring inequality in property ownership and the plight of the poor. Locke, a man who had grown wealthy from investments in the slave trade was in favor of the free development of mercantile capitalism both at home and abroad. Locke was in favor of child labor and suggested that all children over the age of three should attend “working schools” so they would be “from infancy...inured to work.” (Zinn, 1999, p. 73-74).

2.2.2 The War Against Man and Nature

English philosopher and political theorist Thomas Hobbes portrayed a worldview for society and nature that was significantly at odds with traditional thought, most notably in his greatest work, *Leviathan* (1651). Instead of a kind and benevolent god who created a peaceful and purposeful coexistence, Hobbes looked at nature and saw an arbitrary world, where man was in a constant state of violence, fear, and war. He argued that, in order for man to avoid the condition of civil war and savage degeneration, an all-powerful monarch (rather than god) would provide a common power to keep society in awe, helping humans through a life that was hateful, solitary, poor, brutish, and a “race we must suppose to have no other goal, but being foremost” (Hobbes, 1651 p. xxx).

I demonstrate in the first place, that the state of men without civil society (which state we may properly call the state of nature) is nothing else but a mere war of all against all; and in that war all men have equal right unto all things; Next, that all men as soon as they arrive to understanding of this hateful condition, do desire (even nature itself compelling them) to be freed from this misery. (Hobbes, 1651 p. xviii)

Hobbes’ war of everyman against everyman resonated and took root in the newly forming views of the political economy. His observations on the state of nature at conflict with itself were prevalent in the behavior of monarchs of his time, who used conquest and domination to wage perpetual war in Europe and the colonies. Hobbes’ philosophies captured the spiritual shift away from a benevolent view of god, towards an imperial view of god. Hobbes theory articulated the culture of imperialism that came to dominate the political economy, and that put man at war with nature, god, and himself.

Hobbes' philosophy detached humankind spirituality from nature by changing the worldview. Rather than using spirituality or intuition to understand nature, rational thought was used to measure and define nature. Hobbes' ideas resonated with his scientific contemporaries who were trying to separate god from science and define nature. The early founders of Western science, including Galileo Galilee and René Descartes, discovered mathematical alignments in physics and astronomy, and subsequently reframed the concept of nature as a Cosmic Machine, where god acted as an omniscient mechanic-mathematician (Worster, 1994). By reducing god and nature to the sum of their parts, the metaphor of "machine" with observable, detachable, and replaceable parts, gave science a framework for organizing, understanding, and championing the natural world without the mystery of god. Aspects of nature that did not fit into the mechanical framework of science (spiritual experiences) were simply ignored or abandoned. Christian philosophy reinforced the mechanical view of nature by denying non-human entities a soul or spirit. For example, René Descartes, 17th century developer of the Cartesian XYZ coordinate system, declared animals were no more than machines incapable of pain or pleasure, and not suited for emotional investment (Worster, 1994). This Imperial ethic towards nature helped to remove barriers to unrestrained economic exploitation against animals and the living world.

As imperialism grew to dominate the worldview of economics, trade, and science, some naturalists attempted to reconcile the divide between the growing mechanical view of nature and god by offering alternatives, or more often, by blending the Imperial and Arcadian ethic together. One philosopher who stayed true to the Arcadian ethic was Henry More, a graduate of Cambridge University and a contemporary of René Descartes. More opposed Descartes' calculated view of nature and instead drew his inspiration and theories from Plato's *Anima Mundi*, which is Latin for the pure, ethereal spirit that makes up "the world soul" (Jacob, 1987). More argued against the mechanical view of nature, declaring that a "Spirit of Nature" occupied a fourth, spatially energetic sphere between humans, god, and nature and could not be predicted like clockwork (More, 1659). This fourth sphere housed the immaterial workings of nature not

addressed by Descartes' three-dimensional Cartesian mathematic model, which only measured length, width, and height in the physical realm of nature. More's arguments were easily debatable, non-observable, and too complicated to quantify. Therefore, the mechanical metaphor triumphed and helped to further separate the concepts of god from nature.

As new philosophical debates took place in the political economy and scientific circles, an explosion in technological innovation gave rise to an unprecedented industrial revolution. Increased wealth in the economy created a new "capital" class of individuals that put forth the ideas of freedom and the pursuit of self-interest in global trade.

2.3 Classical Liberalism

By the 18th century Europe's elite merchant class grew rich in capital from global trade and began a social renaissance by voicing opposition to monarchs and despotic rulers. Bankers and trade manufactures were resentful of their exclusion from political privilege and frustrated by political incompetence (Korten, 1999). At that time, trade and commerce were restricted to all but the crown's chartered corporations, who hired merchant marines to serve the sole interest of kings. Trade ships acted as paramilitaries and resource-extracting businesses. Up-and-coming merchants challenged inefficient state enterprises and argued that the self-interested behaviors of individuals (merchants) would create a larger common good than the state (monarchs) in global trade. Consequently, a doctrine for classical liberalism burgeoned, calling for the limitation of state power in trade affairs in order to allow individuals more self-determined choices. Therefore, classical economic theory emerged as "a constriction of political authority, to create the largest possible space for the self-determined action of *individuals*" (Heilbroner, 1985, p. 79).

Following the general theory of mercantile doctrine, classical liberalism went further to establish rules and governance over global finance and trade that heavily restricted the unfettered influence of the aristocracy in Europe. This provided the capital class in several European nations

a long-sought victory in political and economic rights. Merchants who controlled and managed resources and capital flows were able to set clear legal constraints on the power of the state to violate the private space or property of individuals. The state acquiesced in order to benefit from the growing function of trade:

Save for unusual circumstances, the state lost its command over the labor or materials, or even the money, by which it traditionally assembled its secular, religious, or military might. Thus even though the state retained the ultimate weaponry of rule and the authority of awe, it became dependent on the operation of its self-created republic for the nourishment of revenues. The power to tax may be the power to destroy, but the ability to tax presupposes the existence of a working economy. It is for this reason that the regime of capital is the dominant active influence in the normal relationship between the two realms, and it is why the state is normally its obliging servant. Self-interest, not weakness drives the state to support and advance the accumulation of capital. (Heilbroner, 1985, p. 89-90)

During this era, the state and capital class grew into a codependent relationship. Each needed the other in order to execute, protect, and further its personal interests in the global trading system.

Although the policies of classical liberalism were successful at earning the elite merchant class political rights by challenging aristocratic control over trade, those benefits and freedoms were not extended to the working class, women, or indigenous people. Under classical liberalism, which subsequently became later known as capitalism, merchants and tradesman formalized the legal framework of imperialism into the management of trade in order to advance their individual economic goals, resulting in sustained harm to the environment, and the people of foreign colonies.

2.4 The *Theory of A Market Economy*

Around the time that the capital class won hard-fought economic rights in England from the aristocracy, another type of political revolution challenged Great Britain in the American colonies. It was the American colonists who, after a grass-roots military uprising against Great Britain, claimed political independence from its imperial rule. Members of the American Continental Congress signed the Declaration of Independence in 1776, the same year an 18th century English philosopher named Adam Smith published his book, *An Inquiry into the Nature and Causes of The Wealth of Nations*. Both events occurring in 1776 altered history and the theory of the political economy. First, the new country of America set out to become a land of individual freedoms protected from despotic and aristocratic rule by creating a political system of elected officials governed by the people, for the people. Secondly, Adam Smith offered new theories for a market economy that challenged classical liberalism and monopolistic control over trade by both monarchs (governments) and merchants (corporations).

Political œconomy, considered as a branch of the science of a statesman or legislator, proposes two distinct objects: first, to provide a plentiful revenue or subsistence for the people, or more properly to enable them to provide such a revenue or subsistence for themselves; and secondly, to supply the state or commonwealth with a revenue sufficient for the public services. It proposes to enrich both the people and the sovereign. (Smith, 1776, p. 42)

Adam Smith was foremost a philosopher. He was the chair of moral philosophy at the University of Glasgow in England and had become an instantaneous sensation after publication of his book, *The Theory of Moral Sentiments* in (1759). Throughout his career, Smith's economic theories were influenced by philosophers before him including John Locke, Dave Hume, Francois Quesnay, Benjamin Franklin, and hundreds of others he mentions in *The Wealth of Nations*. This book, considered a masterpiece across diverse fields, is an amalgamation of philosophical theory

not only on economics, but also on social and political behavior. During the twelve years it took to write *The Wealth of Nations*, Smith incorporated history, psychology, and sociology into a new philosophy of the political economy based on market economics and individual freedom. Smith's economic vision was a blueprint for social and economic reorganization towards greater wealth for the whole of a nation state. Smith was concerned with building what he called a "great society." Although Smith's book addressed social philosophy, it embodied the Imperial ethic towards nature, and addressed the environment as no more than stock in a storehouse awaiting man's industrial ingenuity.

For Smith, wealth was synonymous with money, and he brilliantly laid out a vision for how money should operate in banking, the division of labor, pricing for market commodities, capital flows, commerce treaties, and colonies. In Smith's market economy, trade would take place between multiple producers and multiple consumers in local markets where buyers and sellers could meet freely to exchange goods and services based on personal needs and interests. Smith assumed that under the market system the self-interested choices of many individuals in the market would produce optimal societal benefits. Smith explained that, in order to prevent the self-interest of avaricious men from damaging society and the system, competition between many producers and consumers (that were too small to influence the market price) would provide the market with its own self-regulating force known as the *invisible hand*. However, Smith warned that the market economy could only obtain optimum societal benefits under certain pre-existing conditions summarized here:

- buyers and sellers must be too small to influence the market price;
- complete information must be available to all participants and there can be no trade secrets;
- sellers must bear the full cost of the products they sell and pass them on in the sale price;
- investment capital must remain within national borders and trade between countries must be balanced;
- savings must be invested in the creation of productive capital. (from Korten, 1999, p. 38).

Smith's market theory for the political economy has always been more of a theoretical construct than a practical reality, even in his day. Because the conditions for optimally efficient markets do not truly exist, and never did, market failures⁸ occur. When failures do occur, Smith saw the role of the state as one to correct market failures in order to maintain the integrity of the system. Theoretically, corrections in the market were assumed to bring back a balance of reciprocating benefits between producers and consumers. However, correcting the imbalance of negative externalities in the market caused by environmental pollution would not be addressed by the state until the late 20th century.

Adam Smith wrote with clear disdain for unrestricted power in the hands of either large monarchs or large corporations. He saw them both as instruments for suppressing competitive forces in the market. Smith described the chartered corporation as an entity that attempted to restrict free competition in order to prevent a reduction in the price of its goods or an increase in the cost of its wages (Smith, 1776). Smith also criticized monarchies for their protection of capital interests. "Civil government, so far as it is instituted for the security of property, is in reality instituted for the defense of the rich against the poor, or of those who have some property against those who have none at all" (Smith, 1776, p. 155). Smith stated that he believed government was responsible to provide all citizens with protection and justice, not just those with money. He also described the legitimate role of government as an entity charged to protect against violence and invasion of foreign nations and to erect and maintain public institutions and public works that were advantageous to a great society.

Smith strongly influenced the new government of the United States of America, which aligned its political economy in part with Smith's theories for a market economy as it crafted a federalist governance system. However, over the decades the growing American capitalist class

⁸ A market failure is when a market, left to itself, does not allocate resources efficiently. Failures include negative externalities, non-competitive market structure, imperfect information and public goods. Negative externalities occur when an individual or firm making a decision does not have to pay the full cost of that decision, and it is externalized to society as a whole.

exploited Smith's theories for its own use in expanding elite corporate empires. Smith became the champion of the capital class, who claimed that Smith supported unregulated free trade by allowing the invisible hand of the free market to guide the economy, rather than the government.

2.4.2 Casting A Shadow Over the Political Economy

Four decades after Smith's work, David Ricardo, a successful stock trader, began to outline a theory on market economics based on his own observations of divisive factions in the market. Ricardo opposed Smith's theoretical framework of one, united economic family that provided mutually beneficial results to producers and consumers. Ricardo saw two factions dividing England: the rising industrial capitalists who led the factory revolution, and the old landownership aristocracy and who looked down on those "new money" capitalists, who demanded more government representation and social prestige. Ricardo's great contribution to the study of political economy was in exposing the monetary relationships between owners, capital, and workers. Ricardo explained that while the interests of merchants were irrevocably opposed to the interests of their landlords due to rents, he pointed out that the interests of both landlords and merchants were hostile to those of workers, formally setting forth those ideas in his *Principles of Political Economy* in (1817). He revealed that unearned gains in landowner rent as well as the profit imperative of merchants tended to reduce worker wages. Ricardo's observations helped to explain capitalism's antagonism towards workers and eventually led to the theory of comparative advantage, which compared input factors of production and encouraged countries to specialize in products they could produce at the lowest price. Ricardo's theory of comparative advantage explained how trade in the North (industrial) and South (agricultural) progressed with disparity under global economic development.

A critic of Ricardo's, Fredrick List, called comparative advantage a doctrine of the dominant, where those who were being dominated could expect to derive little advantage from

the economic exchange. In his (1841) work, *The National System of Political Economy*, List argued that instead of allowing new economies to be dominated by wealthy, established industrial powers, governments should instead protect infant industries in order to strengthen the future development of their own economies. List promoted a nationalist political economy, with strong government regulation. This was adopted in several countries in Europe, including Germany. Although List's theories prevailed in the economic development of some European countries, his doctrines were not espoused or accepted by classical liberal economists. Ricardo, rather than List, became the dominant doctrine of the political economy due to the rule of imperialism. As economic integration advanced through global trade, the Imperial ethic came to dominate the policies of classical liberalism.

A contemporary critic and good friend of David Ricardo was another great economist and clergyman named Thomas Robert Malthus. In 1810, Malthus taught economics at the East India Company and was the first economic authority to comprehend the vital statistics of the planet's spherical empire as it related to population growth and resource depletion. Malthus estimated that population growth would continue to rise and eventually threaten to exhaust agricultural and resource production. His theory multiplied human population at a geometric (exponential) rate of gain, while increasing life-support production at an arithmetic (linear) rate of gain. This was a compelling theory for that time, when most classical economists such as Ricardo argued that population growth was related to increases in wealth. Malthus saw two possibilities for the fate of humans. First was human destruction through war or disease. Second was human survival through the social ability to manage population growth and resource extraction. Malthus was the first to introduce this new ecological dimension into the study of the political economy. Although Malthus' work identified that the Earth was a finite closed-system sphere, most political economists and scientists of the time did not comprehend the possibility of exhausting the world's resources to the current point of mass extinction. Therefore, classical economists did not incorporate tools, plan for, or adopt models designed to measure the monetary costs of population

growth in relation to natural resource exhaustion over time. Nonetheless, Malthus cast a shadow over the political economy and both he and Ricardo shifted economic philosophy from Smith's optimistic view of a market system, to a pessimistic calculation of rationalized behavior and scarcity in the future.

2.4.3 Scientific Revolutions in the Understanding of Nature

The writings of Malthus and Hobbes subsequently influenced the historical works of Charles Darwin, an English geologist who profoundly impacted science, spirituality, and the political economy, with his theories on evolution in, *The Origin of Species by Means of Natural Selection*. Published in (1859), Darwin put forth revolutionary ideas about the origins of life by arguing that life on Earth had evolved over time to become attuned with its environment by a process of evolutionary “natural selection,” in which only the strongest species survived in a competitive struggle for existence. Darwin's observations of nature were deeply at odds with the Christian story about the origins of life and further helped to separate science from god.

Darwin developed his ideas in part during a five-year voyage that took him around the coast of South America, Australia, and the horn of Africa. Darwin's journey was to survey and study geology and biology. During his journey, Darwin came into contact with the raw forces of nature and the wild, which he found to be hostile and violent. In his studies of fossils he saw extinction and conflict, leading him to wonder how such a gloomy world could exist. Darwin felt fear and anxiety as he observed a constant state of competition for resources taking place in both the human and natural world. On his voyage he was surrounded by imperial wars raging along the South American coast against “savage” native peoples. He watched and listened with terror to the screams of tortured slaves in Brazil and the genocidal wars in Argentina (Worster, 1994). Darwin's exposure to war, violence, and imperial conquest had a lasting impact on the development and framework of his ecological model, which described the world as a brutal place

of individualistic competition, where each species was vying to seize its place in the economy of nature. Darwin's ideas were written in the context of his age, reflecting his own cultural and moral understanding.

Darwin's ideas were accepted almost immediately by his peers in England resulting in a scientific revolution that drew most of its criticism from the Church. Until Darwin, scientists could not express their views independent from god or moral human values. Darwin's work won the right for scientists to trust their own eyes and to form their own beliefs based on open trial and honest evidence, free from political and religious persecution (Sears, 1950). In effect, Darwin created a new mandate for science where only observable facts could be measured as evidence.

Darwin had both Imperial and Arcadian viewpoints, causing him to be somewhat of an outsider in the modern scientific community. Unlike many of his English scientific peers he was biocentric, which meant that he expressed a deep regard for the interconnected whole of nature, as well as a general fondness and respect towards animals. He did not adopt the static or mechanical view of nature; rather he saw nature as an unfinished, growing, and innovative force in which "plants and animals are bound together by a web of complex relations"(Darwin, 1859, p. 90). Darwin believed no individual species could survive independent of the web of life, including humans. Despite some contradictions, Darwin was able to articulate for science that the human species was involved in an interdependent relationship and kinship with nature.

Although modest and sympathetic toward life, Darwin believed in progress and was not able to escape his formal training in English philosophy. Civilization, to Darwin, was a blessing for the world and would replace savagery. He accepted that the strongest race would come to dominate and drive out inferior races. Darwin's "survival of the fittest" resonated with English society and it quickly found its way into political economic theory. Consequently, "the survival of the fittest" became a metaphor that was used by industrialists, scientists, economists, and public figures, to rationalize their imperial expansion over the natural world.

2.5 American Capitalism

After a violent revolution to overcome colonial oppression, the founding fathers of the United States of America created a new form of government which, along with rejecting monarchy, attempted to subordinate private, capital power to public, state power under democratically elected governments. As a struggling young nation, America wanted respect, autonomy, and economic independence from European aristocracy and corporations. However, as the American economy grew, its corporations began to model the Imperial ethic of their European counterparts. James Madison warned in his *Federalist, No. X* paper written in 1787 of the violence and danger caused by strong factions and for the need to break-up such power so as not to harm the rights of citizens (Madison, 1787). Later in 1816, Thomas Jefferson was quoted as saying, “I hope we shall crush in its birth the aristocracy of our moneyed corporations, which dare already to challenge our government to a trial of strength and bid defiance to the laws of our country” (Jefferson, 1816).

Despite the admonitions of early politicians, American state and capital interests quickly adopted European methods of imperial conquest and war to extract natural resources from land occupied by Native American tribes, resulting in genocide against native people and sustained harm to the environment. As the US political economy developed under classical liberalism it became dominated by capital interests and given the name capitalism in the late 19th century. US laws were written in a fashion that favored the individual’s right to accumulate wealth and private property, thereby improving the rights of the capitalist class. Despite the United States Constitution’s articles on equality and freedom for all, the early US government was exclusively developed for the benefit of male European-American property owners and businessmen, and excluded women, foreign slaves, and native people from the privileges of citizenship.

The American capitalist system became one of expansionism where getting rich was a matter of cunning and ingenuity in the market, more than birthright and privilege. The capitalist

system transformed society by rapidly pioneering new markets and investing in technology. Expansionism towards the West allowed US corporations to grow large in wealth and power by obtaining land, mining metals, and clear cutting forests. Land expansion was facilitated in partnership with the US government and military, which used war to fuel the growing economy. Raw natural resources such as forests were extracted at a rapid rate and used to build cities, factories, furniture, and commodities for trade.

American writer and early field naturalist Henry David Thoreau was one of the first natural scientists to study the effects of wide scale forest clear-cutting in Massachusetts. He observed violent ecological change as a result of economic development that claimed over 60% of the original forest cover by the mid 19th century. Consequently he noted, that as the forest vanished so did its inhabitants, including the hawk, eagle, turkey, and squirrel. Thoreau claimed that, due to the rapid exploitation of forests, no animal could escape the hunter's gun. He detailed the necessary interdependent relationships of wild species in the evolution of forest succession. Thoreau advocated for a forest management strategy that imitated the same planting patterns as nature in order to ensure a healthy, perpetual woodland crop. In an early step towards conservation, Thoreau suggested that each town should preserve a primitive forest for common possession, education, and recreation, where no ax would fall and nature's own economy could function (Thoreau, 1854).

Thoreau belonged to the Arcadian tradition of ecological thought, although he accepted the scientific outlook on nature used by contemporaries such as Charles Darwin, and hoped it could aid in the restoration of clear-cut forests. Thoreau was also biocentric, rejecting what he called man-worship, or the idea that man had the right to violently mistreat nature. Thoreau did not accept the mechanical view of nature and believed that man should learn to find balance with the natural order, rather than overthrow and transform it (Worster, 1994). Thoreau helped to develop the Arcadian ethic into a modern ecological philosophy and restore man's relationship with nature. Thoreau advocated for a confluence between the spirit and matter in science, and he

hoped that scientists could be united with nature, rather than seeing it just as a commodity to divide and conquer.

2.5.2 The Rise of Corporate Power and American Empire

In the United States, the political economy developed under two different philosophies of leadership portrayed by the politics of two American Founding Fathers, Thomas Jefferson (democracy) and Alexander Hamilton (plutocracy). Both parties had close ties with US corporate interests. However, Thomas Jefferson had suspicion and disdain for corporations, especially bankers who sought concentrations of economic and political power (Johnson and Kwak, 2010). Jefferson, the author of the Declaration of Independence, believed in an agrarian society where limited political and economic power would be balanced by a strong middle class of artisans who owned the land and tools they needed to derive their livelihood. He was a strong proponent of individual liberty and feared that the American system might be corrupted by the elite class and cause deep divides in society along class lines. Although he was a slave owner, Jefferson had faith in ordinary people and was a leading voice of democracy, individual rights, and decentralized power.

Jefferson was opposed by Alexander Hamilton, who argued that the US government needed to take a strong and central role in fostering economic development by providing corporations with the credit they needed to expand US enterprise. Hamilton had clear suspicion and disdain for ordinary people. He believed that the elite class had better judgment to rule and therefore should be given a permanent share of government, and be appointed to positions for life (Zinn, 1999). Hamilton supported policies that helped concentrate power and wealth into elite hands, which he thought could lead a strong America to imperial greatness (Zinn, 1999; Korten, 2006). As the first US Secretary of the Treasury under George Washington, Hamilton successfully crafted legislation to create the first Bank of the United States. Jefferson opposed the bank

because of his fear that the bank could gain leverage over the federal government, but he did not prevail. Hamilton promoted other financial reforms along with the bank that proved to be very successful in creating a well-functioning financial system in the early development of the United States. By the time Jefferson was elected in 1800, Hamilton had created the first truly competitive banking system with over 75 banks flourishing in a stable political and economic environment (Rousseau and Sylla, 2005).

Hamilton's bank was the first in a historical succession of public institutions that were run by private interests for the purpose of creating private wealth for corporations guaranteed by public assets backed by the US government. In 1811, when the charter for first Bank of the United States expired, the second Bank of the United States was created and granted a 22-year charter under James Madison. When the second charter expired in 1832, Andrew Jackson, a strong believer in democracy, presidential power, and an agrarian republic, shared Jefferson's distrust for big-city bankers. He saw the national bank as a powerful rival to the federal government and therefore did not renew its charter on political grounds. The bank had by then gained a monopoly control over the government's finances and was issuing paper money to the masses. By Jackson's account, the bank was distorting the economy at the expense of the common people (Johnson and Kwak, 2010). Jackson saw that private interests of the day were using the bank to hold the economy accountable to their own political ends, which mostly favored large corporate factions at the expense of the people. Jackson effectively disbanded the bank and implemented Jefferson's vision of a decentralized economic system. Disbanding the bank's charter weakened the potential for the centralization of power and wealth in the banking sector. The US would not have another central bank until the creation of the Federal Reserve System in 1913.

Despite Jackson disbanding the central banking system in the United States, the competitive finance atmosphere continued to grow and prosper. With financing available, an industrial revolution of free enterprise flourished in the 19th century. US corporations grew rapidly in size, wealth, economic power, and elite status, which infiltrated the political system at

all levels. By the end of the Civil War in 1865, the US Congress openly supported plutocratic policies serving the welfare of large capitalist interests. Abraham Lincoln saw the rise of corporate influence in politics and expressed his concern in a letter to Col. William F. Elkins in 1864, stating:

I see in the near future a crisis approaching that unnerves me and causes me to tremble for the safety of my country. As a result of the war, corporations have been enthroned and an era of corruption in high places will follow, and the money power of the country will endeavor to prolong its reign until all wealth is aggregated in a few hands, and the Republic is destroyed. (Lincoln, 1864)

In the post-Civil War years, the US government handed out subsidies to businesses and set up tariff laws to give trade protections to US corporations (Horwitz, 1976). Corporate businessmen such as John D. Rockefeller, Andrew Carnegie, and James Mellon became notoriously known as robber barons for the amount of gold, land, and public resources they transferred from public ownership to private corporate ownership. In an overt display of partnership, most fortune building by US corporations was done legally with the collaboration of the government through charters and courts. For example, over 100 million acres of land were given free of charge to the railroad companies by Congress under the law of eminent domain. In 1862 the Homestead Act, a federal law designed to give freehold title of up to 160 acres of undeveloped land to citizens that would occupy and work it, was used by financial speculators in the stock market to obtain 50 million acres of public land for private gain at minimal cost (Zinn, 1999). Corporations took advantage of the (literally) dirt-cheap resources that the government was “selling” to shrewdly build empires, choking out foreign competition, maintaining high prices, and keeping wages low to maximize profit.

Eventually, the US corporations gained enough influence and political power to win legal rights under the US Constitution. In less than one hundred years after the signing of the US

Constitution, corporate power won a victory in 1886 in the Supreme Court decision *Santa Clara County vs. Southern Pacific Railroad*, which allowed corporations to enjoy the same rights and protections extended to all citizens under the 14th amendment (Danaher, 2001).

In the United States, capitalists went forth unrestricted to profit from the colonization of the western frontier during the time known as the Gilded Age. American capitalists benefited from land and rapid resource extraction taken forcibly from the Native Americans and the free or low-wage labor of African-Americans, poor whites, women, and children. Capitalists created a modern industrial economy by rewarding workers differently by race, sex, national origin, and social class in such a way as to create separate levels of oppression, “a skillful terracing to stabilize the pyramid of wealth” (Zinn, 1999 p. 253). The US government used poor white rural class families as buffers and paramilitaries, providing incentives to settlers for owning land and personalizing the war against Native Americans.

By the end of the 19th century, American expansion had a strong presence overseas and grew into an empire. The US State Department had engaged in 103 military interventions into the affairs of foreign countries to protect American capital interests in Argentina, Nicaragua, Japan, Hawaii, and China (Rusk, 1962). At the turn of the 20th century the American Empire rose to the helm of global trade.

The global battle for property and resources brought corruption and devastation to many cultures around the world. The American and European empires raced to gain control of colonies and fought over who would own what land and resources. Mapmakers and armies carved up the new world using fear and intimidation to force privatization of resources and labor:

Between 1870 and 1898 Britain added 4 million square miles and 88 million people to its empire; France gained nearly the same area of territory, with 40 million souls attached; Germany won a million miles and 16 million colonials; Belgium took 900,000 miles and 30 million people; even Portugal joined the race with 800,000 miles of new lands and 9 million inhabitants...the colonies were now the

proletariat's proletariat. No wonder imperialism was a popular policy. (Heilbroner, 1999, p. 192)

Throughout the 19th century, capitalist growth was successful because it continued to obtain cheap labor, land, and resources from colonies. Capitalists continued to intentionally organize and implement trade policies that supported institutionalized oppression and stratification based on race, gender, wealth, and privilege. This led to massive backlash and uprisings by the poor and working class in imperial states, especially in Europe, spawning theories on socialism and communism as alternatives to the capitalist model of the political economy.

2.6 The People's Revolt: Socialist Movements

Ideas about socialism as a philosophy of political economic theory date back to Plato's *Republic*, written in (360 BC). Socialism emerged in the early 19th century in England and France as a reaction to the excessive poverty and inequality prevalent throughout Europe. Unstable living conditions from the enclosure of the commons (forests and pastures) for the industrial revolution's production system caused widespread socioeconomic unrest. Rural peasants and workers were often forced off their lands and into urban slum dwellings that were plagued with disease, malnutrition, crime, and pests. Consequently spontaneous uprisings from the proletarian class challenged autocratic rulers of wealth and power in Germany, Prague, Italy, and France, and began winning battles against corrupt and complacent monarchs.

In response to the proletarian uprisings, Louis Napoleon employed his National Guard to subdue crowds to the tune of ten thousand casualties, while Belgium abolished the right to assembly altogether. Nobility in Europe had no sympathy for the proletariat, and many rulers reflected the violent actions of Nicholas I of Russia, who was called a cornerstone of despotism in

Europe by French historian Alexis de Tocqueville. Therefore, due to a lack of organization, European proletariat revolutions were often unsuccessful and mercilessly crushed.

Socialism advocated for egalitarian distribution of wealth and against private property, although theories being put forth at the time varied. European social philosopher Saint-Simon advocated for state-controlled production and distribution while Robert Owen and Charles Fourier advocated for small, decentralized, communal communities (Wallerstein, 1974). Social commentary grew and new forms of socialism arose, including communism.

Karl Marx and Friedrich Engels distinguished themselves from other forms of socialist theorists by forming a doctrine that articulated the class struggle between the proletariat class and the bourgeois capitalist class. Engels was a socially concerned businessman from Manchester who wrote a condemning verdict on the factory conditions of industrial slums in, *The Condition of the Working Class in England* (1844). Engels defined the proletariat as a class in society that lived entirely from the sale of its labor, drawing no profit from any kind of capital. He argued that English economists were only apologists for the established order. Engels' work caught the attention of Karl Marx, who was the editor for a radical philosophical magazine in Paris. Together, through great intellectual debate, they advanced the theory of *dialectical materialism*, which detailed the material forces of growth and development in society and the economy throughout human history.

Marx and Engels were concerned with the material aspects of humanity and nature. They fully accepted Malthus and Darwin and believed that science was the only way to know truth about matter. They considered matter itself as the beginning and ending of reality and therefore described the world through economic materialism rather than through a more biocentric perspective. Marx and Engel were able to link the changing production system of economics from feudalism, under the rudimentary agricultural systems, to industrial capitalism under the factory system. The pair collaborated on what became known as the *Communist Manifesto* in 1848, which described capitalism's material effect on the social community. They asserted that

the disorder caused by capitalism's volatile economic cycles and social unraveling would eventually replace itself with equilibrium. This post-capitalist society would reach a steady state of established relations between nature, man, and justice that would lead to a classless utopia based on common ownership of the means of production (Marx and Engels, 1848). The inefficient and wasteful nature of capitalist production coupled with its arbitrary economic boom and bust cycles, they asserted, would result in the self-destruction of capitalism at the hands of revolution and social chaos.

The crisis was built into the system which was chaotic in its nature, in which only the very rich were secure. It [capitalism] was a system of periodic crisis – 1837, 1857, 1873, [and later: 1893, 1907, 1919, 1929] – that wiped out small businesses and brought cold, hunger and death to working people while the fortunes of the Astor's, Vanderbilt's, Rockefeller's, Morgan's, kept growing through war and peace, crisis and recovery. (Zinn, 1999, p. 264)

Marx and Engels believed that capitalists would breed their own successors, socialists, who would rationally plan out production. Although Marx's ideas did not come to full fruition, they were powerfully influential in several proletarian revolutions, including the overthrow of the Tsar in Russia by Vladimir Ilyitch Oulianov (Lenin) in 1917⁹ and the rise to power of the Communist Party in China in 1949.

In the United States, there were also exploding socialist movements as a response to egregious corporate abuses against labor by American capitalists. Journalist and political economist Henry George wrote on issues affecting the working class in his best-selling book, *Progress and Poverty* (1881).

This association of poverty with progress is the great enigma of our times... There is a vague but general feeling of disappointment; an increased bitterness among the working classes; a widespread feeling of unrest and brooding revolution.... The political economy has been degraded and shackled; her truths dislocated; her harmonies ignored; the word she would utter gagged in her mouth, and her protest

⁹ In 1918, the Russian Social Democratic Labor Party (known as the Bolsheviks) led by Vladimir Lenin changed its name to the Communist Party.

against wrong turned into an endorsement of injustice. (George, 1881 p. 357 and 503)

Under the capitalist industrial system, living and working conditions in cities such as New York and Philadelphia matched their horrific counterparts in Europe. Slums were flooded with poverty and hunger and alive with rats, spreading typhus and tuberculosis. People were cut off from nature and access to land. Poor and immigrant classes began to rise up in protest of desolate working conditions and inequitable plutocratic government policies favoring capitalist interests.

Women, who were brought into the work force because of the Civil War, were among the first to organize a union and strike against long hours, exploitative wages, and dangerous factory conditions. African-American workers, who won their freedom from slavery in 1863 under Lincoln's Emancipation Proclamation, also organized against capitalists but were often excluded from white unions. Nonetheless, membership for unions grew everywhere and, by 1872, the National Labor Union became a federation of all unions around the country.

Worker strikes and protests were met with violence, force, jail, and murder. Labor organizers were targeted, beaten, and often treated ruthlessly by the US judicial system. Workers revolted against the ill treatment of the system by writing decrees, claiming independence and by seeking a different form of political and economic organization. In 1876 the Negro unions formally denounced the Republican Party and one group of German socialists wrote this declaration of independence, delivered in Chicago July 4, 1876:

The present system has enabled capitalists to make laws in their own interests to the injury and oppression of the workers. It has made the name of democracy, for which our forefathers fought and died, a mockery and a shadow, by giving the property a disproportionate amount of representation and control over Legislation. It has enabled capitalists...to secure government aid, inland grants and money loans, to selfish railroads...It has allowed the capitalists, as a class, to appropriate annually 5/6 of the entire production of the country...It has therefore prevented mankind from fulfilling their natural destinies on earth...crushed out ambition...has shortened human life, destroyed morals and fostered crime, corrupted judges, ministers,

and statesmen, shattered confidence, love and honor among men, and made life a selfish, merciless struggle for existence instead of a noble and generous struggle for perfection. (Foner, 1976)

Such condemning declarations against the capitalist class and its corporations were widespread in both the US and Europe at the turn of the 20th century. As dissent against the established order escalated, protection of private property required more force, subversion, and control over information. Media propaganda was written to emphasize a strong sense of patriotism, national unity, and duty. Social movements won some victories in the US, such as outlawing slavery and, later in 1920, women won the right to vote, however most often social movements met with political defeat. In Congress the American two-party governance system of Republicans and Democrats became corrupt and, in industry after industry, shrewd and efficient businessmen built empires by exploiting labor and resources, suppressing competition with high tariffs, maintaining artificially high prices, and using government subsidies to collect what became known as corporate welfare.

2.7 20th Century Imperialism

In the early 20th century, war and imperialism escalated around the world. Europe erupted into World War I and the imperial ambitions of Japan and Germany resulted in a Second World War. In the United States, corporations merged and consolidated, and thereby gained direct political control over the agencies that intended to regulate them. This gave rise to an extreme form of laissez-faire¹⁰ capitalism under a neoclassical model of classical liberalism¹¹ that

¹⁰The laissez-faire school of thought holds a pro-business view that capitalism is best left to its own devices and that the market will dispense with inefficiencies in a more deliberate and quick manner than a legislating body. The belief is that less government interference in private economic decisions such as pricing, production, and distribution of goods and services makes for a better economy.

¹¹ Neoclassical economics emerged in the late 19th century and groups a number of schools of thought. Although economists take different approaches to neoclassical economics, there are three

allowed for the deregulation and privatization of markets throughout the economy. As a result, extreme volatility in the market system and egregious abuses of power by corporate factions prevailed. An unregulated stock market, fed by highly leveraged, borrowed money, brought widespread economic speculation and corruption, driving up the stock market in the 1920s until it finally crashed in 1929, resulting in the Great Depression.

Leading up to the Great Depression, corporations began centralizing their economic control by merging into industrial trusts, allowing monopoly control and concentrated financial power. For example, in the early 20th century J.P. Morgan played a central role in rapidly transforming the business landscape. His financial empire handled as high as 40% of the total capital flows in American industry (Morris, 2005). In 1901, when Theodore Roosevelt was appointed president after the assassination of McKinley, he began to challenge the power of large corporations because he, like Jefferson, believed that dominant private interests were bad for democracy and economic prosperity. He began “trust busting” and used the Sherman Antitrust Act of 1890 and the Supreme Court to bust up J.P. Morgan’s Northern Securities Company, among others. Roosevelt instilled the belief that monopoly trusts were bad for commerce. Later, Woodrow Wilson broke up J.D. Rockefeller’s Standard Oil Company in 1911 (Hofstadter, 1948). Even though trusts were broken up to disband large concentrations of economic power, this did little to break up the wealth and political purchasing power that these large corporations had.

Trust busting did not prevent the “Panic of 1907” which was a bank crisis that nearly brought down the financial system when industrial and financial corporations were caught in a corrupt stock market scheme that caused a run on the banks. J.P. Morgan stepped in to act as the central bank due to the government void (for a crisis that Morgan had helped to create), and ultimately decided which banks were insolvent and should fail, and which banks should receive a \$25 million dollar bailout from the US government (Morris, 2005). The Panic of 1907

fundamental assumptions: 1) people have rational preferences with outcomes that can be identified and assigned a value; 2) individuals maximize utility and firms maximize profits; 3) people act independently on the basis of full and relevant information.

demonstrated the risks of an American economy run by concentrated corporate power, a lightly regulated financial system, and no central bank. In 1913 Woodrow Wilson attempted to correct the financial oligarchy of investment bankers that had come to gain considerable economic power by creating the Federal Reserve Act of 1913. However, the banking corporations saw to it that the Federal Reserve remained a private bank designed to bailout the private sector with public funds when financial crises occurred. Consequently, plutocracy continued to prevent the US Congress from regulating corporations or acting on behalf of the people to correct market failures. In fact, policy went the opposite way, towards further deregulation in the 1920s and, as a result of the lack of oversight, the worst financial crisis in American history to date took place in 1929.

2.7.2 Environmentalism in the Age of Imperialism

At the turn of the 20th century and leading up to the Great Depression, imperialist war continued on the American frontier against the environment. The disappearing forests and animals that Henry Thoreau lamented in the mid-19th century had all but vanished within 50 years. This did not escape the notice of John Muir, a writer, activist, and founder of the Sierra Club. Muir vehemently denounced the extraction and commercialization of nature, and wrote extensively on man's spiritual interconnectedness with the natural world. Muir represented the Arcadian ethic towards nature and advanced the notion of simple preservation. He lobbied the US Congress and Roosevelt extensively for a national parks bill. Muir believed nature should be preserved in its wild state without domesticated animals or people. Muir lobbied against large dam projects in California and was successful in protecting the Sierra Valley by pressuring Congress into the creation of Yosemite National Park in 1899. Muir's writings were well respected and very moving. As an Arcadian naturalist, he wrote with deep regard for the archetypal oneness between all living creatures on Earth. He is considered, by some, to be the founding father of the environmental movement.

Theodore Roosevelt was moved by Muir's sentiments. He had been a progressive political candidate who had run on the promise of providing resource conservation to the rapidly disappearing forests. However, the Progressive Party strongly supported the Western scientific method for natural resource conservation. In 1905, the United States government, through the formation of the Bureau of the Biological Survey, constructed a universal method to exterminate animals that they considered "evil" varmints and predators, almost entirely killing off mountain loins, grizzly bears, coyotes, the gray wolf, and the great bison that roamed the prairies (Worster, 1994). Wolves, coyotes and big cats were despised and received no sympathy from the US government, which considered them devilish outlaws and murders. Man's imperial dominance over its predators led to millions and millions of animals being systematically killed with cyanide guns, airplane sharpshooters, and lethal poisons (Olson, 1971). Resource management and conservation in the early 20th century saw no proper place for large predator animals and those they considered vermin.

Progressives at the time were dedicated to reorganizing nature in a way that fit their own outlook, protecting the nation's economy rather than the natural economy. Progressives saw public land in dire need of scientific management in order that it would be useful in turning a profit. This model of conservation emerged under the leadership of Gifford Pinchot, who organized the Forest Service under Roosevelt in 1905. Pinchot was convinced that science was the tool by which man could learn how to improve nature. He was concerned with long-term management of resources for sustained economic profit and promoted the idea of tree farming. Ignoring the environmental complications associated with the loss of forest habitat, Pinchot brought scientific agricultural methods to the management of the public lands such as forests, promoting efficiency and productivity in resource management. This philosophy also led to game preserves where seed stock could be held in good health for reproduction and for sport hunting. By the end of Roosevelt's term, his administration had managed to put over 230 million acres of land under conservation, including game preserves, national forests, and wildlife refuges.

Pinchot's view of managing nature was soon opposed by those within the Bureau. Aldo Leopold, an early supporter of strict predator elimination and public land management, subsequently turned into a critic of the Progressive conservation movement. As a result Leopold had a lasting impact on the rise in ecological consciousness. Leopold began to question the moral and economic practicality of the scientific approach to resource management and conservation. His first book, *Game Management* (1933), took on an agronomic perspective, identifying practical limitations to resource management under a general economic approach to nature. This book was accepted immediately by his peers, after which he became widely known as the Father of Wilderness Management. Although he advocated for a "light touch" rather than an artificial reorganization of nature, it was not until 10 years later that he fully embraced Muir's Arcadian ethic towards preservation and a balanced relationship between man and nature.

In Leopold's later work, he abandoned the Imperial ethic towards nature and adopted a biocentric and communitarian philosophy that challenged the dominant economic attitude toward land use. His greatest work, *A Sand County Almanac* (1949), was written after Leopold had retreated to the Wisconsin countryside, where he spent many years immersed in nature, reflecting on its interdependent relationships. His work was published shortly after his accidental death in a local brush fire. Leopold there concluded:

"We abuse land because we regard it as a commodity belonging to us. When we see land as a community to which we belong, we may begin to use it with love and respect. There is no other way for land to survive the impact of mechanized man...that land is a community is the basic concept of ecology, but that land is to be loved and respected is an extension of ethics." (Leopold, 1949 pg. viii)

Leopold blended a naturalist approach to science and ethics in order to articulate a highly sophisticated understanding of ecological relationships. His writings helped to usher a new age of ecological thought into scientific study. Leopold expressed the value of the whole of nature, and a harmony that existed between diverse functions in the natural world. Leopold became entirely

disenchanted and disgusted with the greed of the world, and described modern society as a hypochondriac, so obsessed with its own economic health, that it lost the capacity to remain healthy (Leopold, 1949). Like Gilbert White, Henry Thoreau, and John Muir before him, Aldo Leopold inspired a new generation of ecological scientists including Rachael Carson, who challenged the Imperial ethic of the industrialized approach to resource management and brought new public awareness to the vulnerability of human and ecological systems.

Despite the growth of ecological awareness, the traditional Imperial ethic towards land and resource management remained dominant. Consequently, science and industry forged ahead in the 20th century with unprecedented manipulation of nature that encouraged the widespread growth of factory farms, industrialized agriculture and chemical inputs, massive resource extraction, and sustained exterminations of wild animals. As a result, ecological imbalance in communities across the United States began to show signs of massive pollution, reproductive disturbances, and the extinction of a large number of species. Imbalance was also acutely felt by human society in the US and abroad. Within the first half of the 20th century, the policies of imperialism helped to fuel the fires of global financial collapse and two World Wars.

During the final stages of the WWII, the US dropped two of its all-powerful atomic bombs on Japan, which resulted in unprecedented death, destruction, pollution, and human suffering. The use of the atomic bomb gave rise to environmental concern about the limits and uses of modern technology including the moral implications of playing “god.” This new moral awareness was called environmentalism, and it aimed to use ecology to restrain untamed scientific domination over nature (Worster, 1994). Environmentalism brought awareness to the scientific community regarding the interdependency between man and nature, which furthered the concept of the web of life. However, the post-war scientific community largely ignored environmental concerns. Instead it saw its place as the creator of endless new chemicals and market technologies that would improve humanity. After the war, new chemical blends and products made with crude petroleum were commercialized and used in a widespread manner for everyday household

cleaners, fertilizers, packaging, plastics, building products, and industrial elements. It would not be for another half century until the scientific community would concede that many such inventions were hazardous to human health and the environment.

2.8 The Collapse and Rebirth of the Political Economy

During the early 20th century Western nations were plagued with war and economic hardship that subsequently led to a rebirth in the political economy. The rebirth was profound and brought more equity into global trade, however it was not enough to extract imperialism from the system. It began with the Great Depression, which caused the US government to intervene on behalf of the public to correct market failures and redistribute wealth. In 1933, Franklin D. Roosevelt was elected president on the promise of a new social contract with America called the New Deal. Like Jefferson, Jackson and T. Roosevelt before him, F. D. Roosevelt opposed a small minority of private interests and feared that it would undermine both the economy and the political system. Roosevelt believed in democracy and unabashedly sought to shift the balance of power between capital and labor. Therefore Roosevelt's New Deal implemented government spending to create jobs and support better working conditions and social services for workers. Business and financial markets were regulated, monopolies were aggressively broken up, and employment programs with worker's benefits were established. In the first year Roosevelt was elected President, he passed the Banking Act of 1933, which separated commercial banking from investment banking, set up the Federal Deposit Insurance Corporation (FDIC), and regulated banks under the Securities and Exchange Commission (SEC). As a result, for the next 60 years, Roosevelt managed to protect consumers, weaken corporate power, and stabilize the banking industry.

After almost a decade of slow global economic growth, the United States was drawn into World War II in 1941 to fight against Nazi Germany and imperialist Japan. At the time, many

Americans went to work producing goods for the war effort, which led to economic expansion and a full economic recovery in the United States by the end of the war in 1945. After the Second World War and the defeat of the Nazis in Germany, the United States won economic and political power. Europe and Japan were devastated by war and their infrastructure was in ruins from bombings, allowing the United States to gain a strong economic advantage in key industries. Consequently, the US took the leadership role in helping to reestablish the global trading system.

The United States and its allies determined that a unified law of trade that adopted a model of “controlled capitalism” would best facilitate a global economic recovery and prevent unexpected and volatile changes in the market that could lead to war or global financial collapse. The new contemporary model for global trade marked an end to the era of overt imperialist conquest, and the birth of a new era of economic imperialism, facilitated through international trade agreements. Trade agreements allowed economic integration to be more lawful, predictable, and accountable. Under the direction of the United States government, a new global trade and finance system became formalized under the world’s first global governance institutions. These institutions became known as the Bretton Woods Institutions, which included the World Bank, the International Monetary Fund, and the World Trade Organization (formally known as GATT). These institutions were inherently plutocratic and were counter-balanced only by one competing model of democratic world governance known as the United Nations. The new world governance system marked a new era of economic integration described here as contemporary globalization. Contemporary globalization unfolded under three distinct phases described in the following chapters.

CHAPTER 3: Contemporary Globalization: Phase 1 (1945-1971)

3.1 The Founding Fathers of Contemporary Globalization

The founders of the post-World War II global trade system sought to stabilize a world economy devastated by two World Wars and widespread financial collapse. The United States and its global allies recognized that the laissez-faire model of neoclassical liberalism created a volatile market system, plagued with blatant abuses of power by government and corporate factions. It was decided that a new model for the political economy was appropriate in which the state took a vital role in the function of the market. Therefore, as the first phase of contemporary globalization developed, nation states agreed to adopt regulation, governance, and controls over the movement of capital in world markets in order to protect the legitimacy of market capitalism, the well-being of citizens, and the stability of the global trading system (Macpherson, 1977).

At the time, British economist John Maynard Keynes was an author of numerous political economy theories that fundamentally influenced the foundations of modern macroeconomics. His work criticized neoclassical economics and instead suggested interventionist policies that used government monetary policy and spending to help eliminate cyclical recessions and economic booms. He claimed private capital would not invest in production, and that would eventually lead to a recession. Keynes saw employment as a function of aggregate supply and demand, where full employment was only possible if governments ran a deficit when the economy was slowing. Franklin Roosevelt experimented with Keynes' theories in an attempt to keep the budget balanced and implement his New Deal. The success of the American economy under Keynes' models made Roosevelt a believer, and shortly afterwards Keynesian economics were adopted by Western nations under new institutions of global governance and global trade.

3.2 Designing the Institutions for the Global Political Economy

In July of 1944 during a meeting in Bretton Woods, New Hampshire, the United States and its allies finalized agreements for the general governance and infrastructure of a new global trade and finance system. The Bretton Woods meetings produced three powerful institutions including the International Bank for Reconstruction and Development (World Bank), the International Monetary Fund (IMF), and the General Agreement on Tariff and Trade (GATT). These three global bodies became known as the Bretton Woods Institutions (BWIs), which under Keynesian economic policies supported regulated business transactions and restricted movement of capital in global financial trade.

The World Bank was commissioned to stimulate overall economic development and growth, with a focus initially on war-torn economies. The World Bank offered long-term, low-interest loans to Europe for “reconstruction”¹² and later for Third World¹³ “development” (Meltzer, 2002). The International Monetary Fund became operational as a public financial institution to promote international monetary cooperation and oversee an orderly exchange rate system between complying countries. It established fixed exchange rates based on the US dollar and US gold reserves. The IMF mandate was to maintain currency stability and foster world trade.

The GATT agreement was originally introduced as the International Trade Organization (ITO), a governance body created for implementing global trade policy under a

¹² The US government decided on granting (instead of loaning) money for the post-war reconstruction of infrastructure in Europe. The US Marshall plan transferred \$41.3 billion dollars in funds to rebuild European countries.

¹³ The "worlds of development" concept originated with Louis Irving Horowitz. Horowitz distinguishes between groups of countries that share similar patterns of socio-economic development. The criteria used to differentiate between countries include: the nature of the dominant economic system (i.e., "capitalist" vs. "socialist", "open" vs. "closed"); the nature of the dominant political system (esp. in terms of their degree of participatory democracy); degree of urbanization; and, the role of the military in national life. The third world includes those countries of Central and South America, Africa, and Asia. The first world refers to Western capitalistic countries of America and Western Europe. The second world referred to state controlled economies such as the Soviet Union (taken from Horowitz, 1972).

laissez-faire agenda. Ideas for the ITO date back to WWII discussions between the US and Britain that suggested all non-tariff barriers should be abolished and all tariffs reduced through international negotiations (Dam, 1970). Less industrialized countries opposed the free trade liberalization agenda in the ITO and demanded special charter provisions for trade including the flexibility to use tariffs and protective barriers for new industries. The Third World recognized that many of the new rules for economic integration in the world market sought to expand the reach of capitalism into untapped markets and commodities in developing nations. By the end of the negotiations, even the US Congress would not ratify the entire ITO agreement and signatory countries instead adopted the General Agreement on Tariff and Trade. GATT came into effect in January of 1948 as an interim step to the ITO with some special charter provisions for less industrialized countries. GATT remained in effect until the 1995 when it was replaced by a laissez-faire model for global trade under the World Trade Organization (WTO).

3.3 The United Nations

In 1945, representatives from 50 countries met in San Francisco at the first United Nations Conference on International Organization to draw up the UN Charter. The Charter was ratified on October 24, 1945 after it was signed by a majority of the attendees including China, France, the Soviet Union, Britain, and the United States. The UN was created as a democratic governance institution for preserving international peace and collective security through international economic and social cooperation. The UN created a global congressional platform for governments to negotiate and cooperate on international agreements for economic development, global security, and social equity. Subsequently, the United Nations developed international agreements on the environment, global health, and protection for women and children.

“The purposes of the United Nations, as set forth in the Charter, are to maintain international peace and security; to develop friendly relations among nations; to cooperate in solving international economic, social, cultural and humanitarian problems and in promoting respect for human rights and fundamental freedoms; and to be a center for harmonizing the actions of nations in attaining these ends.” (UN Charter, 1945)

Similar to the Bretton Woods Institutions, the UN has an extensive network of its own global governance institutions. The UN is divided into six principle administrative bodies including the UN General Assembly,¹⁴ UN Economic and Social Council (UNESCO),¹⁵ UN Security Council,¹⁶ UN Secretariat, UN Trusteeship Council, and the International Court of Justice. Under its core framework the UN has been subsequently responsible for creating international institutions such as the World Health Organization (WHO), the UN Development Program (UNDP), the UN Environmental Program (UNEP), and the UN Children’s Fund (UNICEF).

Originally, the Bretton Woods Institutions were under the oversight of the United Nations. However in 1948, after GATT came into effect, the IMF and World Bank became independent from the direct oversight of the UN council. Consequently, a clear separation between two very different global governance agendas emerged. The BWIs adopted the plutocratic mission of advancing global capitalism in economic development. The UN was less concerned with protecting capitalist interests and evolved by pursuing an inclusive democratic policy and research agenda giving each country one equal vote in the general assembly. Unlike the BWIs, the UN provided a platform for social organizations and less developed countries to

¹⁴ The only UN body in which all members are represented, the Assembly serves as a forum for members to launch initiatives on international questions of peace, economic progress, and human rights. It can initiate studies, make recommendations, develop and codify international law, promote human rights and further international economic, social, cultural, and educational programs.

¹⁵ The UN body that is a vehicle for cooperative economic and social dialogue. It coordinates special agencies and functional commissions.

¹⁶ The Security Council votes on peace and security issues and is the most powerful UN body. It has five permanent members (US, UK, Russia, China and France) and 10 elected members (2 year terms). Each permanent member has the power to veto any resolution. A single blocking vote outweighs any majority.

lobby governments in the creation of democratic international law. The UN was quickly marginalized from influencing the BWIs because many of their socioeconomic policies and agreements were often at odds with those in GATT. The UN had no enforcement power or direct legal ability to govern individual nations and therefore, as the UN and the Bretton Woods Institutions developed, they became subdominant and dominant in association. The UN took on a subdominant governance role by urging countries to voluntarily comply with non-enforceable social and environmental agreements. The BWIs on the other hand took on a dominant role in global governance by creating binding and enforceable (by US military power) international trade agreements to encourage capitalist market growth. UN agreements often contradicted the BWIs, and therefore countries were prevented from ratifying UN treaties due to their BWI obligations. The Bretton Woods policies prevailed throughout the 20th century allowing profit-driven corporations to gain power and ultimately direct world governance. Rather than democracy and socioeconomic justice advocated by the UN, global governance under the BWIs was dominated by plutocracy and economic imperialism.

3.4 Development and Dependency Theory

In the post-colonial development era, the BWIs asserted that industrialized nations in the North needed increased access to global resources and markets in the South in order to have enough export surplus to maintain full employment at home. Therefore, it was considered a necessity for global capitalism to formally open markets and privatize resources from the Third World (Sachs, 1996). The US and its European allies used the BWIs to gain economic control over cheap labor and natural resources from former colonies by using market privatization, foreign direct investment, and debt financing. This primarily benefited Northern governments and corporations. As a result, some critics have called post-colonial development policy a form of neocolonialism or economic imperialism.

The massive efforts to develop the Third World in years since World War II were not motivated by purely philanthropic considerations (such as raising living standards) but by the need to bring the Third World into the orbit of the Western trading system in order to create an ever-expanding market for our goods and services and a source of cheap labor and raw materials for our industries. This has also been the goal of colonialism especially during its last phase [capitalism], which started in the 1870s. For that reason, there is a striking continuity between the colonial era and the era of development, both in the methods used to achieve their common goal and in the social and ecological consequences of applying them... *Development* is just a word for what Marxists called *imperialism* and what we can loosely refer to as *colonialism* – A more familiar and less loaded term. (Goldsmith, 1996 p. 256)

The founders of the Bretton Woods Institutions adopted development theory as a central strategy by claiming that global interdependence, based on a strong economic development model, would greatly reduce the need for wars. The BWIs commissioned numerous studies on the benefits of development for underdeveloped nations. Economic development became the accepted solution for Third World countries to rise out of poverty by promising wealth and prosperity through market privatization.

In the quest to rationalize the South's underdevelopment some economists blamed traditionalism or population growth for the reason the South failed to economically develop. In general, economists in the North believed that all Southern economies needed to do was to adopt the market-based policies of the North to set them on the path of growth and prosperity. Therefore, although development theorists differed on economic schools of thought, they agreed that market capitalism would be beneficial to all (Ferraro, 1996). Therefore, mainstream development theory became the task of Northern economists who believed that the "South's problems could be rationally assessed and technically managed with the aid of Western guidance" (Brohman, 1996, p. 9). Development theory advocated the South industrialize by reorganizing low-productivity commerce, with decreasing returns in agriculture sectors, to high-productivity

commerce, with increasing returns in mostly industrial sectors. Development theory and Keynesian economic models were transferred to the economies of the Third World through the BWIs, and subsequently became known as modernization theory¹⁷ (Brohman, 1996).

Concurrent with the expansion of development theory was the emergence of dependency theory,¹⁸ first articulated by the Director of the United Nations Economic Commission for Latin America, (ECLA) Raul Prebisch. Prebisch was troubled that industrialization did not necessarily lead to growth in poorer countries. Indeed, his studies showed that the prescriptions of development theory had negative consequences poorer countries, such as poverty and loss of economic autonomy from Northern states and corporate interests (Ferraro, 1996).

Prebisch's explanation for this occurrence was that poorer countries exported primarily raw materials, which were processed in rich countries and then exported back and sold as higher-priced commodities.¹⁹ This created a negative surplus that could not be corrected because poorer countries could not earn enough export surplus from primary commodities to afford to import foreign goods. To correct this imbalance, Prebisch stressed the importance for developing nations of growth through internal reforms, to escape from dependence on external help from large financial institutions such as the World Bank.

An alternative economic model for development that emerged from dependency theory was called, *Import Substitution Industrialization (ISI)*. ISI sought to strengthen domestic industries in developing nations as a key strategy for sustaining growth. ISI sought to replace goods that were typically imported with similar goods produced by local industries. This was believed to be the

¹⁷ Modernization theory is a socioeconomic theory within development theory that focuses on the positive role that developed nations play in helping to provide technical assistance and facilitation for the modernization of underdeveloped nations.

¹⁸ Dependency theory emerged from structural economics and was popularized in the 1950s as a group of social science theories (Prebisch; Singer; Frank; Baran) suggesting that poor underdeveloped states of the periphery (Third World, South) are exploited by wealthy developed nations of the centre (First World, North), in order to sustain economic growth and remain wealthy.

¹⁹ Post-colonial trade infrastructure for Southern countries continued to follow the patterns of the colonial agro-export model, in which Southern countries provided cheap labor and natural resources for manufacturing and production abroad.

best strategy to improve the health of the national economy and reduce dependency on aid from the North. Poorer countries sought to sell their products on the world market and earn foreign exchange reserves. The bulk of their income would not be used to buy goods from abroad, rather it would be reinvested in the domestic economy. In theory, the ISI model would help achieve more rapid self-sustaining growth and promote economic diversification while still attracting foreign investment and concessions for capital (Brohman, 1996).

ISI models had a high level of state involvement in creating and stimulating domestic industry. Eventually, those state sponsored industries attracted investment from foreign corporations who desired to improve their access to local markets and circumvent trade barriers for privately held foreign companies. In many cases foreign investors were resistant and defiant towards state regulations that required corporations to reinvestment profits locally, share ownership with nationals, and abide by local employment laws. Disputes arose, which led to distrust between US foreign investors and governments in developing nations.

Northern economists in the BWIs challenged the veracity of the ISI approach and portrayed ISI as a protectionist model promoted by populist and nationalist governments of the South. The irony of the ISI model was that economists who traditionally supported ending ISI protectionist policies, engaged in supporting ISI models that were friendly to foreign capital interests. In many countries foreign-owned corporations received substantial subsidies from individual governments and dominated ISI sectors. Consequently, the US government and its corporate interests played a large role in advising and shaping ISI policies in countries such as the Philippines, Turkey, Argentina, India, Brazil, and Mexico. In some cases US corporations were able to ensure that they did not lose foreign markets to domestic competition while gaining preferential access to protected markets, and excluding other foreign competitors.

In summary, during the first phase of contemporary globalization the BWIs influenced both the post-colonial development model and the ISI development model. Each pattern for

economic growth promoted the spread of free market capitalism around the world, ostensibly in the name of freedom, democracy, and to benefit the world's poor.

3.5 Establishing the New World Order

In the post-WWII years the US military contracted with a highly sophisticated group of corporate trade and industrial partners. The US federal government funded the military's corporate associates through a variety of grants, contracts, and subsidies to deploy weapons, build infrastructure, and maintain services for the US Defense Department. In addition, the US State Department assisted the US Defense Department and its corporate associates in gaining contracts overseas to build bridges, utilities, dams, and roads. With the help of the Bretton Woods Institutions, large loans taken out by governments overseas to build infrastructure benefited American capital interests because funds were directed back to US corporations and defense contractors.²⁰

The US military played the role of global enforcer of US capital interests in trade. First and foremost, the US was successful in building a capitalist empire because of the political and economic pressure it used during trade negotiations to protect foreign investment from being "expropriated" by governments who wished to "nationalize" foreign owned assets. Developing nations (many ex-colonies) which did attempt to expropriate resources and redistribute them in a socialist manner were labeled "communist" and often thwarted by US covert military operations through the US Central Intelligence Agency (CIA). Therefore, the United States primarily used trade agreements and debt to gain control of a country's assets rather than direct military

²⁰ In the (2004) autobiography by John Perkins, *Confessions of an Economic Hitman*, Perkins admits to falsifying economic projections to the World Bank (from 1963-1981) in order to win financial contracts in Indonesia, Ecuador, Columbia, and Panama as the chief economist for an engineering and consulting firm named MAIN. Perkins details his working relationship with the World Bank and the culture of using false information to obtain funding that would ultimately profit US contractors and lenders.

occupation and violent government overthrows. However, US military intervention was used openly as a last-resort for non-complying countries (Perkins, 2004).

In one example in 1954, the United Fruit Company (UFCO) (a US company now known as Chiquita) sought intervention from the US State Department to protect “its” assets (idle land) from being expropriated by a newly elected socialist government in Guatemala. Although the Arbenz government offered fair compensation for the UFCO land (80% of which was not in production), the US military subsequently mounted an operation in Guatemala,²¹ and overthrew the democratically elected President, defending its actions on the conviction that he was a communist.

“Washington officials did view the UFCO problem as another, indeed critical, piece of evidence that Arbenz was coming under communist influence. As late as April 1954, that evidence had to rest not on Guatemala’s support of international communism – for there was no convincing proof of that—but on its treatment of private property inside the country...Guatemalans precisely defined the confrontation as being over the question of who was to determine the future use of their own property.” (Lafeber, 1984, p. 54)

The US State Department had no real proof of communism in Guatemala so they devised a communist analogy that became known as *Patterson’s Duck Test*. In the post-WWII era of the Cold War paranoia, passing the duck test was all the legitimacy the US needed to send its military into war for the protection of its corporations in the free market.

“Suppose you see a bird walking around in a farm yard. This bird has no label that says “duck.” But the bird certainly looks like a duck. Also, he goes to the pond and you notice that he swims like a duck. Then he opens his beak and quacks like a duck. Well, by this time you have

²¹ “The revolt itself was based on top-secret operations and maximum use of psychological warfare. The CIA chose Carlos Enrique Castillo Armas, armed his rudimentary group, staged them in Honduras, and prepared covert air cover in Panama. Castillo moved 6 miles inside the Guatemalan border and stopped. The CIA set up a radio transmitter in the jungle and broadcasted reports to Guatemala City that exaggerated the strength and success of the rebels. Arbenz responded by having a blackout. The Guatemalan Army yielded, and Arbenz was out of power because few people wanted to risk supporting him.” (taken from Immerman, 1983 p. 163)

probably reached the conclusion that the bird is a duck, whether he's wearing a label or not." (Immerman and Bowie, 1998 p. 102)

Fear and power drove the US government to try and eradicate communism from the planet. Rogue communist nations and state-controlled economies with socialist agendas threatened the foundational legitimacy and power of capitalist markets on a global scale. Between the Truman and Eisenhower administrations, the United States Congress passed a law that mandated a fight against communism via federal legislation NSC-68 and NSC-141, which committed the United States to be the protector of the free world against the communists (Immerman and Bowie, 1998).

In what became an infamous imperial pattern, the US Department of Defense, US State Department, and the CIA went on to conduct hundreds of both clandestine and open military operations to stop communism and expand free market ideology. This included the failed attempts to overthrow Fidel Castro of Cuba (in the Bay of Pigs Invasion of 1961) and the government of North Vietnam (between 1963 and 1975). Notorious leaders such as National Security Advisor and US Secretary of State Henry Kissinger ordered clandestine bombings in Cambodia and funded the overthrow of Chile's democratically elected government in 1973. The United States funded far-right military dictatorships in Latin America and elsewhere that supported US interests, helping them to obtain weapons and launch campaigns of torture, disappearances, and violence to suppress resistance (Hitchens, 2001).

As the business of war grew, so did capitalist ties to government contracts. Both corporations and the military gained immense lobbying power in Washington DC. In his foreboding 1960 farewell speech, former 4-star general and US President, Dwight D. Eisenhower admonished:

"Until the latest of our world conflicts, the United States had no armaments industry...But now we can no longer risk emergency improvisation of national defense; we have been compelled to create a permanent armaments industry of vast proportions...We annually spend

on military security more than the net income of all United States corporations...In the councils of government, we must guard against the acquisition of unwarranted influence, whether sought or unsought, by the military industrial complex. The potential for the disastrous rise of misplaced power exists and will persist.” (Eisenhower, 1960 p. 1035-1040)

Dwight Eisenhower’s warnings would turn out to be a harbinger for decades to come. He coined the term “military industrial complex,” which refers to the relationship between the US military, private defense contractors, and associated corporate and political interests (Kurth, 1999). This iron triangle held influence over US policy and the direction of the Bretton Woods Institutions. The military industrial complex changed the landscape of business and the political economy, moving it away from controlled capitalism and back towards laissez-faire capitalism.

3.6 Power to the People

In the first phase of contemporary globalization, the democratic ideals of Franklin Roosevelt created a period of unprecedented prosperity and growth for the labor class in the United States. The American political model was *democratic pluralism*, “a system of governance based on a pragmatic, non-ideological, institutional balance among the forces of government, market, and civil society” (Korten 1996, p. 184). In general, governments were strong, legitimate, and responding to the interest of working class people, represented by labor unions and civil society groups.

The rapid growth of the middle-class in America was unique and due in part to Roosevelt’s policies and to the dominant role that the US played in production for the global economy after WWII. US industries, many supported by government contracts, had little competition from companies in Europe and Japan who were struggling to rebuild their economies after wartime devastation. Redistribution of wealth through higher incomes for the American work force drove consumerism, leading to further expansion of the consumer market. For the first

time in US history, the average US worker was able to earn enough to buy a home, a car, and other luxury goods.

As corporations grew in wealth and power from access to foreign resources, the need for high-paid, American, industrial labor declined. Corporations resented giving benefits to workers in the US when developing countries offered cheaper labor and weak regulations. Workers, who found job security in the economic boom cycle of the post-war years under the first phase of contemporary globalization, met with downsizing, union busting, outsourcing, recession, and war in the second phase.

During the post-war years the US pluralist system allowed for great increases in living standards and social rights. Civil society groups grew in number and began influencing politics, making strong political advancements in the 1960s for African-Americans in the civil rights movement, and for women in the feminist movements. African-Americans won the end of segregation and the right to vote. Feminist's movements fought for social equality including equal rights and compensation with men in the work place. A sexual revolution and counter culture movement erupted as the youth generation sought alternatives to war, industrialization, and consumerism. Most importantly was the awakening of the environmental movement, as scientists and activists began articulating the widespread, adverse effects of global capitalism and industrialization on human health and the world's natural resources.

3.7 Environmental Awakening

In 1962, scientist Rachael Carson published her book *Silent Spring*, which popularized awareness about the effects of industrial chemicals in the natural environment. Carson exposed the fact that the most widespread post-WWII agricultural pesticide, DDT, was causing an unhealthy biological chain of concentrated pollution in water, soil, and living species. Many of the producers of industrial chemicals, including Monsanto (PCBs) and DuPont (CFCs and other

chlorine/dioxin products) were being funded by taxpayer's money and through government subsidies to the military industrial complex. Carson's book was revolutionary because it challenged Western science's Imperial ethic towards nature, including the ability of government-funded science to keep citizens safe (Worster, 1994).

Poetically and scientifically, Carson elucidated that nature was vulnerable to human intervention and by extension humans were vulnerable to nature. Carson popularized the field of ecology by illustrating and reaffirming the interdependence of the web of life:

“For each of us, as for the robin in Michigan, or the salmon in the Miramichi, this is a problem of ecology, of interrelationships, of interdependence. We poison the caddis flies in the stream and the salmon runs dwindle and die. . . . We spray our elms and following springs are silent of robin song, not because we sprayed the robins directly but because the poison traveled, step by step, through the now familiar elm leaf -earthworm-robin cycle. These are matters of record, observable, part of the visible world around us. They reflect the web of life-or death-that scientists know as ecology.” (Carson, 1962, p. 189)

Carson's book received worldwide notoriety and planted the seed for an international environmental movement. It took almost a decade for a movement to build, but by the early 1970s US politicians and international organizations such as the United Nations began responding by protecting the ecology of living systems worldwide.

Until the 1960s, not many US environmental laws were past. The Refuse Act of 1899 was one of the only 19th century laws that passed which required individuals to get a permit before dumping waste into navigable waters (which was largely ignored). In 1948 the Water Pollution Control Act was passed to assist local authorities in building sewage treatment plants. In 1945 the Atomic Energy Act established a general regulatory structure for the construction, use, and disposal of wastes in nuclear power plants and nuclear weapons facilities. In the mid-1960s another handful of environmental laws was established, dealing primarily with public land

management and conservation, such as the Wilderness Act of 1964, the Land and Water Conservation Fund Act of 1964, and the Wild and Scenic Rivers Act of 1968 (Vig and Kraft, 2000). In 1963 legislation was passed to set pollution abatement standards. Due to popular demand and the momentum of the world's first Earth Day on April 22, 1970, the United States government took action to create new environmental laws, making it a global leader in protecting natural resources. This included the establishment of the Environmental Protection Agency (EPA) in 1970 to support an unprecedented decade of legislation covering water and air pollution control, pesticide regulation, endangered species protection, control of hazardous and toxic chemicals, ocean and coastline protection, better stewardship of public lands, and the creation of "superfund" money for toxic waste clean up. Rachel Carson's book had a huge impact on the passage of these regulations, bringing scientific credibility and awareness to policy makers.

Environmental regulation was abhorred by the business community, which fought aggressively to discredit protecting nature from commercial interests. Corporations threatened by environmental laws launched venomous campaigns against environmentalists, stigmatizing them as "extremists" who were trying to take away jobs from workers and ruin the economy. Corporations did not want to pay to clean up pollution or have any restrictions placed on their ability to extract cheap natural resources.

In the Third World, the adoption of pro-capitalist development models led to rapid exploitation of natural resources through the agro-export model of trade, causing widespread environmental degradation and industrial pollution.

"The specific ways in which Third World states have contributed to environmental degradation through policy incentives is now well documented... [and] include the use of low or non-existent land rental fees, royalties and corporate income taxes, subsidized loans to promote unsustainable logging, cattle ranching, or agriculture." (Bryant and Bailey, 1997 p. 58)

While limited environmental laws were put in place in the early 1970s in some First World countries, international efforts were difficult to mandate and counter to corporate interests. Consequently, discussions on environmental regulation in global trade were intentionally excluded from the Bretton Woods Institutions and would be dealt with almost entirely through the United Nations, beginning with the 1972 Human Development conference in Stockholm, Sweden.

3.8 Conclusion: The End of the Post-WWII Era

The first phase of contemporary globalization was successful in devising a new centralized governance model for global trade and finance under the Bretton Woods Institutions. However, those controls over capital flows that helped the post-WWII global economy prosper, began phasing out in the early 1970s with the plateau of corporate profits, global recession, and the slow absorption of US products abroad due to a rise in global competition. By the end of the first phase of contemporary globalization, serious political, environmental, and social unrest boiled to the surface in the US as citizens tried to assert their rights and regulate the negative by-products of the capitalist economy. Keynesian economics grew marginalized as the US business community lobbied policy makers for financial deregulation and freer access to overseas markets in order to keep their competitive advantage over European and Japanese counterparts. As the second phase of contemporary globalization began, US corporations started moving overseas where labor and environmental regulations were scarce and resources were cheap and abundant (Bello, 1994). By the 1970s, the global economy had emerged from its controlled, Keynesian, post-WWII economic boom, into a period of global slow down and recession where the United States used its power and influence over the Bretton Woods Institutions to deregulate international trade agreements and ultimately restrict international laws to protect the environment.

CHAPTER 4: Contemporary Globalization: Phase 2 (1971-1989)

4.1 Dismantling Controlled Capitalism and the Rise of Neoliberalism

The postwar order, which seemed so permanent in the good years of the 1950's and 1960's, could not go on forever. Our leaders recognized America's economic dominance immediately following the war as an unusual situation, and the postwar plan for reconstruction and development was a deliberate effort to bring the world economy back into a stable balance. As balance was gradually achieved, there was less and less need for the United States to bear the full responsibility for keeping the world economy growing. Unfortunately, the same quality of statesmanship that went into creating the postwar order was not available for the task of replacing it with more equitable arrangements.

~ Alice Rivlin, Reviving the American Dream

In the second phase of contemporary globalization the United States continued to operate at the helm of global governance. Beginning with the discontinuation of the gold standard in 1971,²² the US government, and subsequently the Bretton Woods Institutions, philosophically began the switch from Keynesian controlled models of classical liberalism to laissez-faire neoliberal models based on neoclassical theories of classical liberalism. The United States used its influence to persuade major banks, the BWIs, and international development institutions to remove tariff barriers to global commerce and allow increased privatization, thereby diminishing government spending and the state's role in regulating resources and trade. This shift in the political economy had serious consequences for the environment because it allowed unrestricted and unregulated extraction and consumption of natural resources to grow at an accelerated rate.

Deregulation in the US market led to the unraveling of America's social contract that was started by the New Deal. Reform policies were enacted to increase corporate welfare and decrease social democracy and planning by drastically reducing tax rates on the rich and cutting social spending on the poor. The government aided corporate efforts to weaken unions in order to

²² Going off the gold standard and giving up fixed exchange rates constituted momentous steps in the history of international economics. President Richard Nixon and his advisors decided to close the US gold standard exchange, which dated back to the Roosevelt administration, at \$35 dollars an ounce. As inflation rose, it became clear that the US did not have enough gold to cover its debts. It was decided on August 15, 1971, and formalized through the BWIs, that the US would no longer exchange dollars for gold.

drive down wages and benefits in the name of competition. At the same time, the government helped to remove restrictions on corporate mergers and acquisitions and allowed greater concentrations of market share and wealth. Many US corporations embarked on moving large-scale production and manufacturing overseas, which resulted in stagflation and millions of Americans losing their livelihoods. Political analysts predicted that old factory jobs would be replaced by jobs in technology and computers. However, those jobs came slowly and too late for many local and regional communities that were economically devastated by the closing of factories. Recession consumed the 1970s and represented yet another economic bust cycle of capitalist trade that was plagued with inflation, environmental degradation, social unrest, and war.

Overseas, the US military and CIA continued to engage in imperial clandestine operations to promote US capitalism, including selling weapons to militant groups who would overthrow communist and socialist governments. In 1973, the Chilean military violently overthrew the democratically elected government of Chile after being sold weapons by US companies²³ and receiving political support from US Secretary of State Henry Kissinger.²⁴ Subsequently, Chile was the first Latin American nation to adopt neoliberal policies, after which the IMF became involved in encouraging Bolivia, Mexico, and later Argentina to adopt neoliberal policies (Brohman, 1996). In Africa, Ghana was the first to attempt market

²³ In a notorious example of US corporate influence in the sovereign political affairs of Chile, the International Telephone and Telegraph (ITT) corporation offered the US Central Intelligence Agency \$1 million to interfere in the Chilean national elections by financing a campaign to defeat presidential candidate Salvador Allende. The offer was refused and Allende was democratically elected. "ITT continued to lobby the US government and other US corporations to promote opposition to Allende through economic pressure including the cutoff of credit and aid and support of Allende's political rivals. After copper mines in Chile owned by the firms Kennecott and Anaconda were nationalized, the US government took a series of steps based largely on the recommendations of ITT to subvert Allende" (Greer and Singh, 1996, p.8).

²⁴ Henry Kissinger served as both National Security Advisor and Secretary of State to the Nixon Administration. Kissinger is both praised and despised. He is a recognized war criminal by a number of professionals and academics for his political role in masterminding events that lead to the murder of millions of innocent civilians in Cambodia, East Timor and Chile (Hitchens, 2001). Conversely, Kissinger is depicted as a foreign policy genius and was awarded the Nobel Peace Prize in 1973 for bringing an "end" to the Vietnam War.

liberalization, followed by Kenya and Nigeria. In Asia, only a few countries, such as Turkey and Indonesia, quickly adopted neoliberal policies, while most countries moved slowly and hesitantly toward opening their markets. Consequently, the practice of economic imperialism grew rapidly under the implementation of laissez-faire global capitalism. This provoked a response from less developed countries in the Third World to band together and fight for a more democratic and just model of global trade.

4.2 The New International Economic Order

In the early 1970s, leading Third World governments engaged in a collaborative dialogue to discuss the limitations of First-World-imposed development theory. Irrespective of their political ideology, they sought to form an alliance to create an alternative development framework for better global redistribution of wealth and economic power for the developing world. There was a strong rhetoric of solidarity between developing nations who felt that their “underdevelopment” was due to their historically disadvantaged economic position under colonialism. The organized group of governments was called the New International Economic Order (NIEO) and their charter was adopted by a special session of the United Nations General Assembly in 1974 (UN General Assembly Resolution 3201, 1974).

NIEO sought to enact fundamental change in North-South relations. NIEO sought mutual respect in economic affairs, autonomy from neocolonial powers, and increased benefits from global trade. Developing nations resented being marginalized in the global economy with foreign interests controlling their resources. They sought to change their traditional role as dependent producers of cheap primary goods for rich Northern consumers.

The victory of the North Vietnamese in the war against the United States and price increases in oil by the Organization of Petroleum Exporting Countries (OPEC) inspired developing nations to create their own cartels and protection over industries. At that time many

developing nations were promoting the ISI model, which had its own shortcomings due to economic and historical factors. For example, rapid industrialization proved to be enormously capital intensive and ISI strategies used more foreign exchange to buy imported technologies from the North than it was able to generate in revenue from selling its finished goods (Bryant and Bailey, 1997). In addition, Southern “substitute” industries were not able to compete with established Northern industries in the world market and lost revenue, which further distorted their balance of payments to foreign banks.

In the 1970s, neoliberal economists in the North began attacking the ISI model of development and pushing for more deregulation and privatization of markets. The BWIs and other Northern financial institutions made foreign aid contingent on liberalization policies. The BWIs discouraged growth in the ISI model and instead promoted the philosophy of privatization over protectionism. NIEO was not cohesive enough to find leverage to challenge Northern governments and financial institutions that demanded free market reform. Therefore, the South remained subjugated to the policy will of the North in the neoliberal global model for international trade.

4.3 The Impact of the Oil Crisis

In 1973, the Arab oil-exporting countries vying to demonstrate their power to Western nations and to protest the state of Israel, began to slow production of oil in 5% increments while also increasing oil prices 70% worldwide (Tugwell, 1988). Billions of dollars generated from inflated oil prices flooded international banks and created an enormous surplus of private capital. With so much incoming capital to manage, private banks began offering loans to developing countries for economic development projects with few, if any, conditions. Many developing countries preferred to take advantage of this seemingly endless supply of private capital rather

than take direct development loans from the IMF and World Bank, which were riddled with conditions for opening markets to deregulation.

Most capital projects in developing nations required expensive northern technologies and contractors in order to be carried out. Projects included large dams, power plants, highways, utilities, buildings, mining, and logging. Such lending was often plagued with corruption and exacerbated environmental degradation in the South because it promoted increased resource extraction (Bryant and Bailey, 1997). Despite the rise in productivity and export goods in developing nations, a global recession put a hold on the ability of the United States, and other large markets, to absorb imports from abroad. This had a detrimental ripple effect for many developing economies that had no buyers for the goods they had produced with borrowed money. Rising inflation in the global economy, coupled with widespread financial corruption in both the North and South made it impossible for Third World governments to service their debts to private banks. Consequently, a spiraling debt crisis began.

4.4 The Third World Debt Crisis

Towards the end of the 1970s, private capital dried up for developing countries as private banks faced mounting Third World debt, exacerbated by double-digit inflation and a global recession. Both private lenders and Third World governments found themselves in a true economic crisis, as default seemed imminent. The favorable lending status given to developing economies by private banks abruptly ended and was replaced with panic that their default could create a systemic collapse for the entire international financial community (Bryant and Bailey, 1997). Suddenly, the IMF and the World Bank found their lending position rapidly elevated to priority lender and “middle man” between developing economies on the brink of default and private banks ill-equipped to handle the situation. As developing countries found themselves

heavily in debt to private banks and cut off from further private loans, they were forced to turn to the IMF and World Bank for assistance.

In response to the debt crisis, the IMF (traditionally focused on short-term stabilization measures) and the World Bank (concerned with longer-term adjustment and project lending) collaborated in support of Structural Adjustment Programs and Loans (SAPs and SALs) in 1982. Consequently, the debt crisis culminated into a mandate that required structural adjustment programs for Third World countries that wished to receive future money and technical support for development from Northern international financial institutions. Previously, banks had no recourse except to keep lending to indebted countries under high uncertainty and high interest rates, purportedly to avoid large-scale default in the global economy. SAPs were designed to help indebted countries make their interest payments to private banks and avoid default, while simultaneously reforming the economy to help them to pay off debt. Consequently, SAPs became the decisive factor in restoring lending creditability to developing countries by ensuring private lenders they would be repaid (Brohman, 1996).

“An immediate objective of the stabilization and adjustment programs was to rescue the Northern financial interests which had become overexposed to the Third World. To accomplish this, the World Bank and IMF became the lynchpin of a strategy that involved providing compliant Third World debtors with billions of dollars in quick-disbursing SAL or standby loans which would then be transferred as interest payments to the coffers of the private banks.” (Bello, 1994 p. 67)

The Third World’s enormous external debts, compounded by high interest, perpetuated its reliance on external capital from Northern international financial institutions. Dependency forced SAP countries to implement the neoliberal mandate of the IMF and World Bank. This type of economic imperialism led to economic instability, rapid environmental degradation, poverty, and a lessening of state legitimacy.

Environmental degradation in the Third World resulted from the conditions placed on it by the Bretton Woods Institutions (Bryant and Bailey, 1997). SAPs exacerbated the South's traditional role as primary resource extractor and agricultural exporter in order to repay compounding interest debt to private banks. Vulnerable to volatility in raw commodity prices, many developing countries under SAPs continued to struggle to meet the payment requirements on their debt, which continued to grow exponentially. For example, in Ghana the economy suffered from flat export sales and inexorably rising imports, which led its deficit to rise from US \$43 billion in 1986, to \$229 billion in 1990 (Bello, 1994, p. 61).

The IMF had an infamous solution for debt service, which required indebted countries to “produce more” output for export at devalued prices and “consume less” imports. However, this mantra for increased exports did not, in practice, create wealth or development in many countries.

“Cote d’Ivoire has increased its exports (from \$3 billion in 1980 to \$5 billion in 1995). However, Cote d’Ivoire’s GDP has remained stagnant (the same \$10 billion in 1995 as it was in 1980) and their external debt has skyrocketed (from \$7 billion to \$19 billion over the same period). Cote d’Ivoire is largely dependent on exports of primary commodities like coffee and cocoa yet, during the 1980s, the world prices for these products collapsed. Cote d’Ivoire had to increase the volume of its exports to earn the same amount of revenue.” (Friends of the Earth, 2001, p. 17)

Countries were told by the IMF to sell more and more primary resources, at devalued prices, to pay for higher and higher interest payments on their debt. This had serious consequences on the natural resources of developing nations. SAP loans had no policies to provide environmental stewardship or resource management. Rather, SAPs made it difficult for nations to protect their natural resources by defining environmental protection as a non-tariff barrier to trade and restricting it. As a result of ever increasing debt, environmental quality and social stability decreased as poverty and hardship increased.

4.5 Economic Imperialism: The Race To The Bottom

The BWIs received direction from the administration in Washington DC and worked to implement US interests worldwide. The BWIs aggressively targeted non-market economies and used SAP loans and international trade agreements to require compliance with neoliberal policies. This form of economic imperialism advanced the financial interests of the North.

“Robert McNamara’s [US Secretary of Defense] greatest and most sinister contribution to history was to jockey the World Bank into becoming an agent of global empire on a scale never before witnessed...His advocacy of “aggressive leadership” became a hallmark not only of government managers but also of corporate executives. It formed the basis of a new philosophical approach to teaching management at the nation’s top business schools, and it ultimately led to a new breed of CEOs who would spearhead the rush to global empire.” (Perkins, 2004, p. 79)

Consequently, many Third World economies lost control over the structure of their domestic markets and were forced to privatize public enterprises, limit state regulation, and open up their economies to foreign investment and corporate control (Lissakers, 1991). Therefore, the BWIs played a primary role in reorganizing entire nation states away from domestic state control and towards private ownership.

“Under structural adjustment, the IMF and World Bank do not merely supervise individual sectors of the economy as in the past (such as agriculture and social services by the Bank and external trade by the Fund). They now manage each and every country entirely. They approve annual national budgets, foreign exchange budgets, post their representatives to the various banks, Ministries of Finance and Trade of independent countries, approve monetary, trade and fiscal policies and give clearance certificates before countries can negotiate with other foreign lending agencies.” (Singh, 1992, p. 8)

Neoliberal reforms were designed to ensure that the maximum revenue possible was directed towards loan and interest repayment. For example, in Mexico:

“Capital expenditures as a percentage of total government expenditures dropped from 19.3 per cent in 1982 to 4.4 per cent in 1988, while interest payments on the country’s domestic and foreign debt rose from 19 to 57 per cent of total government expenditures during the same period... Thus, as a percentage of Mexico’s exports of goods and services, debt service payments averaged a high of 55 per cent between 1982 and 1988... some 7-11 per cent of GDP each year.” (Bello, 1994, p. 39)

Reforms were presented to indebted countries on a take-it-or-leave-it basis (Brohman, 1996).

Indebted countries adopted Northern policies under a fear of non-compliance, which would mean economic sanctions, trade embargos, and in some cases, military intervention.

In addition to reducing protections on the environment, neoliberalism sought to remove other non-tariff barriers to trade such as government regulation, minimum wages, employment benefits, worker safety, public health care services, and public transportation. This began what is known as, “the race to the bottom” in which many developing nations competed with each other for foreign capital investment by promising better liberalization concessions to corporations (Tonelson, 2002). In many cases, such as in Latin America, SAPs took away the state’s autonomy to control development while concurrently advancing the growing ownership and power of corporations, granting them more authority to set trade and finance policies in the global marketplace. As a result, Latin America experienced de-industrialization under SAP programs. The United Nations called the mid-1980s through 1990s the “lost decade for development”(UN Human Development Report, 2003). The UN also reported, “since the early 1980s the world economy has been characterized by rising inequality and slow growth” (UNCTAD, 1997, p. 57). Therefore, the research and findings of the UN on neoliberalism contradicted the BWIs promises. Nonetheless, the UN had no global enforcement power to stand up to the advancement of global capitalism under the BWIs.

Historical and sociocultural factors played a decisive role in how individual countries were managed under SAPs. Powerful groups in the state and corporate arena, both foreign and domestic, played an important role in shaping political and economic outcomes. Those regions

most devastated by SAPs were ex-colonies including Latin America, Africa, and India. However, there was another handful of Asian countries in Southeast Asia that underwent industrialization and economic lending from the BWIs during the second phase of contemporary globalization, with a very different outcome.

4.6 Asian Tigers: Newly Industrialized Countries

The development experience in Latin American and Africa in the 1980s and 1990s varied significantly from that of a small group of countries in South-East Asia during the same era. These countries, known as the Newly Industrialized Countries (NIC),²⁵ outpaced their counterparts in Latin America, India, and Africa, and grew rapidly towards First World status by adopting manufacturing and technology-led exports. Neoliberal economists have consistently credited laissez-faire policies as the key to the economic success of the NICs, claiming that liberalization is “alive and well, and working particularly effectively in East Asian countries” (Bhagwati, 2004, p. 38). However, close examination shows that NICs did not adopt neoliberalism or laissez-faire market liberalization as promoted by the Bretton Woods Institutions. Rather, they were given more flexible trade and lending terms for geopolitical reasons, that allowed for the state to play a key role in economic development.

Traditional neoliberal policies for SAPs included the elimination of protections on international trade, removal of controls on exchange rates, overall deregulation of the financial sector, privatization of state enterprises, de-unionization, specialization according to comparative advantage, elimination of various regulatory mechanisms, and a minimalist role for the state in economic development. Conversely, in NIC countries, the state played a key role in regulating

²⁵ “The original Asian NICs are the Four Tigers of Hong Kong, Singapore, South Korea, and Taiwan. In addition, a number of other Asian countries (i.e., Indonesia, Malaysia, Sri Lanka, Thailand, Turkey) have recently been given the status of NICs in much of the development literature” (Brohman, 1996 p. 81).

trade and economic policy, advocating for import-substitution strategies that included strong state economic intervention, protection for infant industries, and temporary dissociation of their economies from international competition during the initial industrialization phase (Brohman, 1996).

The successful element of the NIC development strategy was that it had strong public-private cooperation, in which the state played a centralized and legitimate role in opening market sectors. The state often employed the technical expertise for entire industries in fields such as engineering and transportation. The state used a mixed model of protecting and nurturing specific domestic industries while opening up other industries for competition in the global market. NICs fundamentally differed from the experience of other Southern countries during the same period under SAPs, who saw a weakening of state participation in job creation, market policy, and social infrastructure.

NICs historically differ from other developing countries because they were influenced by Japanese investment and economic policy, which emphasized mercantilism, export-led industrialization, and strong state autonomy. “Some \$15 billion worth of Japanese investment rushed into the region between 1985 and 1990” (Bello, 1994, p. 34).

“The ‘Gang of Four’...[presents] evidence of Japan’s revolutionary impact...Japan serves as a model...[and] is a basic source of training for the leaders of many of these countries...The NICs use government even more explicitly than does Japan in economic planning and guidance. One would have to say that all except Hong Kong have a more centrally directed pattern of economic growth than Japan, although they would tend to see themselves as basically market, rather than planned, economies.” (Abegglen, 1980, p. 97)

NICs had strong state programs that helped to expedite the process of technological and structural change in both urban and rural areas. The government of Taiwan for example, linked urban industrialization and rural development by charging equal energy rates in rural and urban areas, and establishing rural industries such as export processing zones and bonded factories

(Ranis and Stewart, 1993). In practice, the government played a key role in fostering competitiveness, growth, and funding infrastructure in NICs. This varied significantly from neoliberal theory, which attempted to restrict government from economic development and planning.

The NIC countries helped to expand their exports by having an educated workforce in both the urban and rural areas. NICs supported primary and secondary levels of education, emphasizing programs in science, engineering, and technical expertise, and demonstrating a deep commitment to enhance human resources among all classes. This led to economic development and strong returns in technology sectors such as computers and electronics. In contrast, SAP countries in Latin America, Africa, and India cut back on social spending, which decreased public funding for education and other basic social infrastructure. Consequently, many citizens in these countries were not able to acquire practical literacy and other basic skills needed to broaden their economic participation.

For strategic reasons, the NICs received favorable trade terms from the United States during the Cold War, in an effort to keep communism out of most of Southeast Asia. It is estimated that exports from South Korea, Taiwan, and Hong Kong were given an average 12-15% trade barrier suppression over countries in Latin America (Leamer, 1983). NICs continued to experience trade preferences until the late 1980s, when growth in their economies began to threaten US trade interests. Subsequently, the US pressured Korea and others to liberalize their investment, trade, and production practices.

After the Cold War ended, preferential treatment to NICs began to be dismantled. In 1988, the US Treasury Department went on the offensive²⁶ and accused Taiwan and South Korea of manipulating their exchange rates to gain unfair advantage in international trade

²⁶ The US used the Omnibus Trade and Competitiveness Act of 1988 to pressure NICS to voluntarily restrict exports or face anti-dumping suits. This Act also removed NICs from the General Systems Preferences (GSP) status. GSP extends preferential tariff treatment to imports from Third World countries in order to assist their development.

(Noland, 1992). The United States Department of Commerce and the US Trade Representative began seeking retaliatory action against NICs for unfair trade practices, demanding market liberalization in sectors such as agriculture, telecommunications, maritime industry, financial services, cosmetics, and government procurement (US Department of Commerce, 1992). One after the other, tariff and non-tariff barriers came down in NIC economies and quotas were instituted.

“The US trade offensive was eminently successful, with South Korea’s trade surplus with the United States of US \$9.5 billion in 1987, turning into a deficit of \$335 million in 1991. Korea was the United States’ prime target; indeed, given Korea’s lack of retaliatory clout, the US treated it far more harshly than Japan, which had the capacity to hit back effectively.” (Bello, 1994, p. 80)

Harsh demands on NICs were targeted at shrinking the advantages these countries had gained in key industries. The US corporate strategy was to gain market dominance by ending NIC state-supported competition and intervention in the global market. Corporate-driven global adjustment took place in the NICs through US bilateral trade agreements in the late 1980s and early 1990s. By the beginning of the third phase of contemporary globalization the NICs had been “resubordinated” to Northern interests in the global economy, not through debt, but through the liberalization of their markets under international trade agreements. The US and the Bretton Woods Institutions were successful in using both the tools of debt and international trade agreements to move the political economy towards laissez-faire, free market global capitalism.

4.6.2 NICs and the Environment

Rapid industrialization caused pollution and environmental damage in NIC countries. In the race to industrialize, governments saw environmental regulation as a luxury. They took the position of growing their economy first, and cleaning up later when they were rich enough to

afford it (Bello, 1994). This led to overall poor management and neglect of the environment in most NIC countries. To fuel growth, forests were logged for lumber and land plowed for agriculture, while dams and roads were built for transportation and electricity. Pressure from rural areas for wood use in cooking and heating also contributed to deforestation. Urbanization produced air and water pollution from fossil fuel combustion and industrial wastes, while construction devoured land and caused landslide-related problems such as erosion that clogged waterways. Shrimp farming along the coastal lines of many countries, including Thailand, destroyed mangrove habitats and agricultural land by flooding areas with salt water and leaving behind antibiotic-laden run-off. Tourism moved into areas previously untouched by development and brought hotels and golf courses that required heavy use of water and pesticides.

Public pressure from activist groups and non-governmental organizations began to build in the 1980s and NIC governments responded by developing legitimate environmental agencies. For the most part however, the government was hesitant to place any restrictions on revenue-generating industries and, therefore, environmental agencies were primarily administrative and promoted merit-based incentives. Most environmental management took place behind the scenes. “Industry's role in the East Asian model of environmental management includes regular consultation between industry associations and government outside the public eye, with assured confidentiality” (World Bank, 2007). This non-transparent approach remained dominant between the government and industry and slowed environmental progress. Therefore, despite having a strong public role in economic development, governments did not institute strong environmental policy or regulation.

4.7 The Partnership between the BWIs and Corporations

The ascension of global capitalism was expedited through a familiar relationship between the capital interests of corporations and the institutions of global governance. Historically, capital

interests exerted a dominant influence in the affairs of varying political economies except for in times of internal conflict or external war (Heilbroner, 1985). Accordingly, when the post-WWII years of regulated international commerce ended, Northern governments naturally began to advance the interests of capital again. This was especially evident under SAPs.

In the second phase of contemporary globalization, corporate entities grew past national and multinational boundaries to even greater size, wealth, and market share, and became known as Transnational Corporations (TNCs). TNCs played a principal role in promoting neoliberal policy for deregulation of the global economy, using heavy government lobbying as a means to participate in policy development. Joint policy making was encouraged by organizations such as the Trilateral Commission, the Council on Foreign Relations, and the Bilderberg group, which brought business and government elites together repeatedly to discuss world affairs. The World Economic Forum remains to this day one of the most publicized annual meetings of corporate and government elites to share ideas, build coalitions, and make deals behind closed doors. Collaboration between the BWIs and TNC elites brought about the neoliberal takeover of the global trading system. This is not a surprising conclusion, since it is the nature of capital to accumulate wealth and centralize (Heilbroner, 1985).

Most importantly, TNCs were successful in forming relationships with the BWIs because they had the support of the administration of US President Ronald Reagan. Elected in 1981, Reagan began the international rollout of neoliberalism by loosening market regulation for corporations in the US, allowing them to centralize, gain more power, and lobby the US government to impose their will through the Bretton Woods Institutions.

4.8 Downsizing the American Dream: Reaganomics

The implementation of neoliberal policy worldwide began under the leadership of US President Ronald Reagan and the Prime Minister of Britain, Margaret Thatcher. Both leaders

were known for their orthodox belief in laissez-faire market economics. Paradoxically, the Reagan administration implemented heavy protectionist measures domestically for US corporations that closed American markets off to competitors. He also poured huge amounts of public subsidy money into industries such as automobiles, petroleum, and resource extraction (Chomsky, 2002). Chomsky quotes US Secretary of the Treasury James Baker at a business audience in 1987 saying that Ronald Reagan, “has granted more relief to U.S. industry than any of his predecessors in more than half a century” (Chomsky, 2002). Chomsky goes further to argue that Reagan provided more protectionist import relief to industry than all of his predecessors combined.

“Reaganomics”²⁷ was the term used for Reagan Administration domestic and foreign economic policies espousing a pro-market, pro-business agenda by shifting the tax base²⁸ away from corporations and onto citizens (Greenstein and Barancik, 1990). Reagan hypocritically espoused the virtues of laissez-faire market economics to the rest of the world while practicing protectionism at home. His policies epitomized the axiom, “do what I say, not what I do.” This became the distinguishing policy mark in North-South relations. In Great Britain, Margaret Thatcher coined the phrase “There is No Alternative” (TINA) to neoliberalism. Neoliberalism was seen as the “way” and, one-by-one, nation states (via SAPs and trade agreements) fell in line with what became known as the “Washington Consensus.”²⁹ Thus, neoliberalism rose to become the dominant global trade model by the end of the 1980s.

²⁷ The economic policies of Ronald Reagan began in 1981 and combined the theories of monetarism, supply-side tax cuts, and domestic budget cutting. The goal was to reduce the size of the federal government, to stimulate economic growth, and to increase American military strength. Monetarism is a conservative economic theory that holds that inflation occurs when too much money is chasing too few goods. Since the federal government has the power to create money, it should increase the money supply at a rate about equal to the growth in the economy's productivity; beyond that, it should leave matters alone and let the free market operate. This theory is strongly associated with Milton Friedman.

²⁸ The Economic Recovery Tax Act of 1981, the Tax Equity and Fiscal Responsibility Act of 1982 and the Social Security Amendments of 1983 reduced personal taxes by US\$117 billion but led to an increase in social security taxes. As a result, the tax share of the top 1% of the population fell by 14%, while that of the bottom 10% rose by 28%.

²⁹ The term “Washington Consensus” was coined by John Williamson of the Institute for International Economics in 1989. It describes the conventional wisdom at the US Treasury Department, the World Bank and the International Monetary Fund on policy reforms for

Domestically, the Reagan Administration renounced the social contract with America by slashing government budgets and social spending, while concurrently giving enormous subsidies to support corporate welfare and the military. Workers in the United States lost their footing in unions and labor negotiations as corporations moved manufacturing jobs abroad in search of lower labor costs. The Reagan Administration assisted the corporate quest for lower wages by supporting the break up unions and deregulating labor laws. During the Reagan era, relations between labor and corporate management were marked by aggressive union busting, prevention of unionization through “right-to-work laws,” replacement of full-time workers with part-time workers, wage and benefit “give-backs” under threat of plant closure, and increased out-sourcing of work.³⁰

“We’ve always seen aggressive management in many industries. What’s different now is that a number of companies who for most of the last 40 years operated on the basis of a certain social contract are redefining the terms of that contract. It isn’t just a back-alley machine shop with 200 workers going after its union. It’s AT&T violating seniority rules. It’s Caterpillar threatening to replace its work force ... Public companies that would have shunned these tactics a decade ago are now using them.”
(Phillips, 1993, p. 173-174)

Global recession in the 1970s made labor more vulnerable to corporate take-backs. Corporations complained that American wages were too high and production needed to be moved abroad to stay competitive (Morris, 1996). Neoliberals claimed that moving manufacturing jobs abroad would be good for Americans because those old jobs would be replaced with better, high-paying jobs of the future. Neoliberal economists argued that the “service economy,” rather than a

economic development. The Washington Consensus has become synonymous with market fundamentalism, globally applied.

³⁰ The American experience varied significantly from Japanese labor-management relations as well as from policies in some countries in Europe, such as Germany. The Japanese preferred to slow work, rather than hire and fire workers. The Germans rewarded workers for increased productivity, actively investing in their employees long-term and retraining them to stay competitive. The United States corporate system was not as willing, efficient or as flexible as the Japanese planned economy or the German social economy. In Japan, increased technological productivity and automation has risen hand-in-hand with wages, whereas in the United States this correlation was opposite showing a downward trend in wages (Thurow, 1992 p. 157).

productive manufacturing economy, was a higher stage of capitalist development. While the US did retrain workers for some higher-paying computer and technology jobs, most of the displaced American labor force moved towards low-value-added services and lower-paying, less meaningful work. Some 58% of the 8 million new jobs created during the 1980s paid less than \$11,611 for a family of four (Enriquez, 1992).

Thus, by the end of the 1980s, 60% of the population in America had the lowest share of total income ever recorded (Thurow, 1992). By 1988, American workers were working longer hours, for less real income than they did in 1970. “Between 1979 and 1989 the hourly wages of 80 per cent of the workforce declined, with the wage of the typical (or median) worker falling by nearly 5 per cent in real terms” (Bello, 1994, p. 92).

It was not just labor that the Reagan Administration attacked. He also launched a political war on environmentalists and made those working to protect the Earth enemies of free market capitalism. Anger boiled in the blood of many Americans who lost their jobs during the Reagan years and environmental activists were an easy target for blame. Environmentalists were often pitted against workers in a struggle between conservation and livelihood, and blamed for the need to outsource jobs. Reagan’s record on the environment showed his absolute disdain for environmental regulation and he chose to give short-term relief to industry by rolling back the important environmental regulations that had begun in the early 1970s (Vig and Kraft, 2000).

Reagan helped to reverse institutionalized environmental laws and protections through sharp budget cuts and the elimination or restructuring of many offices, particularly the Environmental Protection Agency (EPA). The authority of the EPA was significantly weakened during this time (Vig and Kraft, 2000). Reagan even removed solar panels from the White House roof. The good news is that there was some legislative progress made despite an overall decline.³¹ Although policy gridlock kept legislation on many key environmental issues slow to non-existent,

³¹Resource Conservation and Recovery Act (1984), the Superfund Amendments and Reauthorization Act (SARA) (1986), Safe Drinking Water Act (1986), and Clean Water Act amendment (1987).

compared with the first phase of contemporary globalization Americans were becoming more aware of environmental pollution and cutting back on overall industrial pollutants such as lead, sulfur dioxide, heavy particulate matter, and carbon dioxide. Due to the lack of governmental leadership in the US and other countries, many non-governmental organizations such as John Muir's Sierra Club began to take action and demand environmental policy be taken up on the global governance scale to protect the Earth's essential ecosystems.

4.9 Environmentalism on the Rise in World Politics

As globalization and industrialization expanded rapidly all over the globe, environmental activism grew and began to play a more significant role in political economy. To coordinate the growing concerns of environmental destruction worldwide, the United Nations held a conference on the Human Environment. It was the first international policy meeting on the environment and took place in 1972 in Stockholm, Sweden. The meeting spawned an array of policy debates and global movements for social change including transnational activist groups such as Greenpeace and Amnesty International. The agendas for the meeting between the North and the South differed. Northern countries focused mainly on limits to growth facing the international economy including the world's population, poverty, and the global "tragedy of the commons" (Conca and Dabelko, 1998). On the other hand, countries from the Third World asserted that poverty and environmental destruction were results of the political economy. These main themes discussed at the Stockholm conference shaped the subsequent political strategies devised by governments, corporations, and environmentalists over the coming decades.

In the 1980s, NGOs and civil society organizations notably emerged as legitimate research, activist, and policy advocacy groups. For example, Greenpeace and the Sierra Club became increasingly successful in their outreach and subsequently grew to have large operating budgets and the resources needed to challenge environmental destruction worldwide. Strategies to

influence legislative action varied. Some organizations lobbied governments while others performed direct action stunts against polluting corporations to gain media attention and shame them into changing their practices. These groups played an important role by highlighting pressing environmental issues that were being ignored by the Bretton Woods Institutions. Non-governmental organizations gained credibility and expertise for handling local-to-global issues that the state proved ill-equipped and unwilling to address (Wapner, 1996). This movement was known as World Civic Politics and it brought legitimacy and purpose to NGOs on the global political stage.

“World civic politics does not privilege the state and is thus fundamentally different from statism, supra-statism and sub-statism. The state is the central, but by no means the only, fact of global political life. World civic politics works underneath, above and around the state to bring about widespread change. Its approach to global environmental governance rests on the view that the state system alone cannot solve our environmental woes...political effort must enlist nonstate mechanisms which operate in tandem with state activities.” (Wapner, 1996, p. 13)

Beginning in Stockholm, many civil society organizations found a voice and lobbying platform within the United Nations. By the mid-1980s, NGOs in the North had come to adopt the South’s view that environmental degradation could not be separated from the political economy. As a follow-up to the Stockholm conference, in 1987 the UN World Commission on Environment and Development brought together civil society organizations and governments from around the world to discuss creating a policy confluence between the political economy and the environment. The UN produced the Brundtland report, which advocated for “sustainable development” and defined it for the first time in history:

“Sustainable development, which implies meeting the needs of the present without compromising the ability of future generations to meet their own needs, should become a central guiding principle of the United Nations, governments and private institutions, organizations and enterprises.” (World Commission on Environment and Development, 1987)

Despite the mounting evidence of widespread environmental degradation linked to economic development patterns, the 1987 Brundtland report was not enough to convince the rising neoliberal political economy that environmental regulation and stewardship were essential elements of global trade. Conclusions from the Brundtland report did not become incorporated into the BWI policies. However, they did herald a more serious effort to address global environmental problems five years later in 1992 at the UN Earth Summit in Rio de Janeiro, Brazil.

4.10 Conclusion: The Rise of Global Capitalism

As the second phase of contemporary globalization ended, a majority of the political economy moved away from Keynesian economics and towards neoliberal trade and finance liberalization. In general, this era was marked by a decline in American wages, the rapid growth in US corporate power and influence, and the rise of environmental activism. The defining shift between the second and third phase of contemporary globalization came in 1989, when communism fell in Eastern Europe and traditional communist countries began privatizing their markets and adopting the Washington Consensus of laissez-faire free trade.

With new power, legitimacy, and technology, transnational corporations took control of the Bretton Woods Institutions in the post-1989 years, most commonly referred to as the era of globalization. The third phase of contemporary globalization has had the greatest scale of impact on the political economy and the environment because the deregulation of international trade and finance led to fundamental changes in national sovereignty, caused widespread economic collapse, and exacerbated global environmental destruction to the point of mass extinction.

CHAPTER 5: Contemporary Globalization: Phase 3 (1989- Present)

5.1 The Triumph of Neoliberal Globalization

The word “globalization” is most commonly associated with the neoliberal model of the political economy in the years subsequent to 1989, referred to in this work as the third phase of contemporary globalization. Globalization is known as an objective and subjective process of economic integration that is not, “an outcome or a condition, but rather a process that the world is currently experiencing” (Gordon, 2001, p. 10). The International Monetary Fund describes it as “a historical process, the result of...increasing integration of economies around the world, particularly through trade and financial flows” (IMF, 2000). This historical process can be traced back to the first global trading system of colonialism.

Author and journalist Thomas Friedman used the analogy in his book, *The Lexus and The Olive Tree* (2000), that the 1989 collapse of the Berlin Wall and the defeat of communism in Eastern Europe marked the “death” of state-controlled economic models and the ultimate “triumph” of private-controlled market capitalism on a global scale. Friedman used the metaphor that until 1989 most countries still had “walls” up around their economies, which took the form of protections on domestic industry (tariffs) and environmental regulations (non-tariffs). From 1971-1989 those walls began to come down as deregulation policies spread throughout markets worldwide (Friedman, 2000). By 1989, the Bretton Woods Institutions advocated for plutocratic corporate governance, allowing corporations to organize monopoly and oligopoly private control over natural resources, production, and distribution systems. With increasingly centralized capital control over the world’s resources, the third phase of globalization became a corporate-controlled laissez-faire model of deregulated international trade and finance, that promised markets would best provide prosperity, growth, and efficiency when individuals were left unrestricted to pursue their own self-interests. Thus, in the third phase of globalization many corporations continued to enjoy the privilege of open access and use of natural resources, despite the mounting scientific

evidence that the Earth's support systems were collapsing. Corporations gained control of the media, the message, and ultimately the political economy through the Bretton Woods Institutions.

5.2 The Sword of Global Capitalism

In the quest by global capitalists to gain absolute advantage over the world's resources, the General Agreement on Tariffs and Trade (GATT) began to morph and take on an aggressive approach to free trade. At the 1994 Uruguay Round meeting of GATT³² the members voted to replace GATT with the World Trade Organization (WTO), a neoliberal resurrection of the original post-WWII International Trade Organization. On January 1, 1995, the WTO became the unified global trade body designed to facilitate trade between approximately 153 nation states worldwide under new, far-reaching laws and enforcement.

The WTO's passage came on the heels of the United States' 1994 trilateral, free-trade agreement with Mexico and Canada known as North American Free Trade Agreement (NAFTA). Both NAFTA and the WTO took up the corporations' avaricious pursuit of profits by lifting its sword against laws that governed health care, water, energy, banking, natural resources, and labor (International Institute for Sustainable Development and World Wildlife Fund, 2001). NAFTA and the WTO gave corporations unprecedented new rights to challenge existing national laws in foreign countries (e.g. health, safety, labor, and environmental laws), claiming that such laws were a form of "expropriation of profits" from their businesses. NAFTA and the WTO provided a platform for corporations to challenge the very sovereignty of a country's right to stand by its own laws and institutions by setting up a non-transparent dispute system to challenge the local laws of nation states.

³² GATT went through eight previous rounds including Geneva (1947), Annecy (1948), Torquay (1950), Geneva (1956), Dillon (1960-61), Kennedy (1965-67), Tokyo (1973-79), and Uruguay (1986-94). The Uruguay Round resulted in the Marrakesh Agreement that established the WTO.

5.3 When Corporations Attack: NAFTA's Secret Tribunals

The US Congress weakened US sovereignty in 1994 when it signed the NAFTA agreement and subsequently the World Trade Organization into law. From the neoliberal perspective, both agreements created a freetrade zone predicted to harmonize trade and make it more efficient and prosperous for everyone. On the other hand, critics argued that NAFTA (and subsequently the WTO) granted new rights to private corporations that weakened the rights of citizens and the environment, most notably through its controversial Investor-to-State Dispute Law. For example, under Chapter 11 in NAFTA, a private dispute court was set up as a tribunal panel to decide investor-to-state disputes. It consists of three anonymous trade lawyers who listen to both plaintiff and defendant (corporate vs. state) arguments in a non-transparent, closed-door hearing. In the United States, a federal court approval is required to launch a claim and no public comment is available for the case. Decisions have no public appeal process and they are considered final and enforced by the BWIs. Chapter 11 was written ostensibly to protect corporations if foreign governments tried to seize their property. However, after NAFTA was enacted, corporations immediately began using Chapter 11 to draw first blood against restrictive environmental laws and regulations. In fact, almost two-thirds of all trade disputes brought against nation states under NAFTA have been a direct challenge to existing social or environmental laws in the name of expropriation (Public Citizen, 2001). According to Public Citizen, only 2 of the first 15 cases brought before NAFTA tribunals actually had to do with property expropriation. The WTO followed a very similar judicial dispute system.

The intent of Chapter 11 from the perspective of trade officials “is to facilitate the flow of investment among the parties by imposing limitations upon the capacity of a host government to impose discriminatory or market distorting measures upon such investments or investors” (Dymond and Hart, 2002, p. 42). Chapter 11 outlines such market distortions as non-tariff barriers to trade, highlighting trade restrictions in four main areas, including minimum

international standards, performance requirement prohibitions, most-favored-nation treatment, and prohibition on expropriation.

5.3.2 Minimum International Standards

Previously, the US federalist system granted states the right to adopt stricter laws than those set forth at the federal level. Conversely, NAFTA subjugates member states to the lowest common denominator of international standards. Local, state, and federal regulations that exceed minimum international standards of treatment in Article 1105 of NAFTA are in danger of feeling the investors' sword. Penalties for non-compliance with minimum international standards require compensation to corporations whose profits have been expropriated (IISD and WWF, 2001). This greatly stifles a government's ability to protect environmental, health, and safety standards without fear of retaliation from investors. For example, in 2001 the Canadian corporation Methanex filed a claim against the US government for a ban that the state of California had placed on the gasoline additive MTBE, a methanol-based source of octane, because of its link to neurological dysfunctions in humans.

“Methanex contended that a California Executive Order and the regulations banning MTBE expropriated parts of its investments in the United States in violation of Article 1110, denied it fair and equitable treatment in accordance with international law in violation of Article 1105, and denied it national treatment in violation of Article 1102. Methanex claimed damages of \$970 million.” (US Department of State, 2005)

After four years of deliberation and extreme outcry from civil society, the case was finally dismissed by the tribunal court in favor of the United States, which required Mehtanex to pay US legal fees totaling \$4 million dollars.

“The Methanex arbitral tribunal has set an important precedent by recognizing its powers to accept submissions from civil society...The

millions of dollars likely spent by the United States in defending itself from Methanex's unwarranted claims further amplify the threats posed by the NAFTA Chapter 11 model to legitimate environmental and health measures, especially in the developing world." (Center for International Environmental Law, 2004)

Although the United States had the resources to fight Methanex's attack on California's right to ban the MTBE additive, before the NAFTA agreement was ratified a foreign corporation could never have taken such legal action against a US law. Poorer countries may not have the resources to fight corporate attacks on their laws, and may not have the same ability to protect against the sword of NAFTA.

5.3.3 Performance Requirement Prohibitions

Prohibitions on performance requirements seek to restrict the ability of governments to impose conditions on the production or investment choices of foreign investors. This policy asserts that investors should be able to make production choices that maximize their economic efficiency and profits irrespective of any negative externalities. Under the Chapter 11, investor-to-state dispute settlement process, foreign investors are able to seek US taxpayer compensation for lost business profits due to regulations that exceed the least trade-restrictive means of production under international standards. This means that things like quotas, local taxes, import/export provisions, and other performance requirement prohibitions described in Article 1106, are now considered violations of NAFTA and likely to meet the investors sword (Public Citizen, 2001). For example in 2002 a company called Corn Products International filed a claim against Mexico, asserting that its tax on high fructose corn syrup adversely impacted its business and violated national treatment obligations under Article 1102, the prohibition on performance requirements in Article 1106, and the prohibition on indirect expropriation in Article 1110 of NAFTA. In this lawsuit Corn Products International sought damages in excess of \$325 million from the Mexican

government (US Department of State, 2005). Therefore, in effect, Chapter 11 allows corporations to challenge a wide range of laws they consider protectionist measures in other states.

5.3.4 Most Favored Nation and National Treatment

Before NAFTA, international trade and investment agreements between countries ensured that foreign investors would receive the same treatment (tariff measures) as domestic firms and products under the national treatment principle. Similarly, the most favored nation law stated that if a trade concession was granted to one country, it must be granted to all member countries of the same agreement. However, under current Chapter 11 Articles 1102-1103, foreign investors are now granted greater investment rights than domestic companies and public citizens (Public Citizen, 2001). Through investor-to-state disputes, foreign investors may challenge host countries' domestic laws and collect compensation if it is found that the host country laws are in violation of minimum international standards. Domestic firms and citizens, however, do not have the same right or access to challenge their own domestic laws or have them settled in a non-transparent tribunal court. Arbitrations brought before tribunals often cite Article 1102 in addition to other grievances.

5.3.5 Prohibition on Expropriation

Chapter 11 provisions on expropriation have been the most controversial and heavily debated issue within NAFTA because of the way that NAFTA tribunals have been defining what is legally considered expropriation. Under GATT a clause defining a nation state's police powers allowed for governments to enact non-discriminatory regulatory action to protect public goods such as the environment, human health, and other public welfare issues. Precedents set under

GATT have always interpreted non-discriminatory action (such as environmental regulation) to fall outside the scope of expropriation disputes.

Notwithstanding this established precedent, Article 1110 of NAFTA's Chapter 11 uses language relating to the police powers of a nation state that is similar to GATT, but is now being interpreted differently under the dispute settlement method of tribunals. The tribunal panel under NAFTA, which is non-transparent and non-accountable to the public, has ignored past precedents and is now determining the definition of expropriation by the "scale of impact" that such government police powers have on foreign investors and their profits. NAFTA expropriation cases have ruled that, regardless of the purpose of the police power, compensation must be paid to a foreign investor if a law or regulation has shown "significant (monetary) impact."

A similar secret tribunal dispute settlement and set of laws has spread to an international scale under the powerful Bretton Wood Institutions and the WTO. As the WTO came to power, NAFTA turned out to be a forerunner for what was to come.

5.4 The World Trade Organization

The WTO was established on January 1, 1995 to replace GATT as a new, enforceable global trade body. Unlike GATT, the WTO extends far beyond mere commerce and trade matters such as quotas and tariffs. It sets up a trade administrative body to implement entirely new provisions on goods and services including health care, banking, education, environmental regulation, and how local tax dollars get spent (Wallach and Sforza, 1999).

The rules and regulations set forth in the WTO define the neoliberal agenda for centralized, corporate-managed trade. Corporate elite and trade ministers from 153 member nations agree to meet every two years to discuss policy³³ and approve binding agreements such as

³³ Meetings have been held in Uruguay (1994), Singapore (1996), Seattle (1999), Doha (2001), Cancun (2003), Hong Kong (2005), and Geneva (2009). At an interim meeting in 2006, it was

the Trade Related Intellectual Property Rights (TRIPS), the Agreement on Agriculture (AOA), General Agreement on Trade and Services (GATS), and the General Agreement on Services and Trade Related Investment Measures (TRIMs). Overall, the WTO has 17 binding agreements that limit regulation in the global economy and dictate trade on everything from subsidies governments can give green industries to what parameters dictate how health-care systems are managed. For example, the agreement on Trade Related Intellectual Property (TRIPs) strengthens protections on all forms of patents and requires WTO members to recognize the standards of intellectual property rights in First World countries. This primarily benefits the pharmaceutical industry and allows private pharmaceutical corporations the right to collect royalties over patented medicines, even in very poor countries. It also allows patent holders to block generic production of medicines by granting property rights and exclusive patents to corporate monopolies over such resources. In many cases, pharmaceutical companies have secured patents over plants and plant processes originally taken from indigenous peoples in the Third World, in what is known as biopiracy. This has caused a worldwide debate over the legitimacy of Eurocentric patent systems and the denial of generic drugs to the developing world for life-threatening illness such as the AIDS virus (Mgbeoji, 2006). In a paradoxical twist of the free market system, it is actually the patent itself that is protectionist by nature and prevents the free flow of information, causing medicines to sell at prices far above marginal costs and reasonable profit (Baker and Weisbrot, 2002).

The quest for corporate control over essential human resources did not stop with intellectual property rights over medicines. The Agreement on Agriculture permits centralized corporate control over seeds, genetically modified organisms (GMOs), and agrochemicals, all of which threaten the safety of the global food supply (Shiva, 2002). Consequently the AOA has led to the centralized, monopoly ownership of the global food production and distribution system.

decided to suspend the 2007 meeting after failure in 2005 to agree on the Doha round of agreements. In 2009, a scaled-back meeting of ministers met to hold open discussions and consult on the final agenda for the Doha Development Agenda.

From seed production to the supermarket shelf, an elite handful of corporations now designs what we eat and has won the rights to restrict public labeling and information about its “intellectual property,” including GMO and cloned processes in food production.

With the help of the WTO and the AOA, a single US agrochemical and biotechnology firm known as Monsanto now controls 41% of the global seed market in commercial maize seed and 25% of the world market in soybean seeds. Overall, Monsanto accounts for 23% of the worldwide proprietary seed market. The top 3 seed companies (Monsanto, DuPont, Syngenta) together account for 47% of the total global seed market (Organic Consumers Association, 2009). By 2004, 88% of the total area planted worldwide in genetically modified seeds came from Monsanto (Action Group on Erosion, Technology and Concentration, 2005). Scientific evidence showing that monocultures of GMO food are unhealthy for the environment and human consumption has been largely marginalized in the mainstream media and has not slowed the widespread planting or consumption of GMO proprietary crops.

Global monopoly control over resources such as seeds has caused backlash because a centralized seed distribution system threatens food security by decreasing diverse strains of seed provided free from nature. The diversity of nature is instead replaced with monocultures of engineered seeds that cost large sums of money and require large sums of expensive and poisonous chemical inputs. Seed patents further remove a millennium of farmer rights to save seed by making it an intellectual property crime (Shiva, 2002). GMO seeds from corporations like Monsanto spread and pollute adjacent farmer’s crops through crossbreeding. New trade laws under the AOA allow Monsanto to sue those same neighboring farmers if their seeds are contaminated by, and therefore carrying, the patented Monsanto gene without a license.

Taking patenting one step further than intellectual property, the General Agreement on Trade and Services (GATS) expands trade into environmental goods and services, by allowing corporate privatization of global common resources such as water. The state assists in privatization of resources by restricting public access and securing control for corporate monopoly

ownership through the brokering of private contracts. The process is further enforced by structural adjustment loans from the IMF and World Bank that provide governments funding to privatize resources. With the help of the Bretton Woods Institutions, three private French corporations known as Suez, RWE and Veolia (previously Vivendi), gained control over more than half of the world's water supply through management, leasing contracts, and asset sales over water. Rather than improving the water supply, many studies have shown that private control of water for profit has caused rate hikes, inadequate service (or non-service to poor), harm to natural resources, pollution, and poverty in many countries around the world including the US and Canada (Shiva, 2002; Barlow and Clarke, 2002). In some cases, the result of corporate privatization of water has led to massive political instability, cultural insecurity, and socioeconomic unrest. In 2005, for example, water privatization in Bolivia led to increased water costs, consuming one-third of the poor's income and causing nation-wide riots that ended in police shootings and violence against citizens. Political instability then mounted into a people's revolution, which led to the presidential election of Evo Morales, the first indigenous leader of Bolivia in 470 years since the Spanish conquest. Since his election in 2006, Morales has been an active critic of neoliberalism and US capitalism stating:

“The worst enemy of humanity is U.S. capitalism. That is what provokes uprisings like our own, a rebellion against a system, against a neoliberal model, which is the representation of a savage capitalism. If the entire world doesn't acknowledge this reality, that nation states are not providing even minimally for health, education, and nourishment, then each day the most fundamental human rights are being violated.”
(Evo Morales, 2006)

The WTO as a global governance institution embodies legislative, judicial, and executive powers all in one. The consolidation of those three powers is inherently non-democratic. The least democratic branch in the WTO, is its judicial system. The WTO tribunal system mirrors NAFTA's Chapter 11 and gives corporations a private courtroom to challenge local and state

laws not in compliance with WTO rules. Similar to NAFTA, a closed-door panel of 3-5 private trade lawyers, chosen on a case-by-case basis to hold non-public hearings, decides disputes, and subsequently presents their findings as the judgment. A one-time, internal appeal process can be sent to the Appellate Body, which is a non-elected, standing body of jurists who ensure WTO consistency and who provide a final and immediate ruling.

The imperial sword of the WTO dispute system has a global reach and threatens countless sovereign laws around the world designed to benefit local business, workers, and the environment. If a country's laws fail to comply with WTO rules, they can be subject to indefinite trade sanctions until they change their laws to meet WTO guidelines. For example, in 2002 the US changed its dolphin-safe label for tuna to include "tuna caught with deadly purse seine nets and dolphin encirclement" after the US was defeated in a WTO ruling from Mexico. The WTO also ruled against the US Endangered Species Act that protected sea turtles from getting killed in shrimpers' nets (Public Citizen, 2001). The WTO dispute system enforces government compliance with laissez-faire trade rules under its agreements and requires nations to change their domestic laws if found guilty (hence altering their national sovereignty), to be in line with the corporate agenda.

5.4.2 Global Backlash and The Rise of the G-20

By 1999, a worldwide resistance to the policies of the WTO had mounted in both the North and South. The agenda of the WTO was exposed as a corporate-managed model of economic imperialism over the entire planet. On November 30, 1999, over 50,000 protestors successfully shut down the WTO ministerial meetings in Seattle, Washington. Subsequently, every BWI meeting across the world became plagued with massive street protests and internal objection and defiance from the governments of developing countries.

The policy agenda and decision-making power within the WTO is primarily in the hands of the North (US, Canada, Europe, Japan). Developing countries have been marginalized and bullied (with threats of economic sanctions and loss of international aid) into accepting free trade policies that primarily benefit Northern interests.³⁴ In fact, the BWIs have been criticized for the narrow accounting of their economic assumptions that have led to false projections about the side effects and consequences of liberalization and tariff reduction in developing nations.³⁵ The South was promised economic benefits under the WTO, especially in areas such as agriculture and textiles. However those promises have not materialized,³⁶ resulting in a backlash from the governments of developing countries.

After the 1999 WTO shutdown in Seattle, developing countries began to directly resist the WTO at the next Ministerial meeting in 2001. At that meeting, the George W. Bush

³⁴ “Each part of the Uruguay Round negotiations [and subsequent WTO ministerial] was held among a small group of countries, in a highly non-transparent process known as the ‘Green Room’ negotiations, in which the developed countries confronted a few leading developing country opponents and applied pressure on them to yield. Since relatively few developing countries were invited to the Green Room meetings, the developed countries enjoyed a level of participation and influence far greater than their share of membership” (Third World Network and UNDP, 2001 p. 24).

³⁵ In many developing countries, tariff revenue accounts for 10-20 percent of government revenue, and in some cases considerably more. If tariffs are reduced or eliminated, these countries will have to impose large increases in other taxes in order to keep their budgets in line. The effect of these tax increases, as well as the costs and problems associated with collecting taxes from other sources, are generally ignored in economic models that project gains from eliminating trade barriers. Developing countries will also suffer loss in textiles and agriculture. *First*, some countries will be hurt by the elimination of quotas that now allow them to sell a fixed amount of exports at a price that exceeds the competitive market price. *Second*, trade liberalization changes the relative prices of various goods, and some countries will find that their export prices fall relative to the price of imports (the “terms-of-trade” effect). *Third*, some developing countries currently benefit from access to cheap, subsidized agricultural exports from the rich countries. If barriers to agricultural imports are removed too quickly, it can lead to large-scale displacement of the rural population. Standard economic models implicitly assume that people are re-employed in other sectors of the economy, but rapid import liberalization can lead to substantial unemployment and underemployment, as well as dangerous levels of social and economic instability (Baker and Weisbrot, 2002).

³⁶ Non-adherence to timelines and targets by many Northern countries has denied benefits to Southern countries. In the case of agriculture, the US was mandated by the WTO to phase out agriculture subsidies by 1999. The US did not phase out subsidies but, rather, increased them. In 2000, the US Congress paid 24 billion dollars in farm and “ad hoc” subsidies. The limit for farm subsidy spending in the WTO Agreement on Agriculture (AOA) is 19.1 billion. This trend has continued in the US, Europe, and Japan and was the main issue surrounding the 2003 Cancun and 2005 Hong Kong round failure to adopt the Doha round of agreements (Jones, 2001; Becker 2001).

Administration led a push for the Doha Round of talks that sought to further constrain a nation's ability to control domestic regulation and further deregulate the financial sector. Developing countries began to push back and refused to negotiate the Doha Round until their demands for the removal of Northern subsidies for agriculture and textiles were addressed.

In 2003, the WTO met for the Cancun Round of talks, where Northern countries expected to finalize the Doha Round of agreements. Instead, the North was met with even stronger resistance by the emergence of a new, powerful group of countries called the G-20. The G-20 (later the G-22) was made up of rapidly developing nations including 3 of the 4 mature developing economies known as the BRIC countries - Brazil, (Russia), India and China. The G-20 came together in 2003 as a counter balance to Northern influence at the WTO and included Argentina, Belize, Brazil, Chile, China, Colombia, Costa Rica, Cuba, Ecuador, El Salvador, Guatemala, India, Mexico, Pakistan, Paraguay, Peru, Philippines, South Africa, Thailand, and Venezuela (G-22 also included Egypt and Kenya). The G-22 proved to be a formidable challenger, demanding Northern liberalization of agriculture, textiles, and other protected industries before further negotiations on the 2001 Doha Round agreements could take place. Due to fundamental disagreements, talks collapsed in 2003 and could not be revived in the Hong Kong Round of 2005. The 2007 Rounds were cancelled and in 2009 the WTO met at a scaled-back meeting to continue to discuss the Doha Round of agreements. In place of the Doha Round, the US engaged in multilateral trade agreements such as the Free Trade Agreement of the Americas (FTAA), the Central America Free Trade Agreement (CAFTA), and numerous bilateral trade agreements designed after NAFTA and the WTO to achieve its free trade goals.

The WTO policies have continued to create a series of crises for both the environment and the economy. The good news is that, due to the power struggle within the WTO, the balance of power in international relations and negotiations has shifted to be more inclusive of developing countries. An extension of the G-8 began meeting in 1999 to bring together the industrialized countries and developing countries to discuss key issues in the global economy. This group is also

coincidentally known as the G-20. In addition to the G-8 countries (France, Germany, Italy, Japan, United States, United Kingdom, Canada, and Russia) the G-20 now meets annually and includes Argentina, Australia, Brazil, China, India, Indonesia, Mexico, Saudi Arabia, South Africa, Korea, and Turkey. The hope is that the G-20 will change the direction of the political economy to be more inclusive of a democratic and balanced agenda in world politics and global trade.

5.5 The Environmental Crisis: Neoliberalism and the Environment

In the third phase of contemporary globalization, the environmental perils of corporate-managed, deregulated global trade began to show their true costs on long-term global economic security by undermining the very elements that create a livable habitat for humans to operate an economy within. Without any ecology, how can there be any economy?

What is particularly egregious about the blind pursuit of profit over the general protection of the planet is that policy leaders at the Bretton Woods Institutions have empirical scientific evidence that neoliberal economic policies and practices are responsible for the destruction of the global commons (oceans, forests, atmosphere, biodiversity). Corporations unfortunately have not taken any responsibility or leadership within the WTO to properly manage the world's resources. As early as 1972, the United Nations began making the case for protecting vital ecological systems and reducing human impact on the planet at the first UN international conference on the Human Environment. The UN developed the concept of sustainable development in 1987 and again, in 1992, the case for the environment was made resoundingly clear by the United Nations in its biggest stand against corporate globalization in the global political arena to date. The 1992, United Nations Conference on Environment and Development addressed the interwoven issues of environmental degradation, socioeconomic conditions, and economic development. Under the flag of the UN, the global community, including scientists, government, economists, and NGOs,

came together to declare that deregulated, unrestricted global capitalism was the fundamental root of environmental devastation worldwide.

5.5.2 The Earth Summit 1992: Making A Stand for the Environment

In 1992, the United Nations Conference on Environment and Development met in Rio de Janeiro, Brazil to address a number of global development and environmental crises that fundamentally challenged the policies of the BWI. Termed the “Earth Summit.” after its global focus, the Rio conference brought to light the increasing link between political economy, poverty, and environmental destruction. It became widely accepted at the UN that, in order to address the global environmental crisis, socioeconomic and political factors would also need to be addressed. Many stakeholder groups felt that the new model of sustainable development, which balanced the needs of the political economy with the needs of society and the environment, must be implemented for generations to come.

A strong sense of urgency at the Earth Summit brought together heads of state, business leaders, and civil society groups to negotiate a progressive framework for a balanced approach to sustainable development called Agenda 21. In Rio, Northern countries came to the negotiating table with primarily an environmental agenda, while Southern countries came to the table with primarily a socioeconomic agenda (Sachs, 1996). Southern countries argued they could not protect their environment until they had increased economic and political control over their resources. The Earth Summit became a debate over a wide range of issues, including Third World debt, the rate of natural resource extraction, intellectual property rights, global warming, and trade liberalization. There was a feeling of collective stewardship towards tackling the global environmental crisis. That feeling for the most part, however, did not translate into direct change in global trade relations or corporate behavior towards the environment.

The driving theme of sustainable development meant something different to everyone. After Rio, sustainable development became an ambiguous buzzword. It was one that was often misused and manipulated. Businesses used it to justify growth, some environmentalists called it an oxymoron, and governments largely dismissed it because it was completely out of touch with their financial obligations for liberalization practices under the BWIs (Daly, 1996). Throughout the 1990s, some signatory countries such as Sweden and Norway took Agenda 21 seriously and became leaders in the sustainable development movement. However, many Northern governments, even those who had signed, fell short on their promises to transfer technology to developing nations and clean up environmentally. In the end, the United States did not sign Agenda 21's voluntary action plan and the Bretton Woods Institutions did not adopt sustainable development practices.

Rather than adopt the United Nation's Agenda 21 in 1992, the BWIs formulated NAFTA (1994) and the WTO (1995), which became the antithesis of environmental protection and limits to growth, deliberately leaving such protections out. Ten years later, the United Nations World Summit on Sustainable Development (WSSD) met in South Africa in August 2002 and it was clear that Agenda 21 and the concept of sustainable development had become seriously undermined.

5.5.3 2002: Why did Sustainable Development Fail?

In the mid 1990s, NAFTA and the WTO emerged as a direct challenge to Agenda 21 by placing business rights over human rights and economic interests over environmental protection. Free trade agreements were enforceable and backed by the power of the US military and BWIs that made it difficult for many governments and businesses to realistically implement Agenda 21. "The enforcement mechanisms of the WTO are so powerful and broad that, in effect, the trade

and finance agenda it promotes trumps the influence and policies of institutions outside of the Bretton Woods system” (IFG, 2002 pg. 8). This is especially true for the United Nations.

In 2002, the WSSD exposed the inability of governments to take action towards sustainable development because of their obligations under the WTO. The United States delegates insisted that the world could only reach sustainable development through unregulated market-based approaches. The representative from the US State Department at the WSSD, Jonathan Margolis, publicly took the position that a treaty should *not* set timelines or targets for environmental achievements, because they are “useless.”³⁷ The US government declared that the best way to achieve sustainable development was through voluntary and unregulated action. This position contrasts with the US position on targets and timelines in other international negotiations such as the WTO. It also undermines the United Nations, and the role it plays in the global arena (Greenpeace, 2002). The WSSD conference ended with a bitter feeling of cynicism and defeat. The Arcadian ethic that surrounded the 1992 Earth Summit was nowhere to be found at the 2002 summit. Rather, the Imperial ethic of corporate-controlled globalization was in full view.

The environmental crisis grew worse throughout the first decade of the 21st century, even as some strides toward sustainable development were made by both governments and corporations. For example, to tackle climate change, in 1997 the UN Convention on Climate Change (UNCCC) adopted the Kyoto Protocol, which set targets for 37 industrialized countries to reduce four major greenhouse gases (methane, carbon dioxide, nitrous oxide and sulfur) by 5% below 1990 levels over the five-year period 2008-2012. To fight global warming, over 187 countries signed on to the treaty that eventually brought it into enforcement in 2005. In 2010, the United States remains one of the only nations in the entire world who has not ratified the Kyoto Protocol. The refusal of the US to ratify the global climate treaty and take responsibility for over

³⁷ Personal interview with Jonathan Margolis, head of the US State Department delegation, WSSD, 2002. The US held firm with disingenuous explanations for why setting no goals was better than setting goals. The US position on this issue was believed by delegates to be an intentional tactic to undermine the outcome of the agreement.

150 years of industrialized pollution is another illustration of how a corporate-controlled political economy in the US prevents progressive change that is essential to human survival. In the wake of one of the worst environmental crises in US history, the 2010 oil spill in the Gulf of Mexico, the US remains slow to regulate oil companies and their greenhouse gas emissions, or adopt a comprehensive national clean energy agenda. This could be construed as further evidence that, under the neoliberal economic model, modern governments lack the power and the will to protect social democracy, regulate corporations, and make key decisions.

In December 2009, the UNCCC met again as a follow-up to the 1997 Kyoto Protocol accord with the intent to create a new treaty that would set timeframes and targets for reducing greenhouse gases beyond 2012, when the Kyoto Protocol expires. For many, the conference was another failure and an all-time low for the environment because no binding agreements or meaningful legislation for tackling global warming were achieved. As a result, many corporations postponed action and investment towards climate initiatives due to uncertainty in the marketplace and absence of regulation.

Nearly 20 years after the initial urgency of the 1992 Earth Summit, the lack of meaningful legislation, political will, and economic policy towards environmental protection has led to insurmountable and irreversible environmental crises including climate change, global mass extinction, and high-toxicity levels of pollution in air, soil, and water. Simply put, neoliberalism and its global institutions have failed to protect the fundamental systems that support life on planet Earth. This is not only true for the environment, but it is also true for civil society and the economy. In addition to the cause-and-effect relationship between neoliberalism and the global environmental crisis, neoliberalism has also caused a global financial crisis due to the same laissez-faire approach to economic regulation that was applied to environmental regulation.

5.6 The Financial Crisis: The Costs of Trade Liberalization

Neoliberal economists have long promised that the benefits of free trade and liberalized market economies include a rise in living standards, reduced poverty, faster economic growth, and increased access to markets (IMF, 2001). In one finding by World Bank economists, the benefits of trade liberalization were expected to exceed the costs by more than a factor of 10 for developing countries (Matusz and Tarr, 1999). Despite the BWIs' ostensible belief in free trade and deregulated markets as the key to economic prosperity for everyone, leading economists have made no clear determination on the correlation between trade liberalization and subsequent economic growth due to its empirical variation (Third World Network and UNDP, 2001). The one correlation that can be made however, is that finance liberalization led to the worst economic crisis in the global trading system since the Great Depression.

The deregulation of the financial system began in the US in the late 1970s and was expedited in the 1980s under Reaganomics. Deregulation was further implemented under the William J. Clinton Administration and executed at a global level in 1995 under the General Agreement on Trade and Services (GATS) of the WTO. GATS introduced the American-style of deregulation to the "services sector" of global trade and removed government controls and restrictions over foreign investment banks and financial services. Critics claim that GATS "restricted the ability of governments to change the regulatory structure in ways which support financial stability, economic growth, and the welfare of vulnerable consumers and investors" (Stiglitz, 2009). Critics recognized that financial liberalization stood to benefit big banks with economies of scale from the North, who used the advent of deregulated finance in the United States (and Europe) to grow in size, wealth, and power.

Financial deregulation began in the second phase of contemporary globalization, when banking morphed from a "safe and boring" industry stereotyped by low-risk and conservative lending, to an exciting new frontier that allowed deregulated financial gambling, ever larger bank

mergers, and corporate influence that grew to dominate the US political system (Johnson and Kwak, 2010). The constraints of Depression-era banking loosened due to the broader trend of deregulation and the emergence of academic finance. Academic finance was a university movement in which economic scholars developed new mathematical models for pricing financial assets and separating and hedging risks in the market (Fox, 2009). By 1980, statistical models on optimal capital structure helped corporations take on increasing debt in order to leverage expected returns. Wall Street used academic models to make financial gains in the economy. As a result, investment firms began to hire math scholars in large numbers to analyze financial models in the market place and subsequently maximize profits. Many of the brightest scholars in math and engineering were recruited away from work in the productive economy to make large sums of money for Wall Street's virtual economy.

Wall Street used academic models determine small discrepancies in market pricing (that technically should not exist). By betting that those discrepancies would disappear, investors often made certain money. The Black-Scholes Model of 1973 became one of the most famous academic models used in finance. It helped corporations price options and develop investment instruments (Black & Scholes, 1973). This led to the modern derivatives market, after which Fischer Black and Myron Scholes were awarded the Nobel Prize in 1997 for their work. Derivatives are zero-sum, non-tangible transactions that allow bets on the value of other assets such as bonds, currencies, or stocks. Derivatives create customized contracts between two parties who place a bet on the future rise or fall in the value of another asset (Johnson and Kwak, 2010). This market mechanism proved extremely helpful to corporations trying to manage financial and operational risk. Derivatives (often called "swaps") were used in currency and interest rate trading to help create predictability, much like an agriculture futures market guarantees prices to farmers. However, in subsequent quests for profit, derivatives grew more and more complex into uncharted areas such as betting that a company would default on its credit, or that the divorce rates would rise. Deregulation allowed the derivatives traders to create a shadow market, where

firms could “hide” derivative investments by keeping them off balance sheet reports.

During the banking years, from the 1930s until 1980, profits in the financial sector grew at the same rate as profits in non-financial sectors. However, from 1980 to 2005, as deregulation dismantled fixed commissions on rates and transactions, profits in the financial industry grew rapidly, at 800%, while non-financial sectors grew by 250% (Johnson and Kwak, 2010). Deregulation allowed commerce and investment to develop arcane financial products, hedge funds, and transactions that allowed them to make millions upon millions in transaction fees alone. The financial sector grew in total assets from \$2.9 trillion (125% of GDP) in 1978 to over \$36 trillion (260% of GDP) in 2007. The derivatives market (which was accounted for separately, not regulated, and largely kept off the bank balance sheets of financial firms) grew from zero (non-existent) in 1978 to a market value of over \$33 trillion in 2008, over twice the US GDP (Bank for International Settlements, 2009). By the turn of the 21st century, the financial sector had managed to dismantle the regulatory system that was put in place in the 1930s.

Deregulation accelerated in the 1980's beginning with the elimination of Regulation Q of the 1933 Banking Act that had set ceilings on savings account interest rates, enabling banks to compete for deposits by paying higher interest rates. In 1982, Congress lifted additional restrictions on savings and loans under the Garn-St. Germain Act, which authorized adjustable mortgage rates and lifted restrictions on loan-to-value ratios for lending. This ultimately led to the Savings and Loan Crisis, in which over 2,000 banks failed between 1985 and 1992 (Geisst, 2004). In 1984, the Secondary Mortgage Market Enhancement Act gave rise to Mortgage Backed Securities (MBS), which allowed investment banks to buy up essentially any mortgage, pool them together and then sell them in slices with varying levels of risk. This form of securitization was made even easier in 1986, when the Tax Reform Act created tax advantages that benefited investment banks by clearing restrictions on stock market trading, resulting in other forms of securitization (e.g. credit cards, student loans, car loans) (Geisst, 2004). During the years of the S&L crisis, deregulation slowed down significantly. It picked up again in 1994, when restrictions

between interstate banking were eliminated and laws were enacted to bring the US financial system in line with NAFTA and the WTO. Banks began buying up other banks and merging into larger corporate conglomerates. In 1999, the Gramm-Leach-Bliley Act dealt the final blow to Depression-era regulation when it demolished the Glass-Steagall Act of 1933 that separated commercial and investment banking, allowing traditional commercial banks to speculate with consumer's savings and pension funds. Senator Gramm was also the author of the Commodity Futures Modernization Act of 2000, which prohibited federal regulation over derivatives and helped to reduce the fees that financial institutions had to pay to the Securities Exchange Commission.

All of this led to increased fervor in the market place and the "financialization" of the economy, in which the amount of wealth and transactions generated in the virtual economy grew to dominate and trump the health and well being of the traditional, productive economy. Financial deregulation eventually led to a lost decade in the 2000's for Americans, in which a joy ride up in the stock market, a bubble in the housing market, and extreme greed in the financial sector resulted in zero net gains for personal savings, family incomes, and job creation between 1999 and 2009.

5.6.2 2000s: The Lost Decade and the Great Recession

In the United States, the first decade of the new century showed no signs of slowing down the trend of deregulation. After a peak in the rise of the stock market due to a technology bubble in 1999, a short mild recession in 2000-2001 followed. However, debt rather than savings fueled the 2001 market recovery, by allowing cheap credit from China to flood US markets, making it easy to buy everything from new cars to new homes. The George W. Bush administration also used debt to fund two preemptive wars in Afghanistan and Iraq. By the end of two presidential terms, Bush had saddled the nation with more debt than all past presidents combined.

Bush further deregulated the financial sector by reducing loan-to-value ratios for residential and commercial lending to zero. Interest rates dropped to an all time low and the minimum requirements for receiving a loan became loosened or non-existent. Speculation in the housing market rose rapidly, causing an asset bubble in the United States that spread overseas. Real estate values skyrocketed everywhere and in some areas appreciated over 100% in less than 5 years.

Consequently, the deregulation of the financial sector led to a subprime mortgage crisis, in which low-income buyers with no verifiable income were targeted and given unrealistic loans and terms to buy houses at inflated prices that could only be repaid if the market kept rising. Those mortgages were then wrapped into Mortgage Backed Securities (MBS) and sold, allowing investment banks to pass the risk of default downstream. Downstream investors were not aware that they had purchased a high-risk toxic asset (subprime mortgage) because there was no transparency that such mortgage risk was being sliced up and hidden inside top-rate securities. This made it difficult for clients to understand what they were buying and virtually impossible for them to accurately determine value. When the risk finally began to surface in 2007 because of mortgage defaults from declining prices and foreclosures, the result was the collapse of a housing bubble larger than any in recorded American history. Thus, 2007 marked the beginning of the Great Recession.

The primary leader at the US Treasury that approved the lending climate that took place in the 2000s, and helped in the crusade of deregulation throughout the 1990s, was the President of the Federal Reserve Bank from 1987-2006, Alan Greenspan. Greenspan played a key role in helping banks expand loopholes and relax rules that enforced separation between banking and securities operations within a single bank. The Federal Reserve took an official position not to regulate new Wall Street financial products such as derivatives. The Fed also chose not to properly police the new Wild West of mortgage lending that led to the Great Recession. Greenspan supported the Washington consensus that markets alone could rely on self-regulation

to prevent fraud and excessive risk-taking (Johnson and Kwak, 2010).

In 2007, less than a year after Alan Greenspan left his nearly 20 years at the Fed, signs that the economy was in trouble began to show. The housing market started slowing down as prices reached unsustainable levels. Rumors began to spread that many of the big investment banks (which had merged into mega-banks and investment firms in the 1990s), were so over-leveraged that they were close to insolvent. However, the consensus inside of Washington remained that, regardless of the risk, and despite the evidence, complex financial products and unregulated financial markets at large were still good for America. Even as scandals broke and evidence came to light that the system was destructive to economic stability, the financial sector was not reigned in due to its ability to infiltrate deep into the halls of government, through campaign financing, lobbying, and its ability to place people in key regulatory positions in the US government. As a result, a collective failure to oversee and regulate the excesses of Wall Street led to the worst stock market crash since the Great Depression in October of 2008.

The Great Recession began in 2007 but it was not until March of 2008 that the financial system began to clearly unravel. Bear Sterns, a large global investment bank and securities brokerage, went bankrupt due to over exposure to toxic assets in the derivatives market. Subsequently, Bear Sterns was bought for less than 10 cents on the dollar by J.P. Morgan Chase, who also bought Washington Mutual when it went under. Similar mergers happened between Merrill Lynch and Bank of America. Then, in early September, bad loans began to overwhelm Fannie Mae and Freddie Mac and the US government had to step in with a bailout of taxpayer money and renationalized the two mortgage institutions (which had been privatized in the late 1960s). It was not until mid-September 2008, however, that the crisis became global, when the fourth largest global investment bank in the US, Lehman Brothers, went bankrupt as a result of bad property investments and over exposure to MBS and other toxic assets known as Collateralized Debt Obligations (CDO). It turned out that Lehman was borrowing money at a leveraged rate of 1 actual dollar to 44 borrowed dollars (Smith, 2009). On September 15, 2008

Lehman filed for bankruptcy and individual shares fell from \$85 dollars to \$0.03 cents. Lehman Brothers was the largest bankruptcy in all of history. It set off a chain reaction of bank failures and mergers that caused market shock on a global scale. The crisis culminated in a 10-day stock market crash in October 2008 in which stocks and pensions in the Dow Jones Index dropped 22%. By March of 2009 the stock market had fallen 40% from its peak to below 10,000 points. This was the first time since 1999 that the market dipped below 10,000 points, effectively erasing an entire decade worth of stock market gains. Credit markets shut down, liquidity dried up, and a wave of layoffs began.

In order to save the economy from a second Great Depression the US Federal Reserve Bank agreed to rescue several more major banks from bankruptcy. No one knew how many toxic assets each bank had on the books, but they were all connected like a string of dominos and it was believed that another huge bank failure could cause them all to fall. The government decided to spend an astounding \$700 billion dollars in taxpayer money to buy the toxic assets that these banks had on their books. Instead of negotiating a deal to write down the toxic debt, the US government paid 100 cents on the dollar to rescue the very banks that caused the financial crisis. The US government then began to bail out a number of other non-bank corporations such as AIG and General Motors. The total number of dollars that went towards bailing out the financial system was estimated at \$23.7 trillion dollars, over 150% of the US GDP (Office of the Special Inspector General for the Troubled Asset Relief Program [TARP], 2009). This amount of debt was effectively transferred from private sector balance sheets of global corporations, to the public sector (the taxpayer) in the United States. Subsequently, many state governments in the United States came close to bankruptcy and had to implement extreme cuts in spending on social services and infrastructure. Incredulously, despite the crisis and government bailout, no reforms were put into place to correct the financial system or to reign in the investment banks from causing a future crisis. As a result, the very banks that caused the financial crisis emerged in 2009 to be larger (due to mergers), more profitable, and more powerful than ever. In 2009, business was back to normal

when banks paid the highest bonuses on record to top executives despite taking the government bailout money. In 2010, corporations broke 2009 bonus records by paying 4-5% more than 2009 bonuses. (Gandel, 2010). Banks were able to do this because the US government put no conditions on the bailout money such as not using it to pay bonuses. The bailout was essentially a blank check that resulted in no firings, no arrests, and no repercussions for Wall Street's wild casino gambling behavior that wrecked the entire global financial system.

By 2010, over 5 million people had lost their jobs and the unemployment rate reached 10.1% in the US and, in some adjusted estimates, up to 17% (US Bureau of Labor Statistics, 2010). The job growth rate between 2000-2009 was determined to be 0% for the entire decade. No previous decade since the 1940s had ever experienced job growth less than 20%. The annual growth rate was also lower in the 2000s than any other decade since 1930. The median household income fell from \$52,587 in 1999 to \$50,303 in 2008 (US Bureau of Economic Analysis, 2009; US Census Bureau, 2008).

At the same time that Wall Street received hundreds of billions of dollars in bailout money, homeowners and Main Street received almost no money from the US government to bail them out. Programs to help homeowners out of bad mortgages were scarce and credit was not available for refinancing residential homes due to declining values. As a result, foreclosure rates began soaring as the market rapidly declined. Contraction in the economy increased and many small companies went out of business or had to lay off workers because consumer retail sales fell and the government offered little support to help access much needed capital.

In addition to the negative savings and job growth rates, the 2000s were a lost decade for economic planning and development. In the United States, the housing market turned out to be a house of cards. The gamble ended up costing Americans a lost decade of investment in the productive economy as well as subsequent decades of lost opportunities. This was because the housing bubble caused cheap money to be misallocated towards real estate development in suburban subdivisions across the desert or towards mega-mansions that still stand vacant today,

rather than towards factories for workers, city infrastructure, or capital start-up money for clean technologies.

The 2000s were also a lost decade for culture. Many of the brightest minds of the youth generation in the 2000s went on to fight George Bush's imperial "War on Terror" in both Afghanistan (2001) and Iraq (2003) after two planes crashed into the World Trade Center in New York on September 11th 2001. The attacks of 9/11 caused both trade towers to collapse and killed over 3000 people. The attacks prompted fervent patriotism in the US and helped the Bush Administration push through a number of questionable laws including the suspension of *habeas corpus* and a preemptive war with the Middle East. After invading Afghanistan in 2001, in 2010 Afghanistan became the longest war in US history, second to the Vietnam War. The financial cost of the Afghanistan and Iraq wars, also financed by taxpayers, is expected to reach \$1.09 trillion by the end of the 2010 fiscal year (National Priorities Project, 2010). This brings the total, publicly held national debt of the year 2010 to \$13.6 trillion dollars, or 94% of the current US GDP.

The laissez-faire approach to global trade under the neoliberal political economy has led to soaring corporate profits on the one hand, and ecological destruction and financial ruin for society on the other hand. Under this political economy, the South experienced de-industrialization in the 1980s, the NICs experienced crisis in the 1990s, and the North experienced a lost decade of development in the 2000s. In order to correct the fundamental dysfunction that has arisen from the laissez-faire approach to the political economy, policy reforms that can restore stability and integrity to the global trade and financial systems must be implemented, along with environmental policies, into the WTO. Currently, the presidential administration of Barack Obama has been tasked to reform the financial sector in the United States. However, nearly two years after the crisis, no meaningful reform in the political economy has taken place and it remains to be seen whether any reform will be enacted by the US or the WTO.

5.7 Conclusion: The Time of the Turning

The third phase of contemporary globalization began in 1989 and is close to the end of its era in 2010. Some analysts may argue that the 2008 stock market crash ended the era but, because no meaningful regulations or reforms at the national or global level have taken place, the phase of neoliberalism has not officially ended. This era will be known as a time of corporate-managed, international, deregulated trade, where absolute greed led to both financial and ecological collapse.

In 2010, the Earth is not the planet it used to be. Unfortunately, we did not “win the fight” or have the political will to “save the Earth.” According to author Bill McKibbin, in his book *Eaarth* (2010), we no longer live on a pristine, abundant planet. Earth has transformed into a planet undergoing its sixth largest mass extinction, under increasing temperatures, and rising levels of carbon dioxide that will make it difficult for life to survive in many places. In 2010, we now know that global warming is irreversible and has triggered additional positive feedback loops in greenhouse gas emissions (GHG). This means that, in addition to the high levels of human GHG and industrial pollution being emitted, large amounts of methane and carbon dioxide that were previously stored are now being rapidly released from melting ice caps, raging forest fires, and acidic oceans in a vicious cycle that produces more GHG, higher temperatures, and more violent natural disasters. Even if we stop all fossil fuel use tomorrow, it’s too late to stop the world’s warming effect. With just the greenhouse gases we have in the atmosphere now, temperatures will continue to rise for another 60 years. Humans may be able to adapt to a few degrees in temperature rise, but not much more. The Earth is not going to cool itself down and re-freeze the ice polar caps. Due to the damage that we have caused to the planet, Earth as we know it has been fundamentally altered into a hotter more volatile planet with failing ecological systems at all levels (McKibbin, 2010).

The new political economy that replaces neoliberalism is going to have to figure a framework for how to survive on a planet that is plagued with overpopulation, famine, disease, war, and environmental refugees from floods, hurricanes, and drought. The support systems for life on Earth are failing at such an accelerated rate that we can now literally watch the planet dying in front of our eyes. Species on land and sea are going extinct at an alarming rate. Glaciers are literally melting into the sea and disappearing from the mountains. Entire forests are dying, diseases are spreading, and crop yields are significantly declining in all areas of the world. Petroleum is polluting our lakes, seas, and rivers with oil spills and industrialized agriculture runoff at non-stop rates. Humans are plagued with health epidemics from environmental toxins. As these huge humanitarian problems continue to mount, small positive steps towards change remind us that there is still hope to create balance in our political economy.

Although the third phase of contemporary globalization will be mostly remembered for its destructive behavior, it will also be known as a time of global resistance, innovation, environmental mobilization, and consciousness awakening. It will be known as the “time of the turning,” when the spiritual and cultural consciousness of some humans rose to its potential to create a new era of sustainability and restoration focused on rescuing the Earth from its economic, environmental, cultural, social, technological, and moral unraveling. Globalization is a process and a choice. We can choose a better future for our political economy. It is time for a new era to be born and for the laissez-faire model of capitalism to be put to rest and discredited for the second time in less than a century.

CHAPTER 6: Reforming the Political Economy

6.1 Alternatives to Neoliberalism

The prevailing political economy is in the process of change due to the extreme imbalances caused by the neoliberal model of globalization. There are alternatives to neoliberalism that create a balanced framework for a just, peaceful, and prosperous model of global trade. The first alternative is the imminent reform of the political economy towards sustainable development. Sustainable development is already redefining commerce and conventional economic practices by promoting policies that balance and protect the interests of profit, the planet, and people. Sustainable development reform for the political economy is in the process of replacing neoliberalism. Sustainable development reform will replace neoliberalism when a confluence in the trade and finance agenda of the Bretton Woods Institutions and the environmental agenda of the United Nations, is developed and implemented throughout the political economy.

The second alternative model for the political economy is a fundamental restructuring of global trade. Building on the core principles of the sustainable development model, the restorative development model seeks to go beyond sustainability to correct imbalances in our early perceptions about science, god, and human moral dominion over nature. Restorative development encourages a political economy framework that is actively engaged in healing relationships between human and ecological communities, rather than just trying to sustain their relationship at the margin under the capitalist model. Restorative development rejects the Imperial ethic and replaces the fundamental assumptions of the Western scientific approach with new understandings in science and consciousness. Restorative development adopts the interconnected Arcadian ethic towards the management of the global commons and heralds a return to the ancient wisdom of the feminine principles of cooperation, reproduction, unity, and mutual interdependence. The Arcadian ethic honors the intelligence of each living being and

builds a culture of peace around the observation that life flourishes in communities of diversity. Finally, restorative development promotes democracy and the participation of local stakeholders in decision-making over resources in local communities.

Sustainable development requires that we balance economic capital, social capital, and natural capital. It requires that we become more efficient at technology and commerce so that we can sustain human existence on the planet. It does not require that we change capitalism, abandon imperialism, or alter models of societal organization. However, it does ask us to be more just, democratic, and equitable in global trade. It also asks us to respect human rights, respect diversity of culture, and to protect and share the global commons (including food security).

Restorative development on the other hand is a culturally transformational model. It is a paradigm shift that can be hard to describe or imagine because it is currently so different from what we tend to think is possible. It is a shift in consciousness away from the current paradigm of global war, fear, violence, and imperialism, and towards a new culture of world peace, mutual respect, and earthly abundance for every human and ecosystem on the planet. The inspiration for the restorative development framework comes from the 1935 Roerich Pact and Banner of Peace. The 1935 Roerich Pact was a pre-United Nations peace treaty signed by the United States and 21 other countries to preserve culture and heritage from the destruction of war. During times of war the Banner of Peace (see Figure 1) could be hung on cultural buildings (libraries, universities, theaters, churches) for protection, similar to the Red Cross flag hung on hospitals.



Figure 1: Symbolism: The Banner of Peace symbol (right) has three circles inside a larger circle. The trinity inside the circle represents man's development in art, science, and religion. The outer circle represents the culture of peace that exists for humanity when the trinity within the circle is balanced (Roerich, 1947). Sustainable Development symbolism (left) also has a trinity and a circle that represents balance in the development between man's economy, environment, and society.

The restorative development model described in this work draws from Roerich's concepts to foster a balanced life in the humanities in order to bring about a culture of peace in the political economy. It builds on the practical model of sustainable development and adds three additional elements including scientific (technological) capital, spiritual (moral) capital, and cultural (arts) capital to its framework.

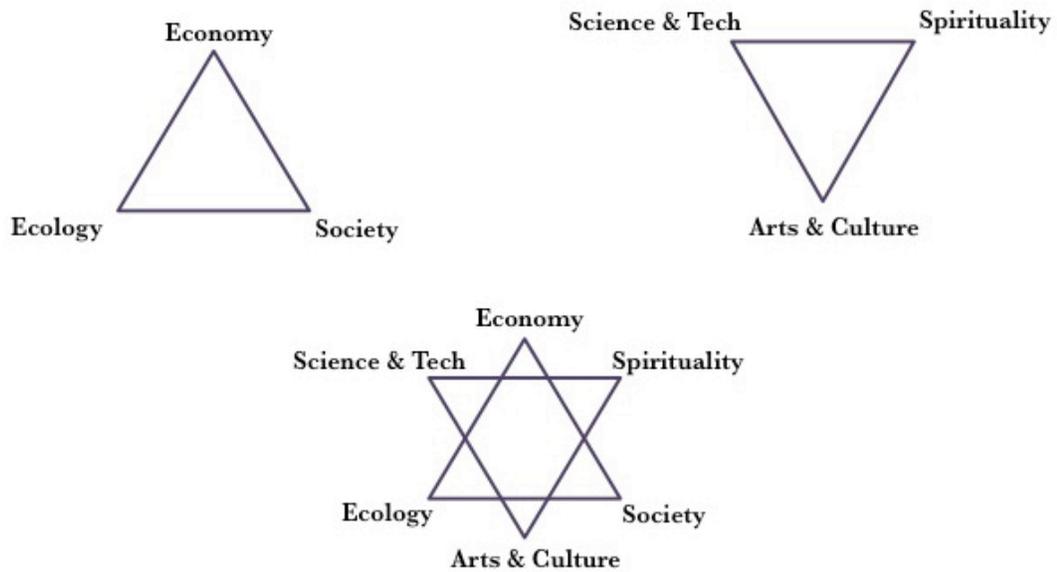


Figure 2: Restorative Development & Balance: Combined with the sustainability trinity, the restorative development trinity becomes a six-pointed hexagram that creates the sacred geometric symbol for balance (Greer, 2002). This framework corrects fundamental imbalances in power between men and women, and man and nature. Symbolically the triangles represent opposed forms. When combined, the balance between the two opposing forces creates a vibration of harmony and love. For that reason it is the Sanskrit symbol of the Heart Chakra which stands for unconditional love, compassion, and peace. This sacred harmony is repeatedly expressed in the symbolism of many religions, including Judaism, Hinduism, and Taoism.

Restorative development fosters a culture of spiritual consciousness that directs the political economy to use science and technology for the restoration, health, and shared abundance of all living communities on Earth. In a restorative society, the profit imperative is replaced by the imperative to have a well-balanced life filled with art, peace, and spiritual interconnectedness.

Restorative development seeks to provide every human on the planet with a high quality of life in an environment free from fear, oppression, and scarcity. However, it will not be easy to achieve a restorative model for the political economy without first agreeing to reform the economy towards sustainable development. Adopting sustainable development as the dominant model for the political economy is the first step towards building a restorative society.

6.2 Reform Political Economy: Sustainable Development

The framework for sustainable development seeks to balance the flow of economic capital (profit), social capital (people), and natural capital (planet). Sustainable development is defined as “...development that meets the needs of the present without compromising the ability of future generations to meet their own needs” (World Commission on Environment and Development, 1987). Sustainable development adjusts to new conditions in human awareness about ecological limits, societal health, and economic valuation. Sustainable development takes an incremental approach to reform that allows time for discussion and the adaptation of new ideas and processes. Ideas and information are developed slowly and implemented in a top-down direction by large institutions, government agencies, universities, civil society organizations, and businesses. Over time, reform has the potential to move society towards a fundamental restructuring of the political economy through the aggregation of small changes. Conversely, reform has the potential to stop society from reaching restorative development by preventing deeper cultural problems within the system from being corrected. This is because although reform helps to redistribute power between society, it may cause a “band-aid effect” over the underlying cultural dysfunction without healing it. In the case of the political economy that dysfunction is imperialism. Reform towards sustainable development is likely not to dismantle the culture of imperialism or power structures within the political economy. Hence there is need for a cultural paradigm shift towards restorative development.

Sustainable development represents a political economy that is more aware of the patterns of nature and their effects on the production and consumption of natural resources. Nature's economy operates in cyclical patterns and creates no sustained wastes. Every natural waste process provides food or support for some other natural process through an interconnected and complex web of symbiotic relationships. Therefore, many reformists are beginning to imitate nature's economy to develop sustainable patterns of production and consumption in the marketplace. This can be seen in the growing popularity of the new science of biomimicry, which observes and emulates nature's best examples for technological materials and processes in human development (Benyus, 1997). For example, oysters and other shelled sea creatures produce adhesives and hard-coverings superior to any petroleum-based, synthetic equivalents. These biochemical and physiological structures found in nature can be mimicked and used in human applications for a number of industrial purposes such as the construction of submarines.

Conversely, neoliberal global economic production and manufacturing models are not considerate of nature's economy and instead flow in linear³⁸ and monocultural patterns. Extraction, production, and distribution of natural resources into one-time-only consumer goods, produces high percentages of inefficiencies and wastes, resulting in externalities not being absorbed into the cost of the product. Further inefficiencies in the linear economy are generated by the superfluous transportation of goods in colonial patterns of trade where resources are shipped back and forth across oceans and highways for processing and consumption multiple

³⁸ Linear refers to a one-way flow of influence from cause A to effect B, or from producer to produced. Its model implies that there is no new behavior in the effect B that cannot be traced back to cause A. It assumes that action continues in a unilateral movement forming chains of information that can be used to make explanations and predictions. The roots of the linear, unidirectional, causal paradigm can be traced back to the Greek philosophers Parmenides and Aristotle whose unidirectional thoughts on God and philosophy took root in subsequent major thinkers such as Plato, Descartes, Augustine (Christian theology) and Newton. The scientific method and economic theory adopted unidirectional assumptions by creating models where inputs determine outputs in proportion to the information the inputs carry. The strength of linear methodology is that it has yielded powerful results, especially in fields of analysis, predictability, and control. However mathematicians, scientists and theologians such as Steward, Hume, and Hartshorne have challenged linear thinking, pointing out that the universe does not conform to expectations (Macy, 1991).

times. To reform the linear economy towards sustainable development, a system that is inherently non-linear must be adopted, where wastes can be safely assimilated back into the economy or reused in downstream processes.

Physicist Fritjof Capra in his book, *The Hidden Connections: A Science for Sustainable Living* (2002), offers a comprehensive argument for how new concepts in design have the potential to convert 100% of the present waste of industrial production into raw materials for other industrial processes in a continuous, beneficial, economic cycle that does not deplete the planet's natural resources. Such technological changes and innovations are sparking a green industrial economy in which civilization hopes to survive and sustain economic growth by replacing linear production and technology with circular models that imitate nature in efficiency and zero waste.

In 1999, authors Paul Hawken, Hunter Lovins, and Amory Lovins, articulated a macroeconomic model for commerce based on a sustainable reform of linear production and consumption models in their book, *Natural Capitalism*. Natural capitalism is a reformist approach to neoliberal capitalism and suggests retooling the way the political economy operates in order to avoid widespread ecological breakdown. Natural capitalism does not advocate making sudden market changes or uprooting the Bretton Woods Institutions; rather it makes small critical changes that can tip economic and social factors in positive ways. *Natural Capitalism* suggests that, through small sustainable changes, a social transformation of commerce will naturally take place (Hawken, Lovins, Lovins, 1999).

The natural capitalism model is a pragmatic, market-based approach to sustainable development meant to appeal to both liberal and conservative policy makers. It argues that, without the inclusion of natural resources into the economist's accounting sheet, we will continue to deplete the Earth's life-sustaining resources until they are devastated. "Our current accounting system is based on principles that would bankrupt any company" (Hawken, 1993, p. 42). Natural capitalism advocates that a fourth type of capital be accounted for in economic models in order to measure costs and benefits of natural resource extraction accurately:

1. Human capital – labor, intelligence, culture, and organization.
 2. Financial capital – cash, investments, and monetary instruments.
 3. Manufactured capital – infrastructure, machines, tools, and factories.
 4. *Natural capital* – global commons, minerals, and ecological services.
- (Hawkins, Lovins, Lovins, 1999, p. 4).

Classical economic models only account for the first three forms of capital: human, financial, and manufacturing. These are used to transform natural capital into the products we enjoy everyday such as cars, furniture, roads, houses, and schools. Under the current system, natural capital remains artificially cheap and vulnerable to unrestricted corporate extraction. Ignoring the value of natural capital and continuing to uphold linear economic assumptions is dangerous to the future of trade, society, and the environment. This is because the depletion of natural capital represents depletion in the assets and wealth of a nation state. Growth is only an illusion if it is the result of depleting fisheries, mining soils, and destroying whole forests.

Natural capital is comprised of ecosystem goods and services. They are the processes and functions by which biological systems provide goods (food, water, and natural resources) and services (waste assimilation, air filtration, and water purifiers) that sustain life and are used directly or indirectly for the benefit of humans. Sustainable development calls for investing money, time, and energy into regenerating natural resources and ecosystem functions that sustain life on Earth. Ecological economists now recognize that it is less expensive in the long run to protect ecological functions than to try to replicate artificial environments after natural habitats have been destroyed (Costanza, et al., 1997).

“There is no finite compensation that individuals would accept to agree to the loss of the world’s ecosystems, and they would pay everything they had to avoid it. To an economist this is the definition of an essential good, a good for which there is no finite compensation for its complete elimination.” (Bockstael, et al., 2000, p. 1387)

The loss of the ecosystem goods and services needed to sustain life would most likely cause the deepening of the environmental crisis and a progressive worsening in the political economy. It is crucial therefore, to manage and protect the Earth's resources by accounting for and replenishing natural capital.

6.3 New Economic Models for the Political Economy

In the 1960s, a growing awareness of the innate relationships between ecological systems and the political economy emerged.³⁹ In response, economists began to examine resource flow in the economy and its impact on the environment (Turner, Pearce, and Bateman, 1993). The field of ecological economics⁴⁰ emerged as a means to provide scientific and economic measurement of human influence on natural capital (Harris, 2002). It reforms models and assumptions found in classical economics to account for natural capital and pollution. This helps enable policy makers to measure the relationships between environmental protection and economic activity.

Economic activity can be viewed as a process of transforming solar energy and materials into heat and wastes. Natural resources (goods) are extracted, transformed, and then become wastes. Those wastes are eventually assimilated back into the environment through (services) such

³⁹ Ecological economics emerged from the fringes in the 1960s, with the birth of the environmental movement. However, there is a much longer history of social and environmental thinking. For further information, see, e.g., Malthus (1798) on absolute limits, population, scarcity; Ricardo (1817) on relative limits, exploitation of best resources; Marx (1867) on limits due to social and political unrest; Gray (1914) on user cost; Hotelling (1931) on discounting, economic models for non-renewable resources; Pigou (1920) on pollution from externalities; Hicks (1946) on the amount of income that can be spent without depleting wealth; Carlisle (1954) on optimal optimal rates of extraction; Gordon (1954) on open access and property rights; Boulding (1966) on spaceship earth and waste assimilation capacity; Ayres (1969); Kneese (1970) on materials balance models and economic incentives; Daly (1974) on steady-state economics; and Norton (1984) on pollution control policy and regulatory models.

⁴⁰ In this work, the field of ecological economics is defined by the macro- and microeconomic models used for setting environmental standards, trading pollution permits, managing natural resources and waste assimilation, providing cost-benefit analysis, conserving biodiversity, and developing property rights. This field of economics also has other approaches that differ in some ways from ecological economics known as natural resource economics, environmental economics, and Earth economics.

as air and water purification.⁴¹ As economic growth increases, so does the volume of waste relative to the limited capacity of natural environments (atmosphere, oceans, landfills, wetlands) to absorb that waste. Finding a balance between natural resource consumption and waste assimilation is an important theme in ecological economics.

Ecological economics is based on the theory that our entire economic system is underpinned by, and cannot operate without, the use of natural capital (Harris, 2002). For example, manufacturing capital could not exist without the flow of ecosystem goods and services, and, therefore, neither could human welfare (Daly and Costanza, 1992). Ecological economists argue that human benefit and welfare in the economy comes from combining natural capital with labor, land, and manufacturing capital. Such economists claim that zero natural capital implies zero human benefit and welfare. This illustrates that natural capital is a multifunctional asset that is currently undervalued. In order to correct the undervaluation of natural capital, a system of economic valuation must be developed and implemented into the accounting systems of the political economy.

Economic valuation⁴² of ecosystem goods and services starts by asking, “How do changes in the quantity or quality of various types of natural capital and ecosystem services impact human welfare?” (Costanza, et al., 1997, p. 255). Such changes in the functions of ecosystem services range from small and simple (valuing services at the margin) to large and extremely complex (global warming, loss of biodiversity). Ecosystem changes directly impact the allocation of benefits and costs associated with human welfare in both market (monetary) and non-market ways (non-monetary). For example, the Gulf of Mexico is home to a diverse range of ecosystem goods and services that provide monetary and non-monetary benefits to the regional and global economy.

⁴¹ The economy uses natural resources for the benefit of human welfare through sources (directly through use of natural resources, indirectly through appreciation of scenic landscape) and sinks (waste assimilation functions, clean air and water).

⁴² “Economic value arises if someone is made to feel better off in terms of their wants and desires. Positive economic value – a benefit – arises when people feel better off, and negative economic value – cost – arises when they feel worse off. What economic valuation does is to measure human preferences for or against changes in the state of environments. It does not ‘value the environment’” (Turner, Pearce and Bateman, 1993, p. 38).

Monetary values can be derived from fishing, oil drilling, and recreational use. Non-monetary values can be derived from the peace of mind that comes from the Gulf's abundance, or the quiet enjoyment of the wildlife sanctuaries. Changes in the quality of the Gulf will undoubtedly affect the interests of each diverse group of users. Unfortunately, that is exactly what happened on April 20, 2010 when BP's Deepwater Horizon oil rig exploded and spilled over 4.9 million barrels of oil into the Gulf over an 88-day period. Compared with the Exxon Valdez oil spill that dumped 750,000 barrels of oil into the Prince Edward Sound, the Gulf oil spill spread pollution to over 5 state lines, crippled the fishing industry, and placed a moratorium on drilling that cost jobs in the whole region. How then do economists determine what all of the values are between all of the human and ecological systems? Who derives compensation? How is compensation decided? In some cases market values are estimated by an individual's willingness to pay (WTP) for a gain or to avoid a loss.⁴³ Values can also be determined by an individual's willingness to accept (WTA) compensation to tolerate a loss or forego a benefit (Pearce and Seccombe-Hett, 2000; Costanza et al., 1997). However these methods are not widely used (World Bank, 2006). In the case of the BP oil spill in the Gulf, a simple monetary fine based on how many gallons were spilled determined compensation for the entire disaster.

The greatest difficulty in valuing natural capital is gathering relevant, updated data for ecosystem goods and services whose economic valuations are widely accepted. Debates over what to quantify as natural capital have been abstruse, polemic, and marginalized. What is important, however, is that, irrespective of the methods of valuation, a consensus between the United Nations, the World Bank, and the OECD countries, has been reached that environmental goods and services should *not be free*; rather, they are an economic asset that should be included in

⁴³ The hedonic pricing method is used to estimate the value of environmental amenities that affect prices of marketed goods. The method is based on the assumption that people value the characteristics of a good, or the services it provides, rather than the good itself. Thus, prices will reflect the value of a set of characteristics, including environmental characteristics, that people consider important when purchasing the good. Retrieved from http://www.ecosystemvaluation.org/hedonic_pricing.htm.

macro- and microeconomic accounting sheets of all nations. Although this has not yet become official policy, many OECD countries have begun to account for natural capital and greenhouse emissions on an annual basis. In 2006, the World Bank published a report called, *Where is the Wealth of Nations?* In that report, the World Bank estimates the value of natural capital in over 120 countries in the year 2000. They conclude that 25% of the wealth in low-income countries comes from natural capital, and 18% of the world's total wealth comes from natural capital. Because the depletion of natural resources is not currently visible in standard national accounts, dependence on resource extraction makes it difficult for many low-income countries to save and invest in future growth. Middle-income countries (13%) and OECD countries (2%) have less dependence on natural capital for wealth.

In order to account for natural capital's relationship to human welfare, environmental indicators and economic modeling must become a central component of sustainable reform. Instruments that provide quantified measurements of pollution, ecosystem services, and human welfare must be implemented into a national accounting system that all nation states can adopt. Institutions that are capable of managing natural resources, collecting information, and sharing natural capital information between countries must also be developed to complete the transition towards sustainable development and balanced growth. The United Nations has been working quietly to develop guidelines for an environmental accounting system since the 1992 Earth Summit through a project called "The Economics of Ecosystems and Biodiversity" (TEEB). The World Bank announced in October of 2010 that it will partner with the United Nations Environmental Program to conduct a 5-year pilot program to measure natural capital in 10 key countries, including India and Columbia. This pilot program will test various valuation methods and formalize a set of tools that finance ministers in nation states can adopt to determine policy for global trade. This new system of environmental accounting will change the models and calculations that economists use to determine the wealth of a nation. For example, when calculating the economic return of clearing mangrove trees to farm shrimp, the cost of the loss of

habitat for fish stock and coastal protection will also be subtracted from the benefit of the income gained from shrimp farming. Once finalized and implemented worldwide, this “green” accounting system would replace the neoliberal political economy with sustainable development.

6.4 Accounting for Natural Capital and Social Capital

The mainstream accounting tool for measuring national well being is currently the Gross Domestic Product (GDP). The GDP was originally devised in the 1930s by the United States as an emergency national accounting measure during the Great Depression. It measures, in dollars, the total production output and expenditure transactions in a country’s domestic economy, linking growth in GDP to growth in living standards (Beyon, 1999). Classically trained economists assume that, as GDP grows, society will benefit through increased progress and economic development. However, the GDP only measures the produced assets in the economy and is therefore an antiquated model, because it does not include natural capital or social capital.

The paradox of the GDP lies in the distribution of benefits from economic development. If a rising GDP assumes benefit to all of society, then shouldn’t US society be doing pretty well after 20 years of steadily rising GDP? We are taught to assume so, but evidence under neoliberalism shows the opposite. By the turn of the century, American living standards had been steadily declining since the late 1970s. Between 1980 and 2000, the GDP grew 55%, yet real wages declined by 14%. The exception was for the rich. The top 5% of household incomes concurrently rose by 20% (Cobb and Halstead, 1999). Under the neoliberal agenda, a majority of Americans found themselves working longer hours for less money, less leisure time, and lower quality of life (Morris, 1999). From 2000 to 2010, Americans experienced further declining household income, job growth, savings rates, and increased rates of poverty and unemployment.

That is because current GDP indicators mask social and environmental costs associated with economic development and therefore give an inaccurate assessment of human benefit and

wealth. Critics have outlined several major distortions of the GDP, the greatest being its relationship to natural capital. When natural capital is extracted (e.g., when ancient forests are clear-cut and sold, or depleted fish stocks are harvested) the extraction of natural capital is treated as income, instead of what it really is, the depletion of an asset. The market creates a value for extracted goods such as wood, but never accounts for the economic, environmental, and social costs involved in cutting down the forest. The rise in GDP would continue to imply the improvement of society even if every last tree were cut down or every last fish in the ocean caught.

Concurrent with the growing awareness of the need to account for natural capital, social capital⁴⁴ has emerged as another essential ingredient in the economic formula for sustainable development. Social capital is a process by which people establish social networks and norms based on principles of trust, reciprocity, and participation. Individuals facilitate cooperation between each other for mutual benefit, forming interconnected non-monetary relationships that foster family, community, and culture. The GDP, however, does not account for social capital and therefore cannot measure breakdowns or contributions in the non-monetized social realm. For example the GDP records social externalities such as divorce fees, accident fees, and health costs as economic growth. As the GDP rises with each monetary transaction, it does not differentiate or account for the correlated economic costs related to social externalities such as mental illness, loss of family, incarceration, war, crime, and murder. Undoubtedly, economic globalization has left innumerable communities across the world in poor condition, with depleted social capital.

⁴⁴ “Social capital is the raw material of civil society. It is created from the myriad of everyday interactions between people. It is not located within the individual person or within the social structure, but in the space between people. It is not the property of the organization, the market or the state, though all can engage in its production. Social capital is a ‘bottom-up’ phenomenon. It originates with people forming social connections and networks based on principles of trust, mutual reciprocity and norms of action. The term social capital was first used in the 1980s by Bourdieu and Coleman” (Bullen and Onyx, 1999).

Recognizing the fundamental problem with the GDP accounting system, the United Nations, in a joint publication effort with the IMF, the OECD, the European Commission, and the World Bank, developed a *System of National Accounts* (SNA) in 1993, to provide a common international framework to ensure economies are measured in the same way across countries (UN Statistical Division, 1994). At the same time the SNA was set up, the UN and other agencies published a separate handbook called *The System for Environmental and Economic Accounts* (SEEA). The SEEA was not included in the SNA, which adopted such standards as the use of the Purchase Power Parity (PPP). The PPP between two countries is the rate at which the currency of one country needs to be converted into that of a second country to represent the same volume of goods and services in both countries (World Bank, 1998). The PPP and SNA have been adopted by all WTO nations as a harmonization method for global accounting. However, the SNA remains problematic because it has not yet translated the SEEA measurements into its harmonized global accounting system for use in shifting development policy towards sustainability.

The SNA also developed a conceptual framework for social capital accounting that aims to measure non-monetary socioeconomic indicators, such as life expectancy, infant mortality, adult literacy, nutrient intake, access to public health and education facilities, housing, labor, employment, and expenditures per household (UN Statistical Division, 1994). However, this framework is not currently used in SNA accounting, although it will likely be used in the future. The World Bank launched a study in 1996 to define and measure social capital, its evolution, and its impact (World Bank, 1998). This led to the World Bank's publication of a *Social Capital Implementation Framework* (SCIF). The United Nations and World Bank have since teamed up in 2010 to develop a similar study on a green accounting system for natural capital over the next 5 years, with the intent of integrating the value of natural capital into the SNA. When both the SEEA and SCIF can be implemented into the SNA, instead of defining wealth in terms of GDP,

the new system will define wealth in terms of Environmentally Adjusted Net Domestic Product (eaNDP) and Sustainable National Income (SNI) (World Bank, 2006).

6.4 Retooling the Political Economy for Sustainable Development Governance

In order to achieve sustainable development reform, governments must have the political will to use new economic models and tools to create environmental policy and reform. Agenda 21 is an early example of a global framework for sustainable development governance. Many local and regional governments have used Agenda 21 as a guide to create their own frameworks, adapted for local conditions. However, at present, the corporate sector still plays a dominant role in policy making through lobbying efforts, resulting in pro-business policies that support corporate welfare in the form of subsidies, diminished accountability, and unregulated business practices (Real World Coalition, 2001). As a part of sustainable development reform, governments will play a more balanced and legitimate role in the political economy. They will have the political will and power to change the payments of perverse subsidies⁴⁵ to corporations through the adoption of sustainable laws, permits, taxes, and standards that protect ecosystem services, restore natural capital stocks, and control industrial pollution.

For example, US fiscal policy disproportionately supports conventional business through a package of perverse subsidies known as corporate welfare. Corporate welfare gives special tax breaks, financial assistance, and lax regulations for large industries in agriculture, mining, energy, transportation, and fisheries. The International Institute on Sustainable Development (IISD) reports that the combined subsidies of the latter five industries totals \$1.9 trillion per year, of which \$1.45 trillion is considered perverse (Kent and Myers, 1998). Corporate welfare uses an inordinate portion of society's resources via public subsidies for expenses such as advertising,

⁴⁵ Perverse subsidies are, in a word, perverse. They encourage development in scientific and industrial sectors that is counterproductive to environmental and social concerns, and they encourage growth and development in areas that are often non-competitive.

executive salaries, lobbying expenses, and luxury corporate travel. Furthermore, these subsidies allow corporations the privilege of externalizing their costs by way of paying less than a living wage, downsizing the workforce, keeping substandard working conditions, dumping pollution into the environment, and extracting resources at below-market prices. Reforming the political economy would require government subsidies to be redirected away from non-sustainable, extractive, and inefficient corporations. Rather than paying perverse subsidies for corporate welfare, sustainable development reform uses ecological economics to set new taxes, regulations, standards, and permits to balance economic activity with natural capital management and pollution abatement.

For example, governments can set standards and quotas on natural capital rather than paying subsidy support to corporations for extraction and depletion of natural capital. Economic modeling can also help governments determine optimal pollution levels⁴⁶ in order to set taxes. For example, the Pigovian tax, also known as the polluter pays principle, states that the price of a good or service should fully reflect its total cost of production, including all externalities.⁴⁷ If air, water, or land is being used to store wastes, then it should be accounted for as a monetary cost to the polluter. This approach puts the monetary burden on those who emit pollution, rather than on the communities affected by it. Taxes on pollution are a method of redirecting externalized costs paid by society, to internalized costs, paid by the producers of pollution. In addition to the polluter pays principle, sustainable development governance also advocates using the precautionary principle. The precautionary principle switches the burden of proof to corporations, which must prove the safety of a new product (such as cloned meat) before introducing the product to the mass market. This is an improvement over the current system,

⁴⁶ “Optimal pollution levels are amounts of pollution that exactly balance marginal social benefits and marginal social costs. Another way of looking at this is to consider the marginal cost of pollution control versus the marginal cost of pollution damage” (Harris, 2002, p. 49, 327).

⁴⁷ Pigovian tax is a per-unit tax equal to the external damage caused by an activity, such as a tax per ton.

which often rushes products to the market for monetary reasons without adequate testing to determine the long-term impacts on society.

Under the reform model, market-driven incentives represent the most widely accepted alternative for creating sustainable policy. Some economists assert that negative externalities arise from the lack of well-defined property rights in certain environmental assets. Open access to common resources can lead to a “tragedy of the commons,” in which resources are exhausted due to overuse, such as in the fishing industry. Issuing permits or property rights over industries that use ecosystem goods and services is believed to create better management of resources for future generations than would be the case if no exclusive ownership was awarded to anyone (Heal, 2000). This requires international cooperation and governance in industries involving the global commons.

The United Nations Framework Convention on Climate Change (UNFCCC), known as the Kyoto Protocol, outlines, under Articles 6 and 17, an international, market-based program for trading pollution permits to help protect Earth’s atmosphere and air quality. The goals of the program are to slow global warming by capping the total global emissions of four major greenhouse gasses (GHG) and to ensure that the reduction of GHG emissions happens at the least cost. The theory is that polluters will be incentivized to reduce pollution and trade surplus credits to other polluters for profit. This market approach limits the need for draconian regulation by offering the carrot incentive. This method of trading permits is highly anticipated to become an international law for markets relating to carbon and other greenhouse gases. In a follow-up to the failure of the 2009 Copenhagen meeting to replace the Kyoto Protocol when it expires, governments will meet again in Cancun, Mexico in December 2010 in hopes of creating an enforceable international agreement on climate emissions and tradable pollution permits.

In the business community, sustainable development has slowly become a standard part

of the vocabulary. Through voluntary initiatives and guides such as the Natural Step,⁴⁸ some corporations now adopt sustainability measures for internal processes. In addition, growing demand for sustainable products has captured the attention of larger corporations who wish to increase profits and market share.⁴⁹ An indicator of such growth, the Dow Jones Industrial Sustainability Index⁵⁰ now tracks the financial performance of sustainability-driven companies worldwide.⁵¹ Such products are often labeled as organic, green, biodegradable, renewable, or recyclable. Consumers purchase green products based on perceived values and implied quality assurances rather than on cost and advertising alone.

In order to achieve sustainable development governance from corporations within the political economy, the WTO must be reorganized away from state-corporate collusion under laissez-faire models of global trade policy. Instead, good governance that directs environmental policy and accounting is essential. Otherwise, like in the case of the Kyoto protocol, corporations will not invest in cleaner technologies until regulation or legislation mandates it. Under neoliberalism, many corporations find that it is not cost competitive to change unsustainable business practices when other competitors do not. Because there is currently no guarantee of legal compliance or an enforcement mechanism for sustainable development, even the most ethical

⁴⁸ The Natural Step is a business protocol that was founded in 1989 by Swedish doctor and researcher Dr. Karl-Henrik Robèrt. After observing human cancer cells Robèrt collaborated with other scientists to develop four basic principles for businesses to follow that reduce the accumulation of toxins and address the systemic causes of environmental pollution.

⁴⁹ For example, early successful organic food companies have grown and been absorbed by larger TNCs vying to capture a profit share of rapidly growing markets. Brands include Ben and Jerry's Ice Cream (Unilever), Cascadian Farms (General Mills), Boca Burgers (Phillip Morris) and Seeds of Change (Monsanto). In addition, large corporations such as Nike, Toyota, and IKEA have adopted energy-efficiency and resource-saving targets.

⁵⁰ "Launched in 1999, the Dow Jones Sustainability Indexes are the first global indexes tracking the financial performance of the leading sustainability-driven companies worldwide. Based on the cooperation of Dow Jones Indexes, STOXX Limited and SAM they provide asset managers with reliable and objective benchmarks to manage sustainability portfolios. Currently 70 DJSI licenses are held by asset managers in 16 countries to manage a variety of financial products including active and passive funds, certificates and segregated accounts. In total, these licensees presently manage \$8 billion USD based on the DJSI." (<http://www.sustainability-index.com/>)

⁵¹ According to the 2005 DJSI Review, companies are focused on good corporate governance, accounting and environmental reporting. Corporate trends are moving towards implementing eco-design concepts into products and services. Retrieved from http://www.sustainability-indexes.com/djsi_pdf/news/PressReleases/DJSI_Review05.pdf

corporations have cut corners on social and environmental responsibility to make a profit. Only in areas of industry where monetary cost savings have proven to be substantial, such as in energy efficiency, have corporations voluntarily adopted sustainability with speed. Sustainable development governance will succeed best with a comprehensive and enforceable mandate that would require all corporations to internalize their costs and therefore level the playing field.

It is possible to reform corporations towards sustainable development, and it is also possible to reform governments. The deeper problem with reform is the culture of imperialism, power, and control underlying the political economy. Sustainable development in practice does not fundamentally guarantee a change in the Imperial ethic. This Imperial ethic expresses itself throughout our society and most prominently in the negative behavior patterns of corporations (e.g. greed and reckless disregard for humanity). True sustainable development governance and corporate reform will require the United States to change its protection of corporations under the 14th amendment, which grants them the legal rights of a recognized citizen with none of the liability for any of their actions. Critics have charged that if corporations were actually persons they would be diagnosed as psychopathic, for their consistent callous, grandiose, and irresponsible behavior towards society in which profit drives them to manipulate, lie, and have no empathy for their destructive action towards human and environmental support systems (Bakan, 2004). These behaviors are deeply embedded in corporate history and in need of reform to control the destructive and impulsive behavior of unrestrained greed.

The sustainable development model is a great improvement over the current neoliberal political economy, which allows corporations little to no oversight, provides no value to natural capital, and externalizes the costs of global trade onto society. In essence, sustainable development policies will still give corporations a license to pollute and continue widespread extraction of resources, however policy will restrict and measure the extraction of natural capital and pollution so as not to exceed maximum standards. Sustainable development may not be capable of dismantling the behaviors of imperialism in the political economy, but it may be able to mitigate

impacts on society and the environment. Such a shift has the potential to move society towards a more fundamental change in development that rejects an Imperial ethic and returns society to an Arcadian ethic for managing the political economy. This cultural shift is already taking place and offers another alternative framework for the political economy that builds on the sustainable development model called restorative development.

CHAPTER 7: Restoration Economy

7.1 Restorative Development

“Capitalism is not a success. It is not intelligent. It is not beneficial. It is not just. It is not virtuous and it does not deliver the goods. In short, we dislike it and we are beginning to despise it. But when we wonder what to put in its place we are extremely perplexed.”

~John Maynard Keynes

In a personal interview with Paul Hawken at the 2002 World Social Forum in Porto Alegre, Brazil, Mr. Hawken mentioned something that changed my consciousness. He said, “We need to go beyond sustainability.” Hawken asked, “The idea is to restore the Earth, isn’t it?” Economically, if we stay in the sustainability paradigm we will always be living at the margin, failing to replenish natural capital and evolving into a higher state of human consciousness. Hawken articulated that the real goal was to produce net gains in diversity and natural capital replenishment, not just sustained margins.

While sustainability is gaining momentum in the mainstream, it is still poorly understood by those institutions, individuals, and power structures fighting to cling to old paradigms. Therefore, the image of restoring the Earth into a socially just place of abundance for all inhabitants is unfamiliar because it requires a fundamental restructuring of the current culture. It requires our value system to move away from the Imperial ethic and the masculine principles of domination and control (which has led to gender subordination, oppression, and the violent destruction of the Earth), and towards an Arcadian philosophy that encompasses feminine principles such as fertility, union with all life, respect, cooperation, compassion, oneness, and healing. A restorative political economy reestablishes the lost sense of spiritual connection between humans, god, and nature. It abandons old assumptions in Western scientific methodology, Anglo-Christian spirituality, and Imperial cultural expression.

In the restorative paradigm the true measure of wealth is not money. Rather it is the health and happiness of communities that are the true measure of wealth. Restorative development is not an attempt to turn back the hands of time on globalization or a market for exchanging goods. Rather, a restoration paradigm represents an opportunity to reorganize society towards a deeper and more insightful relationship between people, the economy, and nature. The restorative development paradigm is able to go beyond sustainable development and capitalism because new attitudes and values make up a new moral landscape for the political economy that directs it to end wars, heal relationships with nature, recognize the equal value of women, and evolve our understandings of science in the universe.

The restorative political economy embraces the reform economy and builds on its core concepts of sustainability. Therefore, the two paradigms can and do exist concurrently (Khor, 2002) with the primary difference being that, while the restorative economy operates within a market framework, it is not philosophically or culturally aligned with capitalism or imperial institutions. Restorative economies shift the political economy towards decentralized, participatory governance models, and uses technology for collective human well being rather than human self-interest. Restorative development seeks to reallocate materials and resources away from life-destructive technology such as weapons for war, and towards life-nurturing commerce and exchanges, such as access to housing, food and water, and energy for all humans. Markets are accountable to democratic governments who work to secure community interests by assuring that businesses internalize costs, honor community values, and serve community needs (Korten, 2007). Time for personal growth and spiritual reflection is honored and restorative justice (based on rehabilitation) replaces retributive justice as a more holistic practice in social relationships.

A restorative model for the political economy links individual interests to the collective interest through a dynamic system of reciprocity and solidarity. The restorative economy differs from sustainable development because it is a true market system that seeks to decentralize power and localize production away from large corporations and institutions. More importantly,

restorative development differs from sustainability because it encompasses a larger social agenda that changes the neocolonial relationship between North and South regions of the world by implementing democratic changes in political and economic associations. Restorative development includes a macroeconomic framework for international trade and finance that is based on empowering regional producer-consumers and workers-entrepreneurs rather than on continuing corporate control over resources, centralized financial aid from the BWIs, and technical dependency from foreign institutions in global trade (Arruda, 2001).

In order to address the root of environmental problems in the political economy, this author suggests that the culture of imperialism must be replaced with a culture of peace that can respect life and honor the value of interdependency between all human and ecological systems. Restorative development starts from this bottom-up perspective in local communities who self-organize and participate in local democratic governance. Restorative development also uses a top-down international framework of guiding principles to help communities shape agreements in behavior that move global culture towards positive values in trust, over negative values that create oppression. Even though it may seem hard to believe in our planet's darkest hour that humans can create a culture of peace for the global political economy, our human potential gives us all the power we need to restore the values of love over hate, caring over apathy, respect over insolence, sharing over greed, peace over violence, and freedom from fear. Restoring the Earth, balancing the political economy and creating a culture of compassion are all possible if we make the choice.

7.2 Restorative Politics: A Democratic Global Constitution

“We stand at a critical moment in Earth’s history, a time when humanity must choose its future. As the world becomes increasingly interdependent and fragile, the future at once holds great peril and great promise. To move forward we must recognize that in the midst of a magnificent diversity of cultures and life forms we are one human family and one Earth community with a common destiny.”

~The Preamble to The Earth Charter

Under a restorative development paradigm, the laws and principles of the global political economy follow a set of 16 fundamental principles that have been articulated by the United Nations in what is known as the Earth Charter. The Earth Charter is the largest collectively written international treaty to date and is likened to a global constitution for building a democratic society. Its initiatives are based on an Arcadian respect for the whole community of life. The Earth Charter promotes ecological integrity, social and economic justice, universal human rights, gender equity, universal education and health care, spiritual well being, respect of indigenous knowledge, and a culture of non-violence and peace. The document was written with the intent of providing an ethical framework for sustainable development. However, this author argues that sustainable development can (and will) exist under an imperial framework that is fundamentally at odds with universal human rights, non-violence, and demilitarization. Therefore this author suggests that the Earth Charter is a model for a restorative political economy which embraces sustainability, but goes beyond it to defeat the culture of imperialism and honor the sacred community of life with compassion, understanding, and love. Sustainable development is the interim step to reaching a restorative society.

Written in the year 2000, the Earth Charter was meant to inspire a new sense of global interdependence and shared responsibility in world citizenship for the sustained wellness of the human family, the global economy, and the whole of the biosphere. The document articulates a shared expression of hope that, through the creation of a new global partnership at this critical

juncture in evolutionary history, we can create a society based on true democracy, shared values, and collective freedom.

The Earth Charter is the product of a decade-long, worldwide, cross-cultural conversation about common goals and shared values. The drafting of the Earth Charter has involved the most open and participatory consultation process ever conducted in connection with an international document. Thousands of individuals and hundreds of organizations from all regions of the world, different cultures, and diverse sectors of society have participated. The Charter has been shaped by both experts and representatives of grassroots communities. It is a people's treaty that sets forth an important expression of the hopes and aspirations of the emerging global civil society. (Earth Charter Initiative, 2000)

The Earth Charter is predicated on UN international law and declarations, treaties and reports, integrated science, the wisdom of native tribes, women, civil society organizations, government ministers, and philosophers. The principle objectives of the document are meant to guide all levels of governance, business, and civil society towards positive and reciprocating exchanges within the political economy.

The Earth Charter embodies the idea of global citizenship, in which people act locally with moral consciousness on behalf of environmental and social needs worldwide. Global citizenship implies a feeling of being “one” with the planet as a whole, where personal action and responsibility is believed to directly impact positive or negative outcomes for society both locally and globally (Albrow, 1996; Soysal, 1994). The feeling of mutual interdependency and oneness with all living beings on the planet is an Arcadian ethic that is a result of increased awareness for the interconnectedness with the whole of creation. This sense of being one with the whole drives communities to respect and care for each other, and to make decisions based on the good of the whole planet.

7.3 Restorative Global Governance: Replacing the BWIs

“The tragic truth is that much of the work ahead centers on repairing the enormous damage caused by the Bretton Woods Institutions. Debt must be cancelled, commodity prices stabilized, control established over the goods and money flowing across borders, anti-trust measures implemented to break up concentrations of corporate power, corporations with repeat criminal convictions dechartered, national economies rebuilt and redirected with proper regulatory regimes to meet local needs, the environment healed, the power of corporations curbed, financial speculation brought under control, wealth redistributed to create a semblance of equity, and the democratic accountability of governments established.”

~International Forum on Globalization, 2002

Over the past 60 years the Bretton Woods Institutions have led to egregious corporate and government abuses in power against people, their livelihoods, and the environment (IFG, 2002). Concurrently, the global governance model of the United Nations has fallen painfully short of its mission and obligations to the global community as a result of inadequate funding, corruption, and powerful undermining by member nations such as the United States, Canada, and Australia (Greenpeace, 2002). Between the two models of global governance, the money and decision-making power resides with the BWIs while those policies of the UN, written to protect civil society and the environment, are either adopted voluntarily or ignored. In the case of sustainable development, a confluence between the competing interests of the BWIs and the UN must be reached in order to find the balance for globalization. However, under a restorative political economy, the BWIs need to be replaced altogether rather than reformed.

A global think-tank known as the International Forum on Globalization (IFG) has proposed the creation of a new set of global institutions for world governance that would replace the Bretton Wood Institutions. Due to the depth of corruption and state-corporate collusion in the fundamental nature of BWIs, the IFG does not recommend their reform:

“Institutional reform is a viable strategy when the institutions in question are fundamentally fair and aligned with a legitimate purpose but have simply been corrupted, as is the case with many national governments. It is not a viable strategy when a system is in its structure, mandate, purposes, principles and processes so fundamentally at odds with the human interest, as is the case with the Bretton Woods Institutions.” (IFG, 2002, p. 225)

The dismantling of the Bretton Woods Institutions (WTO, IMF and World Bank) would begin by phasing out programs and lending operations, starting with Third World Debt cancellation. A selling off of all BWI assets and liabilities would take place through an UN International Insolvency Court and their buildings and facilities would be turned over to their original oversight body at the UN Economic and Social Council (UNESCO).

The IFG recommends unifying global governance under a restructured and empowered United Nations that can more accurately fulfill its original cooperative and egalitarian charter of global democracy. The United Nations is recommended because it is an existing global democratic institution of governance, with a framework to provide each country with an equal vote. The United Nations Committee on Trade and Development (UNCTAD) could replace the WTO as the leading global legislative body deciding trade and finance laws in alignment with the Earth Charter and other international law. It would include a corporate accountability office to promote transparency, good governance, and open access to information and technology (IFG, 2002).

The IFG recommends that the IMF be replaced by a newly appointed UN International Finance Organization (IFO), with no lending or enforcement capabilities. The IFO would provide technical support, technology transfer, maintenance, policy studies, and facilitation of international agreements. The IFG recommends that a number of Regional Monetary Funds replace the centralized finance center of the World Bank as a means to access short-term emergency foreign exchange. Emphasis, instead, would be on using financial resources that would be accountable to member countries of a particular region. The UN International Court of Justice (ICJ) would replace the WTO secret tribunal court with a democratic dispute settlement court.

Under a restorative political economy, public policy would take place through more levels of civil participation in the political process. The IFG envisions civil society organizations and non-governmental organizations as active political players in the economy at all scales, helping to

disseminate information and strengthen local participation and empowerment of communities. Such organizations make up the citizen base and work at the local governance level to articulate what the real needs of the community are in order to build a better democratic society. With the participation of civil society, democracy will thrive in governments.

“Aristotle viewed the legitimate state not as an institution apart from the civil society but as an entity created through a union of society’s members for the purpose of securing the good life--the happiness of the individual. The civil state is therefore inseparable from the union of citizens that creates it.” (Everson, 1996 p. 13)

Women have an important role to play in restorative development. Presently and historically, women have been marginalized from political decision-making, discriminated against in the workplace, considered of lesser value than their male counterparts, and made victims of physical and psychological abuse. Male dominance in philosophy, religion, science, politics, architecture, and economics has created a world culture based on male attributes in which imperial war and competition dominate the quest for global resources and empire. In a restorative society, the divine principles of the feminine would be honored and valued as equal to their male counterparts. Women and men would find a means of political and economic cooperation rooted in gender equality. Recognition that both genders have a vision to create a universal society that contributes to collective welfare would be mainstream. It is only through the inclusion and respect of women, who offer a caring, nurturing and cooperative set of values, that a culture of peace can be manifested and sustained.

7.4 Local Restorative Economies

Various economic models for a restorative political economy at the local level already coexist within the neoliberal economy. One example is a European-Canadian model called the social economy. Other regions have models called solidarity economy, participatory economy,

labor economy, and local living economy. These restorative models are centered on the policies and enterprises of local and regional communities and emphasize collective social profitability, as opposed to purely individual economic profitability in the marketplace. Social profitability contributes to improvements in the quality of life for the overall population, particularly through the increase of available jobs, goods, and services (Neamtan, 2002). Some of the principle objectives found in a restorative economy include the following:

- Instead of simply striving for financial profit, social enterprises are by nature part of a stakeholder economy, whose enterprises are created by and for those with common needs, and accountable to those they are meant to serve.
- The social economy enterprise is autonomous of the State.
- In its statute and code of conduct, it establishes a democratic decision-making process that implies the necessary participation of users and workers.
- People and work have priority over capital returns in the distribution of revenue and surplus.
- Its activities are based on principles of participation, empowerment, and individual and collective responsibility (Arruda, 2001).

A restorative economy is based on local participation, cooperative businesses, and community associations that are mutually beneficial to society. There are five types of entities that make up such an economy including cooperatives, civil society organizations, foundations, mutual societies, and social enterprises. Cooperative business models, for example, can be found in the sectors of agriculture, banking, and retail. Mutual societies are active in the mortgage and insurance services. Foundations cover a wide range of social services including health care, welfare, culture, sports, and recreation. Civil society organizations focus on education, environmental regeneration, human rights, training, development aid, and consumer rights. Social enterprises work in unison to serve both public and private interests. In Europe, the social economy has gained significant political recognition as industrialized nations readjust to slower growth rates in a more competitive international economy. Similar to subsidy support given to corporations, governments can play a vital role in assisting social enterprises, helping to shift the

political economy towards restorative development. The heart of a restorative economy is the empowerment of citizens to participate in the development of strong local markets and policies that respect nature and society and provide meaningful livelihoods to the community.

A restorative economy creates equitable relationships between markets and finance through the active and democratic participation of community members in local decision-making. It seeks to make the political economy accountable to a wide range of community standards, including “ethical consumption, women’s initiatives, community and ecological agriculture, social money, ethical financing, fair trade, community services, appropriate and democratized technology, and social forms of ownership and management of assets and of developmental activities” (Reintjas, 2003). Strong tools of empowerment for social change start locally with the initiatives of responsible citizens who want to participate in the way they are producing, consuming, saving, investing, and exchanging.

Restorative development advocates decentralized participatory planning, in which citizen councils propose and revise local government activities in socially responsible ways. Collective citizen planning allocates benefits more evenly throughout society by coordinating economic inputs and outputs among actors in an inclusive way. For example, the participation of the community in the choice of projects financed by public funds increases the level of efficiency and productivity of social investments. In 1988, the City of Porto Alegre, Brazil (State of Rio Grande do Sul) instituted a participatory process of balancing the state budget that directly involved the local citizens by allowing them to vote on how state money was allocated. The participatory budget was implemented by the Worker’s Party (Partido dos Trabalhadores, or PT) in Brazil. Their purpose of democratization of municipal budgets was to increase the transparency of government action and to include the general public in policy formulation regarding local expenditures. This breaks radically from conventional methods of deciding how public money will be spent and provides social empowerment and accountability for the people of a local area or region. From some, participatory planning and budgeting is considered the most successful

innovation in fiscal policy in the last 20 years.

In the United States, the restorative economy is called the Local Living Economy (LLE) and it seeks to allocate human and material resources with ecological and social integrity in order to meet the self-defined needs of the people in a community. Through democratic local governance, LLEs support public oversight of the global commons, equitable distribution of income, and user fees to assure that market prices internalize true costs of production. The theory behind LLE is that when needs are met locally by locally-owned enterprises, people have greater control over their lives, economies are more stable, jobs are more secure, money is recycled back into the community and there are incentives to protect the environment and build social relationships based on mutual trust (Korten, 2002). This model for restorative development measures real wealth as an investment in human capital that contributes to healthy communities, a sense of belonging, and spiritual connection. In 2001, an alliance of socially committed entrepreneurs launched a nationwide initiative called the Business Alliance for Local Living Economies (BALLE) to facilitate business-to-business relationships among firms committed to restorative economic values. They educate and encourage people to buy from, work for, and otherwise support locally owned, value-based, and eco-friendly enterprises.

The restorative economy nurtures the values of cooperation over competition, and shared abundance over scarcity. As a functioning economy, it moves emphasis away from the self-interest of individuals to make profit, and towards the collective interest of society to ensure that people have jobs, health, access to ecosystem goods and services, and can participate in local decision-making. Creating a restorative political economy starts at the individual level, with the self-determined choices and participation of workers, owners, and democratic governments.

7.5 Restorative Culture: A Culture of Peace

“Once we break free of the mental prison of separation and exclusion and see the world in its interconnectedness and nonseparability, new alternatives emerge. Despair turns to hope. Violence gives way to non-violence. Scarcity transforms into abundance and insecurity to security.”

~Vandana Shiva, 2002

Throughout the globalization process, human behavior and values influenced the evolution of culture worldwide. The word culture stems from the Latin word *colere*, which means, to cultivate. Culture is comprised of a shared set of traditions, values, institutions, religion, art, and knowledge that make up how a community expresses itself. It is a human achievement created by collective and intellectual assertion. Culture often develops around ecology, where communities derive their survival needs from, establishing folklore and cuisine in relation to the plants and animals they interact with (Campbell, 1998). Culture is dynamic and changes over time as new ideas and information become absorbed and expressed in societies.

Over the past 500 years, the violence of globalization has torn many communities apart, displacing them from their land and destroying their cultural and spiritual linkages to nature. In Europe and throughout every continent, many diverse languages and cultures have been lost entirely to war and violent imperial globalization. The result of such cultural extinction has been massive social exclusion and isolation, loss of traditional knowledge, and the homogenization of culture on a global scale. The Imperial ethic within global culture cultivates negative values of selfishness, greed, deceit, and envy, which lead to fear, terror, and widespread, negative externalities, including war. To build a culture of peace, the negative values, emotions, and feelings that create violence and war, must be replaced with positive counterparts.

Restoring fragmented cultures requires a fundamental shift in the life-destroying Imperial ethic that results in economic imperialism, militarized police states, and social stratification, to the life-preserving Arcadian ethic that results in freedom from fear, freedom from violence, freedom

from denial of basic needs, and freedom from non-sustainable and unethical production methods for global trade.

“Alternatives beyond war, non-sustainability and social and economic injustice are becoming a survival imperative. These alternatives need to combine our making peace with the planet and our making peace among people from diverse cultures. One is not possible without the other because the roots of terrorism, violence and war lie in environmental and economic exclusion and the insecurity it generates. People’s security does not lie in larger military budgets, bigger bombs and stronger police states. It lies in ecological security, in economic security, in cultural and political security.” (Shiva, 2002, p. 3)

Cultural behavior and its relationship to economic, ecological, and political exclusion is an important issue that illustrates how imbalance, poverty, and exclusion fuel insecurity and instability, leading to negative politics, negative economies, and negative identities (e.g., domestic and state terrorism). Such negative cultural values (terror, fear, insecurity) must be replaced with positive values that protect life on earth, create economic security, cultivate art and knowledge between diverse cultures, and provide basic needs to all such as food, clean water, health care, education, livelihood, and housing. Only when basic needs are met can virtue flourish.

In countries around the world, a restorative culture seeks to end violence as an inherent part of the political economy. Freedom from fear, terror, and war allows space for human hearts and minds to evolve spiritual consciousness, and for a culture of peace and justice to emerge. The Earth is seen as one family, where all beings are connected to each other through love, compassion, and ecological responsibility (Shiva, 2002). Restorative culture encourages freedom of expression and moral development through the humanities (visual and performing arts, music, history, philosophy, classics, anthropology, cultural studies, linguistics, law, and religion). In a restorative culture, time does not equal money; rather, time equals art and knowledge.

In the United States some spiritual and cultural organizations including the Quaker’s Religious Society of Friends, have formed restorative political movements to promote a culture of non-violence and peace.

“We seek a world free of war and the threat of war; We seek a society with equity and justice for all; We seek a community where every person’s potential may be fulfilled; We seek an earth restored.” (Mission Statement, Friends Committee on National Legislation)

In India, a movement called Earth Democracy is underway, based on Gandhi’s strategy of Swadeshi.⁵² Swadeshi is based on the Dharma principle taken from the *Vedas* (Hinduism’s highest spiritual book), that all interactions take place on an ethical principle of life duty that respects social custom, civil law, and sacred law. Earth Democracy’s aim is to create local economies run by inclusive democracies, in which moral responsibility and duty are at the core of human relationships and cultural objectives.

Globalization has the opportunity to move beyond our violent imperial history and unite global citizens with the Arcadian ethics of unity, compassion, and respect for all life. This evolution in human consciousness is in part achieved by a new paradigm in science. This new paradigm replaces the classical assumptions of a matter-based universe, with a science that is primarily based on consciousness and quantum potentiality. This transition heralds an age of Arcadian science that reaffirms the existence of universal oneness through scientific measurement.

7.6 Restorative Science and Technology

“What science discovers but fails to communicate to the public is that the technology of the Universe, which we speak of comprehensively as ‘Nature,’ operates only as a complex integral of exact mathematical laws. These laws govern all the omni-interaccomodations of the everywhere ceaselessly and eternally inter-transforming Scenario Universe.”

~Buckminster Fuller

Breaking the superstitions of myth and religion, the development of science has led to many technological accomplishments by man. Western science has manifested ever-more

⁵² *Swadeshi* (self-sufficiency) was a successful economic strategy that was developed to gain independence from British rule. Strategies of the Swadeshi movement involved boycotting British products and the revival of domestic-made products and production techniques. Swadeshi, as a strategy, was a key focus of Mahatma Gandhi who described it as the soul of Swaraj (self-rule).

complex machines and processes to advance the notion of material science and progress. The advent of global trade, and its associated fields of social and natural sciences, began by using Western science and mathematical tools rooted in linear philosophy, Greek geometry, Newtonian mechanics, and Cartesian mathematics. Classical scientific relationships between man and nature were defined and explained within the matter-based construct of the Cartesian three-dimensional XYZ-axis parallel/perpendicular model of measurement (see Figure 3).⁵³ Conversely, the greatest technology known to man (nature and the universe) does not operate within a linear, 90-degree, cube, or parallel/perpendicular model. Furthermore, nature does not employ Western science's adopted gram/centimeter/ second/area/time/temperature exponents that have led to awkward and irrational scientific relationships.⁵⁴ This has resulted in centuries of inefficient technological associations and destructive industrial patterns of trade. Therefore, restorative development fundamentally rejects the three-dimensional linear assumptions in Western science and mathematics and instead replaces them with a new mathematical methodology that is based on the direct observation of mathematic relationships found in nature and the universe.

⁵³ Archaeologists have discovered artifacts proving sophisticated mathematics dating back 4,000 years to Mesopotamia and Babylon. Over 3,000 years ago, the Greeks made magnificent contributions to geometry, algebra and calculation. Then, 1000 years later, the Roman Empire all but obliterated mathematics, only to be restored slowly by Arabs and Hindus traveling through North Africa towards westward-evolving culture. It was not until 1200 AD that algebra was republished in Latin and not until 200 years later, in the 15th century, that Europe diffused the zero-cipher into the university system (Fuller, 1975, section 1203).

⁵⁴For example scientific entry into the realm of nuclear competence was accomplished by the centimeter/gram/temperature/second (CGtS)² measurement and the Cartesian XYZ 90-degree coordinate system. However Plank's constant (6.626×10^{-34} joule/second) must always be applied to the data to correctly interpret the awkwardly calculated constant of photon energy relative to frequency. Buckminster Fuller reminds us that "the development and adoption of the great computers has now relieved humans of the onerous computational tasks entailed in the corrective processing by the irrational constants necessitated by the ineptness of the arithmetical rigidity of arbitrarily exclusive, three-dimensional interpretation of the Euclidean geometric measurement" (Fuller, 1975, section 204.01).

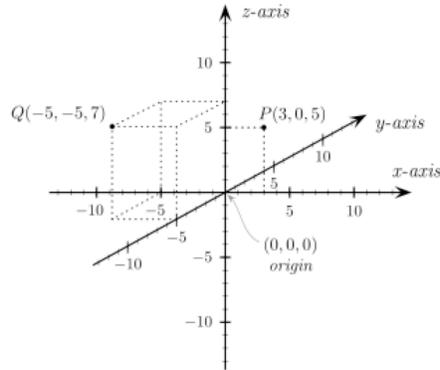


Figure 3: The Cartesian Model: The three-dimensional XYZ-axis coordinate system provides measurements for the physical dimensions of matter: length, width, and height.

By observing the structural relationships and strategies employed by nature, author and inventor Buckminster Fuller discovered the universal principle of synergy.⁵⁵ He subsequently published the laws of nature's own mathematical coordinate system in his two-volume series called, *Synergetics* (1975).⁵⁶ Fuller's mathematics was experientially derived (rather than theoretical), and combined topology with geometry to illustrate that nature itself is an eight-dimensional coordinate system that grows spherically outward in very mathematically precise omni-intertriangulated structures called tetrahedrons (see Figure 4). The tetrahedron is the smallest unit of measurement found in the physical universe. Rather than a 90-degree, linear measurement system, synergetics uses a 60-degree geometric system that structurally appears as closely packed spheres made up of tetrahedrons (see Figure 5). Synergetic math led to the discovery of atomic coordinates for molecules, including carbon-60, and was paramount in the development of nanotechnology and quantum physics. Consequently, the synergetic mathematical framework is the foundation of restorative science and technology.

⁵⁵ Synergy is the interaction of two or more agents or forces so that their combined effect as a whole system is unpredicted by the effect of their individual parts.

⁵⁶ Synergetics is energetic geometry, since it identifies energy as expressed by rational whole numbers.

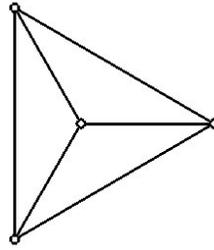


Figure 4: Tetrahedron: A tetrahedron is the smallest unit of measurement in the universe. It is a polyhedron bounded by four equilateral triangles, three meeting at each vertex. (Fuller, 1975)

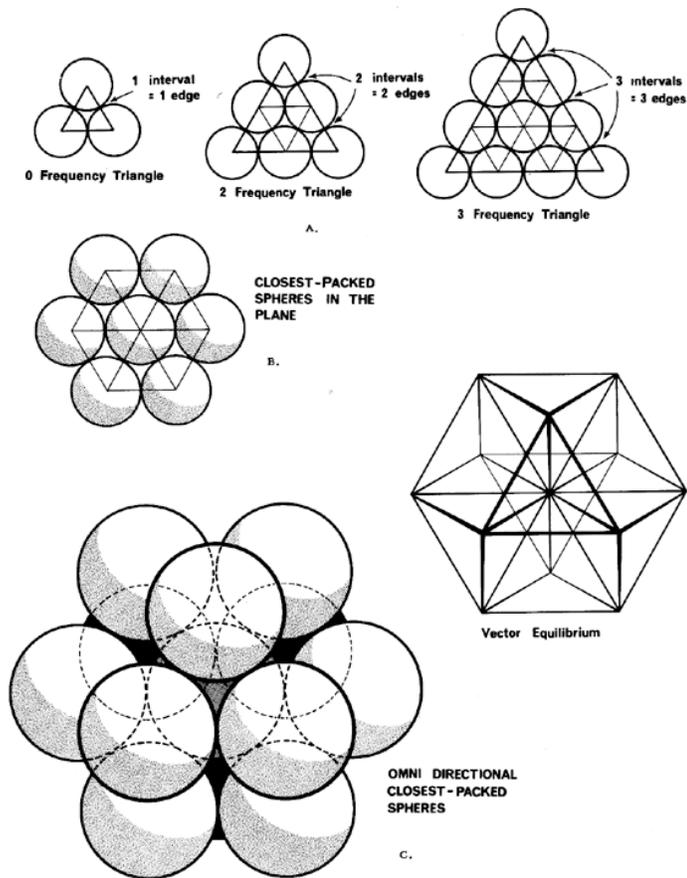


Figure 5: Principles of Synergetics: Nature grows according to precise mathematical equations which are omni-directional concentric close packing of equal spheres (c) about a nuclear sphere form a series of vector equilibrium (b) of progressively higher frequencies (a). The number of spheres or vertexes on any symmetrically higher concentric shell outer layer is given by the equation $10 F^2 + 2$, where $F = \text{Frequency}$. The frequency can be considered as the number of layers (concentric shells or radius) or the number of edge modules on the vector equilibrium (taken from Fuller, 1975).

Synergetic math starts with the consideration of the entire universe, which is finite because it is made up of finite parts. The universe is synergetic because no single part of the universe can predict the behavior of the whole. The Earth's biosphere is also a finite system made up of synergetic relationships. Both systems are held in place by the opposing forces of gravity and radiation under the universal law of mass attraction. Isaac Newton discovered the law of attraction in the law of gravity, however he analytically and mathematically misstated it.⁵⁷ Fuller explains that such scientific misunderstandings are widespread and have led humanity to become stuck, unable to comprehend and find technological solutions for balance with the planet:

This moment in the evolutionary advance and psychological transformation of humanity has been held back by non-physically-demonstrable – ergo non-sensorial – conceptionless mathematical devices and by the resultant human incomprehensibility of the findings of science. There are two most prominent reasons for this incomprehensibility: The first is the non-physically demonstrable mathematical tools. The second is our preoccupation with the sense of static, fixed "space" as so much unoccupied geometry imposed by square, cubic, perpendicular, and parallel attempts at coordination, *rather than* regarding "space" as being merely systemic angle-and-frequency information that is presently non-tuned-in within the physical, sensorial range of tunability of the electromagnetic sensing equipment with which we personally have been organically endowed. (Fuller, 1975, section 1212.00)

Fuller's discovery of synergetic math demonstrates one single method to integrate all scientific fields, "energetically, arithmetically, geometrically, chemically, volumetrically, crystallographically, vectorially, topologically, omnirationally, and energy-quantum-wise" (Fuller, 1975, section 201.01). Synergetics is considerate of universal principles and has given science the mathematical tools needed to transcend the old paradigm of Western science's matter-based calculations of nature and the universe and understand a new paradigm.

⁵⁷ Fuller explains that Newton was able to identify the concept of "squared," however incorrectly. Newton's inverse understanding of attraction led him to speak in terms of "progressive diminution of the attraction: as the distance away was multiplied by two, the attraction diminished by four." (Fuller, 1975, section 120.01). Conversely, Fuller discovered the exact inverse; that the attraction of one mass for the other increases as the power of the rate of increase of their proximity to one another; halve the distance and the interaction is four folded.

7.6.2 Changing The Paradigm of Western Science

New understandings in math and physics have led to a new worldview in science articulated by the field of quantum physics (often interchanged with quantum mechanics and quantum field theory). Quantum physics replaces the classical mechanical view of nature with a more Arcadian view of science, in which the universe is primarily understood as one unified living organism with interconnected fields of energy (consciousness) that expand through space and time (Radin, 2006). Quantum physics dispels the theory of naïve realism,⁵⁸ which “operates at the root of our minds and distorts our knowledge of the world, thus we mistakenly interpret the contents of our minds as an external material universe” (Ringland, 2009). In other words, quantum physics replaces the classical scientific worldview that life, and the universe we experience, is made mostly of matter. Conversely it states that physical matter is only a tiny fraction of what makes up the whole of the universe (Goswami, 1995). Instead, it states that, “consciousness is the ground of being, of which objects are a part, but not all. The objects can be described as waves of possibility” (Goswami, 1995). This energetic field of consciousness is the one unifying force in the universe that everything is connected to on the most fundamental, scientifically measurable level.

Quantum physics measures on the atomic level that the universe is made up of waves of information in an energy field, rather than particles of matter fixed in space. It demonstrates that the mere act of human observation in the present moment changes a wave of potentiality into a particle of matter, which then impacts reality in the present moment by fixing an object in time and space. Humans use free will and choice to direct consciousness, and that choice has an impact on the material reality that humans create. Therefore, human consciousness has a huge impact on the collective outcome of human culture, science and technology, and the political economy.

⁵⁸ Naïve realism is a cognitive habit and philosophical position. It is the idea that the mind perceives the world directly, and thus we experience the world “as is” rather than just “as it appears” within the mind.

Despite the newest discoveries in quantum physics and consciousness, no paradigm shift has officially occurred in the mainstream view of science. This is because when the early theories of quantum physics were articulated over 90 years ago by Neils Bohr and Albert Einstein, two divisions of science emerged, one for quantum theory (atomic and sub-atomic associations), and the other for classical mechanical physics (physical associations). The devaluation of classical science has not yet taken place because it works well in describing the physical universe. The complexities of the sub-atomic world and the field of consciousness are left out of the mainstream educational system because it is simply easier to do it that way (Radin, 2006).

7.6.3 Reuniting Science and Spirituality

Although a full-scale mainstream scientific revolution has not taken place yet, quantum physics continues to provide a new worldview that brings science back together with spirituality and god. The new worldview of science reunites humans with the scientific proof that we are not separate from god, rather we are one unified living organism of god. This evidence of complete unity contradicts Christianity's concept of separateness, and signals a return to the Arcadian view of science and spirituality. For example, a branch of quantum physics called Vedic science, has done scientific experiments to prove spiritual scriptures of the ancient Hindu books of wisdom, the *Vedas* including: 1) a single unified field of intelligence is at the base of nature; 2) the field of consciousness can be directly experienced by the human mind; 3) consciousness leads to individual growth; and 4) the field of consciousness has a measureable way to create peace in society. Many scientists believe our unifying force of oneness can be used as a positive technology.

Dr. John Hagelin, director of the Institute of Science, Technology, and Public Policy at Maharishi University of Management, and founder of the US Peace Government, calls Vedic science the "science of peace" (Hagelin, 2010). Hagelin describes the field of consciousness as the underlying field of unity between all living things on a physical level. He uses the analogy that a

thought wave, just like a radio wave, in an electromagnetic field, propagates out in all directions through the field of consciousness at the speed of light. Halegin has conducted experiments in consciousness by using thought and intent as a technology for creating peace. Halegin explains that when a person consciously radiates peace, the power of that peace amplifies by the number of people (squared) who are also radiating peace (called peace-creating groups). Peace-creating groups radiate an influence of harmony and orderliness through the underlying field of consciousness for days to weeks at a time. Ripples of potentiality turn into tidal waves of potentiality that have demonstrated repeatable, precise, and immediate effects on reductions in crime rates, accidents, terrorism, and war (Halegin, 2010). Halegin believes that society can use technologies in consciousness (such as peace-creating groups) to create world peace and eradicate poverty, disease, and violence.

Experiments with water also show how consciousness changes the shape of the physical world. Dr. Masaru Emoto, author of *Hidden Messages of Water* (2004), did an experiment, in which he taped words written in Japanese to drops of water, thereby giving consciousness to the water. He then froze the water and photographed it. Positive words such as “love,” “thank you,” and “gratitude,” produced beautiful snowflake crystals. Negative phrases such as, “I hate you,” “I want to kill you,” and “shut up,” produced no crystals, only bubbly pond scum images of water. Emoto believes that in order for the world to obtain peace, we must first find water at peace. Since human physiology is made up of 90% water, Emoto asks that if words taped to a bottle of water can produce such results, what are human thoughts doing to their physical-self and world around them? Most of society is still shaped by the Imperial ethic, in which the molds of culture and religion hold individual consciousness back from belief in infinite possibilities such as world peace and abundance. Our Imperial view of science and god has created a history of disempowering thought patterns that must be overcome with new stories that can help create a restorative political economy.

The difference between the application of science and technology under a sustainable development framework, versus under a restorative development framework lies in how new understandings in science are shared. Sustainable development will most likely continue to operate within the naïve realism paradigm and make great technological strides in efficiency and clean energy, however it will be under the direction of the Imperial ethic, and the political economy will continue to use science for profit and the benefit of human empire. The leap to a restorative political economy looks very different because it uses its technology to advance peace, ecological restoration, and shared abundance. It is a political economy that practices the science of *livingry* – a term coined by B. Fuller to describe the use of technology towards the restoration and abundance of human living (food, shelter, health, education, basic needs), rather than human killing. Fuller explained, “Humanity has the option to become successful on our planet if we reorient world production away from weaponry - from killingry to livingry” (Fuller, 1975). Fuller asks the critical question, “Can we convince humanity in time?” This author suggests the answer is yes, and we can start with a shift our own individual consciousness.

7.7 Conclusion: Restoring the Balance

“Will you teach your children what we have taught our children? That the earth is our Mother. What befalls the earth befalls all the sons of the earth. All things are connected like the blood that unites us all. Man has not woven the web of life. We are but one thread within it. Whatever we do to the web, we do to ourselves. All things are bound together. All things connect.”

-Chief Seattle, 1854

The political economy of globalization under the imperial model of neoliberal economics has created imbalance within the Earth’s web of life. If we do not change our production and consumption patterns to correct imbalances within our system, then the human experience within our biosphere will be eliminated through irreversible biogeochemical changes. In such a scenario

there will be no human experience left, and no political economy to debate. It is therefore imperative, for the long-term survival of the human civilization, to reform, and ultimately restructure, the policies of our political economy. The shift to a restorative society will require the adoption of the Arcadian view of science, where humans are connected to all species on the planet. Damage that we do to the Earth is damage that we do to ourselves.

Human consciousness, just like nature, is a complex web of symbiotic and interdependent relationships. To achieve a restorative balance throughout the field of consciousness, each individual must first achieve a healthy balance within his or her own-self consciousness. The very core of planetary healing starts with self-awareness and self-love on the individual level. Individuals have a synergistic relationship between their vital energies of the mind, body, spirit. If one of those elements is out of balance within an individual for internal or external reasons, it can cause disunity or negative energetics within that individual's identity, community, and relationship to the Earth. Bringing balance to the innermost level of individual consciousness occurs with the positive energetic thoughts and feelings that each individual has for him or herself. This self-love within the individual is a critical factor in determining how the individual contributes to the larger community and field of consciousness.

The individual's role in planetary healing is important because quantum theory states that each individual is connected energetically on the sub-atomic level to every other human and living organism on the planet. This was understood by Chief Seattle when he said, "One thing we know: our God is also your God. No man, be he Red man or White man, can be apart. We ARE all brothers after all" (Chief Seattle, 1854). This energetic feeling is what Plato called our World Soul. It is our spiritual self that is one with the whole of creation. Arcadian scientists such as Henry More and John Muir also understood and expressed that humans were connected to the whole of creation. This oneness of intelligent consciousness is what some call god. Science can now observe this oneness. This tells humanity that each individual is an active part of god's creation and, in essence, is an expression of god itself. As individuals, we have free will to be

creators of our own reality, and architects of our own destiny. Each individual reality is in part collectively creating the current culture in which our political economy operates. Each individual (consciously or subconsciously) is contributing positively or negatively to the realities of environmental destruction, war, and loss of biodiversity which, in turn, are contributing to the failing physical and mental health of humans and the planet. Individuals can make huge energetic contributions to the whole of the planet by creating unity and balance within their own minds, bodies, and spirits. The use of quantum technology in meditation can help an individual access and influence the field of consciousness for oneself and for others. When an individual has achieved self-awareness and inward self-love, they can then go forth into their community and spread positive energy that can tip the balance of change in the political economy towards sustainability and restoration.

Individual consciousness is powerful and plays a role in moving society towards the adoption of sustainable development reform. Discussed at length in Chapter 6, sustainable development seeks to reform conventional relationships between the economy, society, and ecology. Sustainable development does not necessitate the eradication of imperialism or the negative energetics associated with it, but it does attempt to correct imperial patterns of overt planetary destruction and North/South discrimination in global trade. It can be thought of as the halfway point between two opposing forces. It is a necessary part of human evolution. However, restoring an abundant, prosperous, and healthy planet cannot be accomplished through empire and its tools of fear, distrust, war, and terror. Restorative development requires a paradigm shift in science, culture, and spirituality in order to achieve such an evolution. Restorative development will come to dominate the political economy when the Imperial ethic for global trade is replaced with the Arcadian ethic of interdependency, interconnectedness, compassion, and cooperation. By restoring love and respect as the fundamental bonds between the humans and the biosphere, the human family can reestablish healthy communities, planetary balance with nature, and a culture of peace.

In conclusion, the majority of the planet cannot make the leap from neoliberalism to restorative development. Therefore sustainable development must come first, but ultimately both models of sustainable development and restorative development are essential to creating balance for the future of globalization. The healthy function of the environment depends greatly on the overall balance and health of its interconnected parts. Finding the balance will take the positive and thoughtful intent of each and every individual as a part of the change on this planet. It is not clear whether our culture will be able to overcome imperialism in my lifetime and evolve into a restorative culture of peace, but it is certain and imminent that humanity will reform the political economy towards sustainable development and correct many of the fundamental imbalances that still exist in today's political economy.

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