

Sustainability and Contemporary Man-Nature Divide: Aspects of Conflict, Alienation, and Beyond

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Abstract

The rise of modern capitalism, which is based largely on Enlightenment thinking and the primacy of exponential economic growth, has usually been considered the starting point of environmental degradation and the abuse of nature. Post-industrial societies, therefore, have been characterized by a disturbed environment-society relationship manifesting itself as ecological disasters as well as the prevailing instrumental view of nature under the current neoliberal capitalist paradigm of development. Using this framework, this article aims to discuss whether or not the current environment-society relationship is wholly at odds with the holistic view of nature within the sustainability discourse. Some important features of globalization, such as 'time-space distancing,' rising 'corporatism,' and 'global consumerism,' are also relevant to this discussion. Special emphasis is placed on the increasingly conspicuous aspects of human alienation from nature within modern societies as well as the concomitant social and cultural dislocations that the lingering Man-Nature divide has engendered. Ultimately, the potential of new initiatives to bridge this divide and promote sustainability is highlighted and research questions are thrown up for further scholarly investigation.

Author's Note

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Keywords: Sustainability, sustainable development, consumerism, man-nature divide, alienation, ecologism.

1. Introduction

Engendering a radically different vision of development, nature, and society, sustainable development emerged as a real challenge to the current socio-economic paradigm of growth based mainly on neoliberal capitalism. The new sustainability discourse preaches a new approach to the accommodation of different political, economic, and social variables in light of new ecological challenges such as ozone layer depletion, global warming, and climate change. In doing so, sustainable development departs significantly from the 1970s environmental movement's narrow focus on single issues such as pollution, diversity loss, and other expressions of the abuse of nature. The most distinctive feature of this new paradigm, therefore, is that it not only questions the current trade-offs between the environment and economic growth, but it also places environmental issues in broader social, economic, and

political contexts. Launched within the rather hostile context of neoliberal capitalism, sustainable development has unveiled a deep Man-Nature divide with an intensifying sense of alienation from Mother Nature in contemporary post-industrial societies.

2. Contemporary Society-Environment Relationship

Over the decades, capitalism has been upheld by theorists, economists, and politicians who assert that free trade, capital flow, and state non-intervention policies lead to economic growth, wealth creation, and, ultimately, well-being for the whole of society. Neoliberal economists (e.g., Bhagwati, 2007; Norberg, 2003/2007; Sagoff, 2000) argue, for instance, that more consumption means more growth whereas less consumption means less growth and well-being for society. However, throughout this process of wealth creation, nature, as an independent entity, has been largely excluded from this equation and has existed only as a source of raw materials or a recipient of industrial and chemical waste. More and more critics (e.g., Brown, 2002; Speth, 2008; Carter, 2007; Jahiel, 2009), therefore, consider the rise of modern capitalism as the main cause of human society's alienation from nature, which has been conducive to a disturbed society-environment relationship.

Although some forms of environmental degradation with limited regional impact did exist in pre-industrial society, some scholars (e.g., Goldemberg, 2003; Altvater, 1998; Dresner, 2002; Kütting, 2004) assert that the global features of contemporary environmental degradation are generally associated with the Industrial Revolution and the subsequent economic growth of industrialized countries. Against this backdrop, the relationship between environmental degradation and today's socio-economic model of development was often regarded as part of 'the modernity project.' For neoliberal economists, "environmental problems, rather than being caused by economic growth as measured by GDP, can be solved by growth" (Robbins, 2009 p. 5). Conversely, for critics like Ann Dale (2001), Stuart Hart (2009), and Andres R. Edwards (2008), the subordination of the environment to economic growth marked a turning point in the society-environment relationship, ushering in a new phase of alienation between Man and Nature. This growing divide between Man and Nature constitutes one of the main obstacles of sustainable development, which advocates a new conception of the society-environment relationship.

One of the milestones in the ongoing debate on the society-environment relationship was the publication of *The Limits to Growth* by Donella H. Meadows, Dennis L. Meadows, Jørgen Randers, and William W. Behrens in 1972. As the environmental movement gained momentum in the 1970s, this document triggered a heated debate about the existence of ecological limits to economic and population growth. Using state-of-the-art computer modeling techniques, the authors came to the conclusion that if existing growth rates continued, "the limits to growth on this planet [would] be reached sometimes within the next one hundred years" (Meadows, D. H., Meadows, D.L., Randers, J., & Behrens, W. W., 1974, p. 23). With all its alarming findings, this report was significant in advancing the environmental movement in the 1970s and 1980s and in drawing public attention to environmental concerns.

In addition to making the environment a high-profile issue on the political agenda of the time, *The Limits to Growth* informed 'green ideology' or 'ecologism'¹ in various other ways. As a matter of fact, this report gave sustainable development a solid *raison d'être* that thoroughly informed its discourse and articulated its approach to economy, society, and nature. Scholar Neil Carter pointedly argues, for instance, that "the concept of finitude underpinning the 'limits to growth' thesis is unique to ecologism; it implies that any future sustainable world will be characterised by material scarcity rather than abundance" (2007, p. 43). This document has also been an important eye-opener for the American public regarding the different dimensions of the society-environment relationship. Thus, in the wake of the 'Limits to Growth' thesis, this prevailing environment-society relationship characterizing the current socio-economic paradigm of growth has been widely called into question, hence the growing literature on the necessity of alternative paradigms of development.

The contemporary society-environment relationship constitutes but one main feature of the incompatibility between the current socio-economic paradigm of growth and sustainable development. While the overall message of *The Limits to Growth* is that environmental degradation is inextricably linked to neoliberal capitalist economic, social, and political systems, neoliberal economists (e.g., Bhagwati, 2007; Norberg, 2003/2007) still insist that the solutions for environmental problems necessitate more economic growth. Therefore, a real shift in the society-environment relationship is still not on their agenda, and radical changes to the neoliberal capitalist modes of production and consumption continue to be dismissed.

From an environmentalist point of view, the neoliberal capitalist drive for continuous exponential economic growth contradicts the idea of 'limits to growth' and the need to live within the ecological carrying capacity of the Earth. Neoliberal capitalism has also caused society to become more alienated from its physical environment. In fact, critics like Ann Dale (2001) and Stuart Hart (2009) believe that the more societies industrialize, the more this alienation intensifies. Armed with modern science and technology, most citizens of industrialized societies developed a solid conviction that they have become the absolute masters of nature rather than being an integral part of it. Hence, "by controlling public awareness of environmental issues, the media, corporations, and governments, and often religious institutions help foster the ideology that human beings were put on earth to dominate Nature," upholding a "patriarchal capitalism that equates the domination of Nature with the domination of women" (Robbins, 2009, p. 14). At this very juncture, the different features of the Man-Nature divide come to the fore and manifest themselves in the form of further estrangement from the natural environment.

Historically, this dichotomy between Man's mastery of Nature and Man's subservience to Nature dates back long before the inception of sustainable

¹ This term is often used in the literature to refer to "a distinctive green political ideology encompassing those perspectives that hold that a sustainable society requires radical change in our relationship with the non-human natural world and our mode of economic, social and political life" (Carter, 2007, p. 6). The father of 'ecologism,' philosopher Arne Naess, stresses the new vision in what he refers to as 'deep ecology' or 'ecologism,' putting it as follows: "I believe that multifaceted, high-level self-realization is more easily reached through a lifestyle which is 'simple in means but rich in ends' rather than through the material standard of living of the average citizens of industrial states" (1995, p. 82).

development in the late 20th century. In the literature, this notion has been referred to as the ‘mechanism-organism’ dichotomy—between a ‘machine-based’ approach to development that usually encompasses an instrumental view of nature and a holistic view of development that views humans as an integral part of nature (Kütting, 2004).

Overall, this ‘instrumental’ approach to nature seems to perpetuate a disturbed society-environment relationship in modern societies, for it downplays the seriousness and urgency of the ecological problems caused by the prevalent unsustainable patterns of economic growth. It does so by trying to fix environmental problems individually while claiming they have little connection with other social and ecological issues. This approach is often embodied in the ‘fragmented’ policies of modern governments vis-à-vis environmental issues. By thwarting the holistic view of nature, modern capitalism reduces nature to simple compartmentalized parts that are dealt with independently. This approach corrodes the main cause of sustainable development based totally on a different kind of society-environment relationship.

Undoubtedly, the society-environment relationship varies according to the degree of industrialization and the wealth of nations, the predominant culture in a given society, and the type of livelihood that citizens have within that society. In modern, industrialized societies, however, the alienation that characterizes Man’s relationship with Nature is exacerbated by higher rates of mass production and consumption nurtured by the principles of neoliberal capitalism. Indeed, the current socio-economic paradigm of growth systematically weakens efforts to raise citizens’ awareness of ecological problems and reverse the estrangement of society from the environment. The instrumental approach to nature in contemporary neoliberal capitalism jeopardizes strategies for realizing a sustainable mode of development as it places Man as the master of his environment and downplays the intrinsic value of nature. As this top-down society-environment relationship prevails, people’s estrangement from nature deepens, limiting their consciousness of their harmful abuses of the environment. This alienation intensifies even more when the process of globalization further obscures current environmental degradation by constantly nourishing a growing ‘global consumer culture’ that systematically reduces nature to a mere source of bounties.

3. ‘Global Consumer Culture’ and the ‘Limits to Growth’

With the rise of neoliberal capitalism and the onset of globalization, human production and consumption volumes have increased exponentially over the past century.² This explosion in production and consumption patterns has had profound economic, political, and cultural ramifications worldwide. The fervent quest for material well-being, the voracious accumulation of wealth, and the insatiable desire for further consumption in industrialized societies have all grown into a fast-growing phenomenon dubbed ‘global consumer culture’ (Mooij, 2011; Bakari, 2013). The global economic changes of the last quarter of the 20th century and the early 21st

² Recent statistics show, for example, that over the 20th century (from 1890s to 1990s): the overall world economy doubled up to 14 fold; world population doubled up to 4 fold; overall energy use doubled up to 16 fold; Carbon dioxide emissions doubled up to 35 fold; water use doubled up to 16 fold; and marine fish catch doubled up to 35 fold (Speth, 2008, p. 50).

century have also brought about numerous fundamental changes to consumer ethic prevalent in these post-industrial societies.

Due to globalization, 'consumer culture' – also referred to as 'global consumerism' – has been widely exported through mass media to the rest of the world where societies have, to different degrees, adopted and identified with the prevalent Western lifestyle (Sydee & Beder, 2009; Kütting, 2004). This section will focus on the negative effects that 'global consumer culture' has had on the emerging project of sustainable development and the resultant intensification of the Man-Nature divide in light of the aforementioned processes. More it will spotlight the dramatic societal and cultural changes that hinder the progress of sustainability in the context of neoliberal capitalism. Understanding the far-reaching effects of these economic and cultural changes is essential to discerning the nature and scope of the clash between the current paradigm of growth and sustainable development.

Although 'culture' is an elusive concept to define, this article will consider the sum of the predominant social practices and beliefs underpinning the prevailing economic, political, and religious systems as the culture of post-industrial societies. Over the last few decades, the society-environment relationship of industrialized societies has become both blurred and unrealistic mainly because it does not reflect the real magnitude of environmental degradation, thus engendering a concomitant sense of alienation between society and nature. This estrangement from nature has both contributed to and been nourished by the surge of mass consumption habits, especially in wealthy, industrialized societies. Observers assert, for example, that consumerism nowadays is not only a "pillar of modern capitalism," but also "an approach to life and social well-being that elevates the material conditions of life over the spiritual and social dimensions" (Speth, 2008, p. 147).

Globally, transnational corporations (TNCs) have played an important role in popularizing consumer culture in order to open new markets and sustain economy growth (Hart, 2009; Speth, 2008). Scholar Stuart L. Hart also contends that "such corporate dominance is leading to a worldwide commercial monoculture based upon the values of Western consumerism and bringing with it the decline of local cultures, products, and traditions" (2009, p. xxxvii). This 'cultural globalization,' also referred to as 'Westernization,' has contributed to the spread of standardized mass consumption patterns that have, in turn, led to the creation of what came to be known as 'global consumerism.'

The phenomenon of 'cultural globalization' has been criticized for failing to produce a new form of a 'global' culture, instead "artificially creating a transnational cultural type that is predominantly characterized by the consumption of global brand names and a particular form of news and entertainment" (Kütting, 2004, p. 45). What is heralded as a global culture, other critics note, is but the spread of Western consumption patterns, which is closer to an economic phenomenon than to a new form of culture (Sydee & Beder, 2009). More important than these definitional problems is the damage that this 'consumer culture' or 'global consumerism' inflicts on efforts to bridge the Man-Nature divide and implement the sustainability agenda.

The argument that the excessive consumption of Earth's natural resources results in environmental degradation is not new, for it dates back to the beginning of the environmental movement in the early 1970s. Reports such as *The Limits to Growth* by the Club of Rome has had a far-reaching influence on environmentalists and other activists who questioned the prevailing culture of consumerism that led to

unprecedented rates of environmental abuse. Being another distinctive feature of neoliberal capitalism, the issue of overconsumption represents one of the biggest obstacles to sustainable development today. The challenge facing this new paradigm is twofold: first, most attempts to implement sustainable development strategies take place in a very unpropitious context dominated by unsustainable fossil fuel-based modes of economic growth with little consideration for ecological limits. Secondly, this new paradigm aims at establishing a broad type of ‘ecological consciousness’ in post-industrial societies where consumer ethics are still deeply entrenched.

For the most part, many of the obstacles facing sustainable development are closely related to contemporary developmental options. Many studies (e.g., Goldemberg, 2003; Venetoulis & Talberth, 2009; Radermacher, 2004; WWF, 2012), for example, show that the excessive consumption of the planet’s renewable and non-renewable resources has caused increasingly irreversible environmental degradation that transformed from local to global by the turn of the 21st century. Nevertheless, the neoliberal capitalist approach that prevails in global economic, trade, and developmental institutions is based on the assumption that the high standards of living currently enjoyed by the richest 20 per cent of the world’s population can be extended to the rest of the world if they follow the same path of economic growth (Rostow, 1991). Moreover, the powerful TNCs, through their relentless worldwide media propaganda popularizing ‘global consumer culture’ and exporting consumer ethics, are dwarfing efforts to popularize sustainability both locally and globally.

As with production, consumption reflects another feature of the dichotomy between sustainable development and neoliberal capitalism. Given their conflicting theoretical underpinnings, neoliberal capitalist and sustainable development discourses have two contradictory visions of consumption. Neoliberal economists (e.g., Sagoff, 2000; Krugman & Venables, 1995; Bhagwati, 2007), for example, consider growth and consumption to be essential tenet of modern development that can be extended indefinitely. In fact, consumption is thought of as the very engine of growth in a society “that considers trade and consumption the source of all well-being [...] built on the foundation of perpetual economic growth, in which we are required to produce and buy more this year than last year and more next year than this year in perpetuity” (Robbins, 2009, p. 1). In other words, the neoliberal capitalist approach considers consumption the last stage in the production-consumption cycle, which means that once a product is consumed, more products must be manufactured to satisfy growing consumer demand and make more profits.

Counterbalancing this zeal for global consumption comes sustainable development’s rallying cry for sagacious patterns of consumption within the carrying capacities of the planet. From an environmentalist point of view, consumption remains but one stage that has to be interconnected with other stages such as environmentally-friendly production, the preservation of the common good, and the process of recycling to alleviate the pressure on renewable and non-renewable resources (Kütting, 2004, pp. 55-60). The ‘limits to growth’ principle, therefore, plays a vital role in sensitizing the public to the required rates and scopes of consumption within the project of sustainable development. “A green economy [that] would be based on production primarily for use rather than profit, and would thereby rule out such frivolous consumption” has, therefore, become one of the major objectives of this project, argues scholar Neil Carter (2007, p. 48). However, this new concept is

still evidently incongruous in the context of neoliberal capitalism, which prioritizes economic growth and ever-increasing consumption at the expense of sustainability.

Another important feature of this dichotomy is also revealed by the issue of waste and recycling after consumption. By and large, the neoliberal capitalist approach considers consumption to be the last stage in the production-consumption process, and thus hardly takes into account the way the consumer disposes of the goods consumed. This neglect of the recycling process, critics argue, further alienates society from its environment, and disconnects these consumers from their social and environmental responsibilities (Kütting, 2004, p. 58). Environmentalists, on the other hand, consider waste disposal to be the last stage in the 'production-consumption-disposal cycle.' Scholars Pamela Chasek, David Downie, and Janet Brown note, for instance, that only under huge pressure from environmentalists did governments in industrialized countries, international economic organizations, and TNCs start to pay attention to the issue of waste disposal (2010, pp.141-145). Still, other critics argue that the way these governments and organizations dealt with this issue has raised a lot of apprehension mainly because "corporations only take account of costs that are integral to their own functioning" and "wherever possible, the consequences of production are externalized, from waste products to the need to care for old or sick workers" (Mellor, 2000, p. 157).

Unlike the current socio-economic paradigm of development, sustainable development discourse does not consider consumption to be the last stage of production and attaches great importance to recycling, the use of environmentally-friendly 'green' technologies, and less energy-efficient growth.³ This divergence in the conception of consumption and consumerism lays bare another fundamental feature of the incompatibility between neoliberal capitalism and sustainable development. The perception of the consumer in the neoliberal capitalist paradigm of development is, for instance, radically different from the one held in the sustainability paradigm, hence the discrepancy in the consumer ethic of the discourses. While consumers are often portrayed as passive elements targeted by the huge power of advertisement and the allure of modern lifestyle in neoliberal capitalism, they are held accountable for their choices and patterns of consumption in the sustainable development discourse. This juxtaposition provides insight into the extent to which the two paradigms diverge and the difficulty in establishing a new consumer ethic in this context.

On the whole, the current socio-economic model of growth thwarts efforts to raise 'ecological' consciousness when it absolves consumers of their responsibility on the grounds that they are constrained in their actions and choices by supply and demand. Critics (e.g., Kütting, 2004) point to the huge pressure from advertising to 'keep up with the Joneses' and the prevalent ethic of the consumer society as a major impediment to effecting social change with regards to consumption. On the contrary, the sustainable development discourse places emphasis on the will of consumers as conscious citizens despite the presence of the materialistic ethic and seeks to

³ A great emphasis is placed, for example, on recycling, the efficient use of 'green technology,' and environmentally-friendly waste disposal in WCED, 1987; Earth Charter, 2010; WWF, 2012; and UNCED, 1992.

maximize their awareness regarding the need to consume sustainably in documents such as the *Brundtland Report*, the *Earth Charter*, and *Agenda 21*.⁴

The discrepancy between the two paradigms is also reinforced by the unequal distribution of wealth⁵ and its concomitant consequences on both society and the environment. Though consumption itself is one of the integral pillars of capitalism, the scale and nature of consumption advocated by neoliberal capitalism goes far beyond the human needs for food and shelter. Given this overwhelming drive for exponential economic growth, observers point out that “the most characteristic feature of modern capitalism is its insatiability” (Campbell, 1987, p. 37). What is more alarming, in my view, is that not only do modern societies insatiably consume more than what they actually need, but they also expect that increasing consumption rates will guarantee more welfare, in an illogical defiance of the finiteness of Earth’s natural resources. Environmentalists and thinkers such as Speth (2008), Hart (2009), Edwards (2008), Dale (2001) Hawken, Lovins and Lovins (2008), among others, argue that if contemporary industrialized society is to survive this ecological crisis, it has to change from a *consumer* society to a *conserver* society. In such a ‘conserver’ society, explains Neil Carter, “any quantitative reduction in the overall material standard of life in the sustainable economy will be more than compensated for by the resulting benefits; both material, such as improved craftsmanship, healthier food, and safer communities; and ‘spiritual,’ such as happiness, individual fulfillment, and a more cooperative society” (2007, p. 49).

To put it in a nutshell, the emphasis on production-consumption processes, the dissemination of materialist ethics, and the neglect of environmental exigencies have all contributed to the yawning Man-Nature divide by perpetuating patterns of environmental degradation. Looking at the big picture, this linear vision of progress advocated by neoliberal capitalism is one of the major obstacles to the project of sustainable development, which strives to awaken consumers to the drawbacks of consumer culture. The resultant Man-Nature divide grows even more conspicuous as the process of globalization intensifies, ushering in the new phenomenon of ‘time-space distanciation.’ This will be discussed in the following section.

4. Globalization and the Phenomenon of ‘Time-Space Distanciation’

Closely linked to the disturbed environment-society relationship that has marked contemporary post-industrial societies, ‘time-space distanciation’ is another feature of the current socio-economic paradigm of growth as a whole, and particularly of the intensifying process of globalization. One important aspect of this feature is that mass production and consumption typical of industrialized societies

⁴ *Agenda 21* is one of the main documents that were drafted at the 1992 United Nations Conference on Environment and Development. It spells out a blueprint of action to be taken by the different UN organizations, governments, NGOs and other organizations at the global, national, and local levels in areas where there have been negative human effects on the environment.

⁵ Recent statistics of the Global Wealth Report 2010, published by the Credit Suisse Research Institute, show, for instance, that 0.5 percent of global population (adults) share 35.6 percent of global wealth whereas 68.4 percent of global population (adults) share only 4.2 percent of global wealth (Pizzigati, 2010).

usually take place far away from resource extraction process, thus obscuring the concomitant environmental abuse and further degrading the environment-society relationship. The concept of 'time-space distancing' is defined by scholar Gabriela Kütting as follows:

The basic idea behind this concept is that under globalization social relations are spatially removed, creating global-local linkages through economic and cultural practices. At the same time social relations are also temporally removed in two ways: first of all, events can be experienced simultaneously in different places through sophisticated technology and, second, the consequences of an action or policy may not be felt in a different place until sometime after actual events (temporal distancing). So, time-space distancing is mostly about global-local linkages. (2004, p. 33)

Before delving into the effects of 'time-space distancing' on sustainability, it must be pointed out that globalization itself is a very contentious concept (Bakari, 2013). Despite widespread criticism, proponents of globalization argue that the whole world has benefited from it and particularly from the resulting increase in global trade and capital flow. Neoliberal theorists and economists such as Jagdish Bhagwati (2007), Johan Norberg (2007), Paul Krugman, and Anthony Venables (1995), among many others, defend globalization as the 'engine of wealth creation' that will ultimately benefit all segments of society in both developed and developing countries thanks to what is commonly referred to as 'trickle-down economics.'⁶

Boosting the growth agenda, reducing trade tariffs, disseminating modern telecommunication technologies, and promoting more freedom of movement and communication are some of the principal concepts the advocates of globalization share and defend. In his book, *In Defense of Global Capitalism*, economist Johan Norberg, for example, argues that capitalism and economic globalization offer unlimited opportunities for the development and well-being of humankind:

At its core, belief in capitalism is belief in mankind [...] In the cultural arena, that means freedom of expression and the freedom of the press. In politics, it means democracy and the rule of law. In social life, it means the right to live according to one's own values and to choose one's own company. And in the economy, it means capitalism and free markets. (2007, pp. 266-267)

One major argument set forth by defenders of globalization such as Johan Norberg (2007, pp. 266-67), Paul Krugman and Anthony Venables (1995, pp. 875-76) is that globalization empowers poor and rich nations alike to transcend geographical, political, ideological, and cultural barriers and open up to a world full of opportunities to improve living standards and achieve sound development. According to its advocates, globalization has numerous benefits such as promoting freedom and allowing the working class to pursue alternative opportunities and throw off local constraints. They also claim that these opportunities will ultimately

⁶ According to economists, the trickle-down theory (aka trickle-down economics) is fundamentally based on the belief that "the accumulation of wealth by the rich is good for the poor since some of the increased wealth of the rich trickles down to the poor" (Aghion & Bolton, 1997, p. 151).

lead to the 'liberation' of human thinking as borders vanish and the world becomes more interconnected (Norberg 2007, p. 263).

Proponents of globalization also dispute many anti-globalization arguments, pointing out that critics' attacks on 'hypercapitalism' originate from elements that have traditionally opposed free markets and free trade, such as 'Third World regimes,' conservative intellectuals, new left movements, and environmental movement, which are all afraid of globalization's empowerment of the people at the expense of their political institutions (Norberg 2007, pp. 263-64). According to this view, having a globally interconnected economic system with a free flow of capital and liberalized trade is not a curse, but a blessing. Scholar Johan Norberg concludes that globalization is portrayed as an unfettered monster only because politicians cannot subject it to their authorities (2007, pp. 263-64).

Notwithstanding this celebration of the benefits of globalization and capitalism, the prominence of environmental issues since the 1970s onwards has cast a shadow on the validity of this model of growth. With the advent of sustainable development by the turn of the century, many of the benefits of neoliberal capitalism in general, and of globalization in particular, have been called into question. The effects of new phenomena brought about by globalization such as 'time-space distancing' have gradually become the focal points of many scholarly debates and academic studies.

Before probing its far-reaching implications, however, it is essential to spotlight the historical context in which 'time-space distancing' came to the fore. There is now a widely-held belief that globalization, with all its overwhelming and unrelenting economic, social, technological, and cultural processes, has made of the world a 'global village.' Thanks to technological telecommunication breakthroughs, remote parts of the world have become unprecedentedly interconnected. Indeed, many observers (e.g., Blewitt, 2008; Chasek, Downie, & Brown, 2010; Choudary, 2004) talk about how the 'local' has become closely connected to the 'global' not only economically, but also politically and culturally. As such, the benefits that globalization has brought about in different fields such as telecommunication, global transport, education, arts, social activism, and global intellectual and scientific debates are beyond any doubt. In fact, the modes and scopes of environmental activism have been revolutionized by the intensifying interconnectedness of different green NGOs (Non-Governmental Organizations) with the onset of globalization.

In recent years, however, more and more observers (e.g., Dale, 2001; Kütting, 2004; Speth, 2008) have pointed out that as a result of this 'distancing,' citizens of post-industrial societies have become gradually estranged from the environment and almost blinded by a false sense of well-being to the actual degree of environmental degradation. By and large, despite the multiple benefits of globalization, the phenomenon of 'time-space distancing' still reflects the magnitude of the yawning Man-Nature divide and underlies much of the prevalent sense of alienation from the natural environment.

To begin, the phenomenon of 'time-space distancing' seems to gradually disconnect societies' economic activities from their concomitant social and environmental consequences, resulting in difficulties in establishing causal links between exponential economic growth and its negative effects on nature and society. Scholars Pamela S. Chasek, David L. Downie, and Janet Welsh Brown further explain that 'time-space distancing' "stretches the chains of production and

consumption over great distances and across many locations, which increases the separation between sources of environmental problems and their impact” (2010, p. 367). As such, this ‘distanciation’ poses a huge challenge for sustainable development in making people conscious of the environmental damage caused by their consumption patterns as they do not witness this damage in their daily lives.

With regards to the effects of this phenomenon on sustainability, they are best exemplified by two particular phenomena, namely ozone layer depletion and the growth of ‘cash crops’⁷ in developing countries. Recent scientific studies (e.g., in Chasek, Downie, & Brown 2010, pp.163-171) have adequately demonstrated that the ozone hole over Antarctica, Latin America, and Australia was caused primarily by chlorofluorocarbons (CFCs) and other Ozone Depleting Substances (ODS) released into the atmosphere during decades of mass production, mass consumption, and relentless fossil fuel-based economic growth, mainly in the industrialized countries. Other recent studies (e.g., in Leichenko & O’Brien, 2008, pp. 6-7) also show that the dire consequences of this global environmental problem strike first in small islands and developing countries, which are poorly equipped to deal with such predicaments. Because citizens of industrialized societies can hardly feel the consequences of their daily abuses of nature in their daily lives, their consciousness of these abuses grows weaker over time. Looking at the big picture, this type of ‘time-space distanciation’ clearly works against efforts to forge a consensus on sustainability.

The second example of ‘time-space distanciation’ is ‘cash crops,’ which are grown in developing countries to satisfy global consumer demand, usually at the expense of local food shortages in developing countries. According to John Blewitt, “poor nations are forced to grow cash crops and export raw materials to the affluent developed nations, who then ‘add value’ through production processes and refinement, while externalizing any environmental costs to the country of origin” (2008, pp. 12-13). Other critics (e.g., Kütting, 2003; Maxwell & Fernando, 1998) point out that because these ‘cash crops’ are grown in regions so remote from developed countries, the citizens of these countries usually have a shallow idea about what environmental damages these ‘cash crops’ cause. This type of ‘time-space distanciation’, nurtured by intensifying economic globalization, systematically creates obstacles to building a worldwide ecological consciousness upon which the paradigm of sustainable development is based. This, in turn, has exacerbated the Man-Nature divide over time. The consequences of this phenomenon are, therefore, detrimental to the strategies of sustainable development, for they insidiously corrode one of the chief foundations of this project—public consciousness of environmental exigencies and sustainable growth.

5. Beyond the Man-Nature Divide: Bridging the Gap between Society and the Environment

Despite the predominance of the current socio-economic paradigm of development and the yawning of the Man-Nature divide, the first decades of the 21st

⁷ The term ‘cash crop’ is defined differently in the literature, but the most commonly used definition refers to a crop exported and “grown specifically for sale or [that] might be sold because production was surplus to ‘domestic’ demand” (Maxwell & Fernando, 1989, p. 1678).

century have witnessed a surge in scholarly rethinking of sustainable development and of development in general. People's conspicuous estrangement from nature has been a strong eye-opener, sensitizing many contemporary thinkers, economists, and activists to the need for a reconsideration of the meaning and implementation of sustainable development. Many of these thinkers aim at initiating a new holistic approach to sustainability that would be the antithesis of the traditional paradigm of development that deals with environmental issues individually. There has also been a growing conviction among thinkers and activists that tackling ecological issues separately would only result in more confusion and an incomplete understanding of what development means. Professor Ann Dale explains the new holistic vision in the following terms:

Sustainable development can be regarded as a process involving the reconciliation of three imperatives: (1) the ecological imperative to live within global biophysical carrying capacity and to maintain biodiversity; (2) the social imperative to ensure the development of democratic systems of governance that can effectively propagate and sustain the values by which people wish to live, and (3) the economic imperative to ensure that basic needs are met worldwide. And equitable access to resources – ecological, social, and economic – is fundamental to its implementation. (2001, p. x)

Many critics (e.g., Kemp, Kemp, Parto, & Gibson, 2005; Hart, 2009; Ikerd, 2005; Strange & Bayley, 2008; Edwards, 2008) regard the fundamental integration of ecological, social, and economic imperatives in one comprehensive model of development to be an alternative to the current unsustainable approach to development. Thanks to this integration, the economic, social, and ecological imperatives can change from competing interests to reconcilable, complementary issues. The potential of these initiatives to bridge the gap between the post-industrial societies and their natural environment should constitute an important starting point to effectively tackling the Man-Nature divide.

As bureaucratic inefficiencies and short-sighted developmental policies have made governments part of the problem rather than the solution in the implementation of sustainable development (Ashford, 2004 p. 2; Dale, 2001, p. 146; Kütting, 2004, p. 67), rethinking the role of government has become an essential step in overcoming today's sustainability challenges. Some scholars (e.g., Kemp, Parto, & Gibson, 2005; Strange & Bayley, 2008; Stahel, 2004) note that the interrelatedness of ecological, social, and economic issues in sustainable development requires more efficient collaboration among different governmental sectors than currently occurs. According to the new sustainability approach, the concept of social and economic collaboration has to replace the concepts of competition and material acquisition, which are highly valued in consumer culture. This paradigm shift in the current links between the ecological, the social, and the economic is central to any effort to reconceptualize sustainability, which would ultimately ease the Man-Nature divide in modern societies.

Above all, bridging the Man-Nature divide requires that institutions of modern governance develop a strong sense of relatedness and commitment to sustainability in order to implement sustainability. This transition from a top-down to a bottom-up approach to decision-making will require a fundamental redesign of

governmental bureaucracies to institute a new type of collective decision-making that takes into account the different participants of civil society.⁸ Thus, establishing common ground between different stakeholders such as governmental institutions, corporations, and NGOs would have several benefits for the implementation of sustainable development and bridging the Man-Nature divide.

In a similar vein, civil society can also play a vital role in reducing the alienation between humans and nature by transforming the current disturbed society-environment relationship to serve the purposes of sustainability. More to the point, transforming the rather blurred society-environment relationship requires the active, effective involvement of citizens and NGOs in both planning and decision-making. Researchers (e.g., Ashford, 2004, pp. 9-10; Dale, 2001, p. 160; Kemp, Parto, & Gibson 2005, p. 18) note, for instance, that different stakeholders' commitments are vital to revolutionizing the governance system through higher degrees of interaction between decision-makers and civil society groups. In a holistic paradigm of sustainable development, civic engagement helps harmonize ecological concerns with other social and political imperatives in society. It does so by spreading public consciousness, not only of these ecological exigencies, but most importantly of the interdependence of ecological, economic, and social issues.

On the social and political levels, civic engagement cannot be effective without a propitious context that encourages bottom-up participation and establishes a solid basis for interaction between decision-makers and the citizens. Plagued by an excess of bureaucracy and hierarchy, however, most contemporary governments, fail to take on board the imminent exigencies of sustainability. Scholar Neil Carter argues, for example, that "liberal democracy nurtures an atomised individualistic focus on the private sphere, which makes it a poor breeding ground for the ecological consciousness and responsible citizenship needed to bring about a sustainable society" (2007, p. 55). According to scholar Gabriela Kütting, this failure has resulted in many of today's governments turning a blind eye to social dislocations and environmental abuse in modern society, exacerbating the already disturbed man-nature relationship (2004, p. 67).

For other critics (e.g., Carter 55), today's social and economic inequalities indicate clearly that the current structures of liberal-democratic governments offer limited opportunities for mainstream participation in public matters. Building up on this view, bridging the current Man-Nature divide necessitates rethinking the cult of individualism in light of the common responsibility of safeguarding nature and establishing a balanced development in accordance with sustainability tenets. Drawing on tools such social inclusion, consciousness raising, and education, the idea of participatory democracy has the potential to effect positive change on the disturbed society-environment relationship. Rather than forcing the required change solely through laws and regulations, this new form of governance could progressively change citizens from being 'self-regarding' to becoming 'other-regarding' in society (Carter, 2007, p. 56).

On the economic level, fighting corporate economic policies that are accelerating the exhaustion of Earth's finite resources and the exploitation of

⁸ The term civil society is used in this thesis to stand for "the arena of uncoerced collective action around shared interests, purposes and values," which is the definition given to this term by the London School of Economics' Centre for Civil Society (as cited in Strange & Bayley, 2008, p. 118).

workers has always been one of the top priorities of sustainability activists. With the intensification of economic globalization, however, opposing corporate hegemony has proved extremely difficult. Daunting as this task might be, harnessing today's global economic powers to work for, rather than against, sustainability may still be possible. In the literature, many scholars such as John Ikerd (2005), James Speth (2008), Stuart Hart (2009), Ann Dale (2001), and Andreas Edwards (2008) pointedly argue that what we need today is an economy that efficiently serves the collective interests of humankind as a whole rather than those of corporate elites and suggest new approaches to green business.

As more and more economists and theoreticians contend that business and sustainability are not necessarily mutually exclusive, a new business ethic of achieving economic growth within the ecological carrying capacity of the earth is being preached as a basis for the 'next industrial revolution' (Hawken, A. Lovins, and L. Lovins, 2008, pp. 1-4). According to this view (e.g., in Ikerd, 2005; Hart, 2009; Knowles, Twomey, Davis, & Abdul-Ali, 2009; Earth Charter), an acceptance by business leaders of their responsibilities in fostering sustainable development and implementing its strategies is deemed crucial today. This shift will not be possible, however, without a willingness among corporate managers to adopt a new approach to making business and expanding profits. The success of this shift to green business hinges, therefore, on how efficient the paradigm of sustainable development would be in accommodating different business interests and harnessing them to achieve sustainability. Hence, sustainable development is far more likely to succeed if it wins over, rather than opposes, business. Still, the challenge, remains how to work with business without being overwhelmed by it.

Being the most prominent actors in today's free market economy, TNCs have the potential to marry sustainability and capitalism to generate a new form of environment-friendly capitalism. Given the omnipresence of corporate power worldwide, these TNCs can uphold the sustainability agenda⁹ and ensure much of its success locally, regionally, and globally (Möller, 2004, pp. 23-24). Stuart Hart (2009, p. xl) maintains that, "By creating a new, more inclusive brand of capitalism, one that incorporates previously excluded voices, concerns, and interests, the corporate sector could become the catalyst for a truly sustainable form of global development – and prosper in the process." Many environmentalists such as Speth (2008), Hart (2009), Edwards (2008), and Dale (2001), among many others, argue that this paradigm-shift from an environment-unfriendly economy to an environment-friendly one can be achieved by mimicking the processes in ecosystems, in which by-products are recycled and reused indefinitely. Other researchers (e.g., Herman, Ardekani, & Ausubel, 1990) believe that this shift can also be achieved through what is referred to as the 'dematerialization of the economy', in which material and energy inputs are replaced with lighter sources of energy such as solar and wind sources. Ultimately, this shift should also focus on services and technological innovations to combat the excessive consumption of energy and materials in industry, thus narrowing more and more the Man-Nature divide as sustainability becomes a global lifestyle.

⁹ For a thorough analysis and specific cases of TNCs' endorsement of the sustainability agenda (such as the case with Interface Inc., Unilever, Philips Electronics, General Electric, and Wal-Mart), see Harmon et al., 2009, pp. 101-105.

6. Conclusions

Despite the prevalent rhetoric of caring for the environment in contemporary post-industrial societies, the neoliberal discourse is still holding to market efficiency and exponential economic growth as the predominant gauge for every issue related to human development. However, this approach starkly fails to take on board other equally important issues such as social equity, sustainable consumption, and equal distribution of wealth. Above all, this neoliberal capitalist approach to development has resulted in the widening of the Man-Nature divide, which marks modern societies today. Consequences range from the intensifying alienation of citizens from nature, to the governmental separation of environmental policy from other social and economic policies, which is the ultimate cause of the marginalization of environmental concerns. This chain of policies and the consequences thereof are but another impediment to sustainability strategies, which denounce the notion of gauging environmental, social, and cultural issues solely in terms of economic efficiency. By and large, this discrepancy also embodies many of the conflicting sets of values and priorities in neoliberal capitalism and sustainable development. Globally, this contradiction is also echoed in other wider areas such as the global governance system, the global trade system, and North-South politics.

The Man-Nature divide is exacerbated by one characteristic feature of globalization, namely the phenomenon of 'time-space distancing.' Revolutionary as it may be in other fields such as telecommunications, this feature has proved alarmingly detrimental to efforts to bridge the gap between Man and Nature and implement the strategies for a sustainable model of development. By creating and popularizing an unrealistic society-environment relationship, the phenomenon of 'time-space distancing' makes it difficult for society to spot the direct link between the accumulation of wealth and the resultant environmental degradation, hence the growing estrangement of contemporary post-industrial societies from nature. Endorsed by an intensifying process of an economic globalization, 'time-space distancing' has also weakened strategies for raising public consciousness. Ideologically, the supremacy of individual property rights and the intense pursuit of materialistic lifestyles prevalent in the post-industrial consumer society stand in stark contradiction with the priority of preserving nature and collective efforts to safeguard the environment in 'ecologism.' This further reduces the chances of survival of sustainable development in a hostile environment created by neoliberal capitalism and perpetuated by a worldwide zeal for global consumerism.

On the social level, many aspects of the current socio-economic paradigm of development such as contemporary economic growth, energy consumption, and environmental degradation further exacerbate the Man-Nature divide. The manipulation of global trade regulations on the part of the industrialized countries has had a negative impact not only on the national economies of developing countries, but more importantly on the daily livelihoods of the millions of poor citizens in these countries. For example, it weakens their purchasing power and makes their lives ever more difficult, thus leaving them with no other option but to abuse their natural environment and become more estranged from nature. Some of the root causes of this situation, therefore, can be directly attributed to the whole

global economic system that turns the developing countries into sources of cheap raw material and underpaid labor.

Despite the daunting challenges facing sustainability today, green industry constitutes one of the most suitable, if not only ways, to overcome the impasse that has obstructed sustainable development. New ideas such as the ‘dematerialization of the economy’ and ‘industrial ecology’ have revolutionized business and have the potential to bridge the Man-Nature divide, especially through a reconceptualization of the role of government in this process. Hence, new ‘green’ economic gauges, procedures, and policies, along with a new environment-friendly corporate creed, are needed to put these values into practice and make the structure of industry more compatible with sustainable development.

With a new holistic environment-friendly approach to development, modern government could become part of the solution rather than part of the problem in narrowing the Man-Nature divide in modern societies. Once it overcomes the bureaucratic fragmentation that plagues their policy-making processes, governments could become a catalyst for the revival of sustainability. With more civic engagement from local communities and NGOs, governments could also become more open to bottom-up policy-making that would guarantee wider public participation and social equity. The transition from liberal democracy to participatory democracy is key to broadening the public consensus about sustainability. Widening political alliances with unions, NGOs, and interest groups is another effective way of gaining more ground for this new paradigm of growth. However, due to sustainable development’s holistic nature, forging green political alliances is just one step in the battle against the predominant socio-economic paradigm. Hence, other economic, social, and intellectual alliances are also important tools in winning this battle.

In light of these conclusions, this paper throws up some important questions in need of further investigation. If the current debate about sustainable development is to be pushed forward, a better understanding of the role of educational institutions in the dissemination of sustainability ethics needs to be developed. In-depth research is also needed to examine possible ways to revolutionize academic and scientific research in these institutions so as to better capture the multi-dimensionality of the current Man-Nature divide. This paper might also serve as a starting point for future studies about the possibility of marrying sustainable development with new trends in global politics and examining how faithful they are to the basic tenets of sustainability. Further research of the corporate role in promoting a green economy could also be based on some of the ideas in this article. Further research on the type and potential of alliances and partnerships between environmentalists and other political and civil society groups is also highly recommended.

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