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Sustainabilization:

A Critique of Green Economy(s)

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Strangely enough, when considering the metamorphoses of alternatives to conventional capitalism as "the green economy," the Front Range and much of Colorado are excellent places to look. In the 1960s, Clark Richert with a handful of art students from the University of Kansas, created a settlement known as Drop City outside of Trinidad that was inspired, in part, by 1960s performance art, and, in part, by Buckminster Fuller. Indeed, "the ideas that Drop City was based on-- ecology, creativity, economy--are relevant today...Drop City may still be a model" (Hendrickson, 2009), even though it is perhaps "the best example of the potential and perils of trying to build an alternative culture in America" (McCourt cited in Hendrickson, 2009). For Marx, this experiment in green economies undoubtedly would be another instance of how unexpectedly in "the material transformations of the economic conditions of production" that the "legal, political, religious, aesthetic or philosophic--in short ideological forms in which men become conscious of this conflict and fight it out" (cited in Tucker, 1978: 5) can begin in counterculture geodesic zones. Yet, they then can come into a strange fruition in car lots covered with photovoltaic panels, charging plug-in hybrids carrying suburban cul-de-sac culture to work and malls.

Ironically, as these material transformations in economic

conditions of production have unfolded over the past five decades, it has become clear that "no social order ever perishes before all of the productive forces for which there is room in it have developed," and therefore "new, higher relations of production never appear before the material conditions of their existence have matured in the womb of the old society itself" (Marx cited in Tucker, 1978: 5). Thus, in another ruse of reason, history records Colorado voters affirmed Amendment 37 in 2004 in a direct referendum, which mandated this state's largest public utilities obtain 3 percent of their electricity from renewable energy resources by 2007, and 10 percent 2015. While it is most likely not the vision of "ecology, creativity, economy" fostered under the zones of Drop City, the massive wind turbine farms at Cedar Creek as well as Spring Canyon and Spring Canyon Expansion are furnishing energy for 28,000 homes in Estes Park, Fort Collins, Longmont, and Loveland, Colorado (www.nawindpower.com/e107_plugins/content/content.php?content.13755).

To paraphrase Marx, the artistic commune of pioneering art school students gives one the zone, while the transnational firms of GE, Mitsubishi, BP Energy, Sempra, and Ixel Energy give one nearly a terawatt of wind energy from massive turbine farms. And strangely enough, facilities like Cedar Creek, Peetz County,

or Spring Canyon, once built, employ only 20 to 30 workers for their upkeep--or about the population of Drop City in its heyday fifty years ago. These deep roots of green economies in Colorado clearly deserve closer attention.

This provisional reconsideration of "the green economy," then, explores a few crucial, and perhaps too cautious, assessments of "sustainability" and its merits as public policy and private practice in the USA today. Such reflections are timely. On the one hand, the sustainability idea and its many associated green economy precepts are now highly regarded mainstream business practices. On the other hand, municipal and state governments, due to increasing national regulations and proliferating international standards, also are embracing green economy strategies in the public sector.

Sustainability, however, is a mutable concept. Different social forces have stressed divergent ethical inflections in its polysemic ethical, political and social meanings over the years, which make it difficult to pin down its core ideals. Even though well-meaning and hard-working individuals and groups still labor energetically to make advanced industrial ways of life rooted in sustainable development more deeply embedded in everyday life, this study wonders if they fully comprehend what they are doing as they turn down the green economy road to

champion ecology, resilience or sustainability for the American public by seeking "sustainabilization" as a solution.

Looking at their goals and achievements, one must ask, once again, the central question of politics: Who, Whom? Whose green economy? Where, why and for whom is being made imperative? Whose sustainability, and how is it being pushed for whom? Exploring these critical questions, even provisionally, soon discloses many important insights.

I. Green Economies

Prior to neoliberal turn in the 1970s, "the green economy" was regarded as a fringe movement's fantastic vision for the revolutionary reconstruction of classical industrial democracy as well as multinational Fordist means of production. Before 1970, the USA was still the world's economic powerhouse, and few heeded the call for the radical changes outlined by various ecology activists in the 1960s. After nearly 50 years of greater globalization, extensive national deindustrialization, accelerating financialization, and growing income inequality, many people now recognize things have changed.

Hence, "the green economy" in the USA, has been rebranded. Indeed, it is essentially construed now as a strategy for blessing this mess with ecological good intentions to create new types of jobs, redirect cost-control efficiencies into key

environmental services, and engineer carbon-reduction strategies. Its goals, however, are essentially conservative, namely, establishing boundary defense, damage control, and risk management strategies for what exists rather than attaining radical transformation. In other words, Drop City-style revolutionary change is not on the table. Instead economic and political leaders want to keep intact as much of what remains feasible for preserving in consumerist America's industrial democracy after decades of turmoil by erecting scores of GE-sourced wind turbines, building more LEED buildings, and selling Detroit-designed plug-in hybrids as they frack natural gas anywhere it can be found.

Colorado's approval of tough renewable energy standards five years ago in the legislature after a state-wide popular vote, approving renewable energy standards in 2004, expresses many of these developmental trends in green economies. Such policies typically mix together a conventional amalgam of centrist material motivations, which range from affirming economic competitiveness to bolstering overall sustainability. As Governor Bill Ritter, Jr. announced in March 2010, his vision of Colorado's "New Energy Economy" would position the state "at the forefront of America's energy revolution," and "it will protect consumers, clean our air and protect public health, and

create new jobs by increasing demand for Colorado-produced natural gas” (Climate News, 2010).

Such green economy ideas do not challenge the fundamental logic of global commerce, basic market structures, and the morphological qualities of existing urbanism, materialism or consumerism. Instead they hold these dynamics *ceteris paribus*, while introducing once-banned ecological calculi as special ingredients for the creative destruction of ever-changing capitalist market places. As Denver’s Labor Council for Latin American Advancement (LCLAA) notes, “environmental protection is a viable tool for producing economic growth and creating jobs because of innovation and competition . . . grow more jobs and nurture a healthy environment” (LCALLA, 2015).

By valorizing the cultivation of environmental sites, services, and stocks, new demand for many different goods and services, as well as the businesses and jobs that produce them, displace older jobs, businesses, goods and services that destroy the environment and/or waste natural resources. As Peter Drucker (1993), Vance Packard (1958; 2011) or John Kenneth Galbraith (1998) all asserted in the 1950s and 1960s, inattention, excess, and mismanagement are deeply embedded routine practices in actually existing American capitalism. Rooting them out via corporate strategic changes that favor

redesign, reduction, recycling, removal, and reuse requires an array of new businesses and jobs to produce such goods and services. Renewable energy sources, for example, gradually may displace nonrenewable energy sources; but, they also exemplify energetic resources for renewability in the exchange of goods and services that can ignite new waves of the creative destruction of capitalist production and consumption.

Echoing Al Gore's vision of "The Future," climate change is both a set of complex environmental problems and a suite of profitable business opportunities (Gore, 2013). For Ritter and those subscribing to his rhetorical representation of green economies, "while climate change presents our leadership with a tremendous challenge, that challenge is matched by the opportunity of our nation to respond to an evolving energy landscape" (Office of the Governor, 2007). In other words, every cloud has a silver lining, particularly for wind turbine installers, solar panel companies, and natural gas drillers. The New Economies school of thought wants to leverage climate change anticipation, assessment, and adaptation as a prime business opportunity for resilient entrepreneurs (Walker and Sal, 2006) rather than a dreadful doomsday dirge by packaging it in the alluring costumes of "the green economy."

An instructive example of this approach is the State of

Washington's definition of "the green economy" as what in Olympia "is best thought of as the "greening" of our existing economy through developing new products, techniques and services. All industries are--and will be in a state of transition in a carbon-constrained world. Efficiencies, new energy sources, technologies and business models will develop and be adopted over time" (CTED, 2009: 12). Such a green economy is far from truly revolutionary; and, at best, it takes a mildly reformist turn toward "the development and use of products and services that promote environmental protection and/or energy security" (CTED, 2009: 12). Going green despite the *Sturm und Drang* posed by its many paleoindustrial opponents in the coal, steel or oil industries, is a cautious strategy. It maintains the existing lines of march set out for consumerist industrial democracy, while scanning the terrain for clean, green, lean improvements. Again, the analysis in Olympia is that "the vast majority of jobs created in a green economy are in the same areas of employment that people work in today--it is more a question of whether we can improve the services provided by buildings, transportation, products and process" (CTED, 2009: 12). Green economies will include clean energy and technology, but they aim at more than those goals--they seek to keep what companies, markets and workers already have.

At the national level, for example, the Bureau of Labor Statistics maintains that green jobs "are related to preserving or restoring the environment" (Bureau of Labor Statistics, 2010). To give greater clarity to these occupations, it defined them as:

a. Jobs in businesses that produce goods or provide services that benefit the environment or conserve natural resources.

b. Jobs in which workers' duties involve making their establishment's production processes more environmentally friendly or use fewer natural resources (Bureau of Labor Statistics, 2010).

In taking this approach, entire industries do not need to be declared "green," but many jobs in most industries can easily be recategorized as green. Rather than reconstituting fixed capital, a bureaucratic taxonomy simply redefines the specific business practices and labor assignments that might have green impacts in the USA's economy.

The identification of green goods and services also can then be tied to such firms and laborers, but their coding is much more complex due to drawing tight links to green technologies and practices. That is,

A. *Jobs in businesses that produce goods and provide services that benefit the environment or conserve natural resources.* These goods and services are sold to customers, and include research and development, installation, and maintenance services. This definition will be used in the BLS survey of establishments in industries that produce green goods and services. Green goods and services fall into one or more of five groups:

1. *Energy from renewable sources.* Electricity, heat, or fuel generated from renewable sources. These energy sources include wind, biomass, geothermal, solar, ocean, hydropower, and landfill gas and municipal solid waste.

2. *Energy efficiency.* Products and services that improve energy efficiency. Included in this group are energy-efficient equipment, appliances, buildings, and vehicles, as well as products and services that improve the energy efficiency of buildings and the efficiency of energy storage and distribution, such as Smart Grid technologies.

3. *Pollution reduction and removal, greenhouse gas reduction, and recycling and reuse.* These are products and services that:

- o Reduce or eliminate the creation or release of pollutants or toxic compounds, or remove pollutants or hazardous waste from the environment.
- o Reduce greenhouse gas emissions through methods other than renewable energy generation and energy efficiency, such as electricity generated from nuclear sources.
- o Reduce or eliminate the creation of waste materials; collect, reuse, remanufacture, recycle, or compost waste materials or wastewater.

2. *Natural resources conservation.* Products and services that conserve natural resources. Included in this group are products and services related to organic agriculture and sustainable forestry; land management; soil, water, or wildlife conservation; and stormwater management.

3. *Environmental compliance, education and training, and public awareness.* These are products and services that:

- o Enforce environmental regulations.
- o Provide education and training related to green technologies and practices.

- o Increase public awareness of environmental issues.

Jobs in which workers' duties involve making their establishment's production processes more environmentally friendly or use fewer natural resources. These workers research, develop, or use technologies and practices to lessen the environmental impact of their establishment, or train the establishment's workers or contractors in these technologies and practices. This definition will be used in the BLS survey of establishments across all industries [<http://data.bls.gov/cgi-bin/print.pl/green/home.htm>]

Here, the two-fold characteristics of "the environment" to be benefited, conserved or sustained are evident. First, it means doing work that is friendly to not-yet-built environments (organic agriculture, sustainable forestry, wilderness land) and, second, it implies being conservationist in already-built environments by switching to renewable energy going to existing points of nonrenewable energy use, boosting net energy efficiency of existing equipment/buildings/appliances/vehicles or reducing/removing pollution loads generated in all energy generation and use.

At the global level, the United Nations Environmental Program (UNEP) has an openly transformative agenda behind its understanding of "the green economy" inasmuch as highlights "improved human well-being and social equity" in building a green economy, which "can be thought of as one which is low carbon, resource efficient and socially inclusive" (UNEP, 2008).

While these aspirations seem uncontroversial, they also fly in the face of 250 years of Western industrial development inasmuch UNEP planners claim "growth in income and employment is driven by public and private investments that reduce carbon emissions and pollution, enhance energy and resource efficiency, and prevent the loss of biodiversity and ecosystem services" (UNEP, 2008). Yet, as Mitchell (2013) and DiMuzio (2015) note, the wealth and power of carbon democracy/carbon capitalism in the nineteenth century or carbon authoritarianism/carbon socialism in the twentieth century largely flow from taking the opposite course.

Consequently, in the guise of gentle guidance, the UNEP actually articulates a stricter vision for a mildly interventionist environmentality rooted in alternative state-led design directives. The financial drivers for these transformations also will be steered by government experts with more than private profit in mind. That is, they must be,

Catalyzed and supported by targeted public expenditure, policy reforms and regulation changes. The development path should maintain, enhance and, where necessary, rebuild natural capital as a critical economy asset and source of public benefits, especially for poor people whose livelihoods and security depend strongly on nature (UNEP, 2008).

Such plans explicitly highlight improved human well-being and social equity, but there can be a tangible tinge of "degrowth

dirigisme" that implies social equity must also be inclusive. Otherwise, the public benefits celebrated as being "green" either will ratify the severe stagnation in most families' income since 1973 or push towards more economic levelling for "the 99 percent" to check "the 1 percent" from prospering even more.

II. The Green Economy in Sustainability Discourse

As a significant concept for environmental policy, "sustainability" is introduced into broader political debates during the crisis-ridden late 1960s and early 1970s. Shared anxieties about economic modernity then pushed decision-makers to maintain collective historical momentum in favor of growing economies within ever more sophisticated organizational and technological systems, regardless of negative environmental consequences. Worries about whether or not the belching smoke stacks of factories and foundries represented economic progress or ecological degradation, however, sparked real consternation. These worries, at the same time, dominated the sustainable development debate--as "the limits to growth" thematic became its recurrent theme from the 1970s through the 2000s (Meadows et al., 1972). During nearly four more decades of global development since these competing visions for limiting versus

accelerating growth arose, much of the planet has experienced, however, an incredibly intense economic expansion, extending the most common goods and services for highly developed standards of human living, as they were enjoyed by only a few in 1972 to many more people across the world by 2015.

Discerning the politics, whether they are latent or manifest, being mobilized in language as practice, like the jargon of sustainability, is a useful task. The semantic punch of these concepts, which are always carefully codified to convey the values of this or that politics, discloses the intentions of those individuals and groups as plainly, or even more clearly, than their official declarations or actions. Bourdieu asserts "politics is, essentially, a matter of words," because the cultural, economic, and social worlds where the struggles over words express politics that "owe their seriousness--and sometimes their violence--to the fact that words to a great extent make things, and changing words, and, more generally, representation. . . is already a way of changing things" (Bourdieu, 1990: 54). Debates about the ethics and politics of sustainable development as well as recent widespread corporate acceptance of sustainability as worthy business goals provide compelling illustrations of these trends.

In 1971, Barry Commoner characterized the sustainability

challenge in stark terms--how can human beings preserve the ecosphere and its integrity? Regarding his own work as "an effort to find out what the environmental crisis means," he observed:

Suddenly we have discovered what we should have known long before: that the ecosphere sustains people and everything that they do; that anything that fails to fit into the ecosphere is a threat to its finely tuned cycles; that wastes are not only unpleasant, not only toxic, but, more meaningfully, evidence that the ecosphere is being driven towards collapse (Commoner, 1971: 7-8, 8-9).

Sustaining the planet's ecosphere requires staving off its collapse from relentless profit-seeking. The survival of all life--much less its basic sustainability--must halt, and then reverse, the erosive effects of ecosystemic collapse, flowing from rapid industrial development.

Sustainability understood in these terms is fundamental. To survive, one must preserve the biosphere by rethinking the interactions of Nature, humanity, and high-tech economy. In seeking sustainability, one joins the columns of environmental sustainers. Yet, when the goals for ecosystem survival are brought into everyday public policy, they get lost in the trance of economic growth, namely, a ceaseless quest for fresh economic/social/technological breakthroughs by economic developers. How headlong economic growth also somehow can be regarded as truly sustainable practice, when Commoner and so

many others have been definite about how it inevitably first causes ecosphere degradation and then destruction, is quite confusing. Still, this belief persists.

Corporate sustainability practices, along with elaborate government policies for making, managing, and monitoring business activity as the pathways to more sustainable ways of life, appear to be, in fact, the power base and knowledge domain required for the ongoing systematic drawdown of existing environmental resources and services. Whether one looks back to Osborn's 1948 *Our Plundered Planet*, or begins only with Catton's 1980 *Overshoot: The Ecological Basis of Revolutionary Change*, or picks up Diamond's 2005 *Collapse: How Societies Choose to Fail or Succeed*, prophecies of a massive environmental crash triggered by unsustainable patterns of living are easy to find. Despite such gloomy warnings about resource exhaustion, planetary destruction, and ecological catastrophe, as they have been openly issued and discussed for decades, they just are ignored.

The "development as freedom" school of thought arguably contradicts the "sustainability as order" vision of a green society. Without conceding that a sustainable society might require unfreedom, Pepper endorses the imperatives needed to constrain choices naturally in defining the social obligations

of sustainability. By presuming that Nature has such easily discoverable and timelessly intrinsic moral/behavioral/aesthetic imperatives, this normative vision for a green social order portends imposing a stricter regimen on "developers" by "sustainers." Development would mean less freedom inasmuch individuals and societies would no longer be able to choose more materialism, consumerism, high-impact technology, population growth, or disharmonious ties to Nature.

In addition, Pepper would reconfigure existing governance and managerial arrangements to distribute authority upward to experts from non-experts so they could reappraise basic values to pursue sustainability. For him, enhancing the quality of life means "people having control over their own lives in a genuine participatory democracy. Individuals and local communities, rather than the state or large private corporations, should own resources... obviously most of this is unachievable without deep-rooted changes in Western values and social organization," because it is quite clear that a sustainable green society "will be less hierarchical and more participatory than present society, and very definitely more communal" (Pepper, 1996: 16-17) as the visionaries of Drop City, Colorado imagined.

Such deep(er) green visions of sustainability arise from

the more popular, if not radical, environmental political movements from the 1960s and 1970s. Their visions, however, became less compelling over time as a popular political agenda, as the embedded and enduring waves of economic stagnation suffered by most people in the developed world since 1973, dulled the desire for any sort of voluntary austerity. As environmental crises have worsened, many corporate enterprises and their managerial overseers, however, changed their tune. In fact, many of them stand at the forefront of those asserting that sustainability does not necessarily require austere ways of life. Instead "green ideas have made progress," and many once radical ideas from popular environmentalist movements of the 1960s and 1970s "have nudged their way further towards the 'mainstream' end of the spectrum" (Pepper, 1996: 17). How they nudged their way into becoming more acceptable is intriguing.

III. Coming "Clean" in the Green Economy

Sustainability in its various articulations and diverse permutations, then, is being more routinely primed in corporate conferences, university curricula, and government think tanks to anchor inventive policy rhetorics or growth narratives for fresh modernization. For decades, "sustainability" had been a term of art favored by New Age or New Left activists to expound political programs tied to the limits to growth, small is

beautiful, and voluntary simplicity schools of thought that touted the merits of consumer constraint, curtailed wants, and complexity reduction. The cautious appropriation of this term, however, by the Brundtland Commission (WCED, 1987) steered the circulation of meaning toward caution, control, and constraint in consumption to advance the interests of intergenerational justice. Once moral qualms about equity are addressed, greater production and consumption could be accepted to the point of even being regarded as actually sustainable "development." The harmonization of consensual constraint at the right scale, scope, and size through enlightened environmental management has reset the regime of truth by reaching out for alternate understandings of sustainability's green economic utility.

One of the frames favored today for displacing the "green economy" narrative with low-carbon, carbon-neutral or postcarbon economy discursive terms is rooted in policy narratives about "lean production" with its "clean revolution" to green the economy. That is, "a global 'race to clean' has now emerged, with numerous nations working to drive low-carbon and environmental industry growth" (Munro, Rothwell and Saha with Bartelle, 2011: 6). To attain and then sustain new economic development, for example, "the 'green' or 'clean' or low-carbon-defined as the sector of the economy that produces goods and

services with an environmental benefit--remains at once a compelling aspiration and an enigma as the nation and its regions search for new sources of growth" (Munro, Rothwell, and Saha with Battelle, 2011: 6). To affirm economic sustainability, this alluring logic reorients behavior by reimagining clean energy and industry as a surefire means for creating "environmental capital." Seeing a need to stimulate faster, broader growth for an American "clean economy," the rhetoric for turning "green" into "clean" opens this previously marginal, if not countercultural, domain into the latest opportunity for renewed growth all led, in turn, by the private sector (Bureau of Labor Statistics, 2011).

When Marx asserts in "The Preface" to *A Contribution to the Critique of Political Economy*, "it is not the consciousness of men that determines their being, but, on the contrary, their social being that determines their consciousness," he marks a decisive impact of "the environment" upon "the economy" (Marx in Tucker, 1978:4). This insight rang true in the liberal democratic West, first in the 1970s, and then again in the 1990s, as the consciousness of sustainability accepted by most people paralleled the interests of the main OECD economic elites to secure their national significance, maintain their hard-won wealth, and not impair the future of coming generations to enjoy

at least much freedom as prevailed at the end of the Cold War. Creating better understandings of sustainability as a knowledge network, in turn, served the conservationist agendas of these powers.

Foucault observes that the social modes of being, like those drilled into sustainability discourses, remediate themselves as consciousness, "as a function of the true discourses which are the bearers of the specific effects of power" (Foucault, 1980: 94). The green economy concedes that capital is its core social relation of production, and all of its shapes and substances still are "creations of labor, products of labor, *accumulated labor*" (Marx/Tucker, 1978: 207). The US Bureau of Labor Statistics concurs: green jobs are the *sine qua non* of the green economy. Green jobs fuse individual work in Nature and Society at the nexus of capital/labor accumulation in all the worked matter that capitalists and proletarians fabricate.

In 2013, the BLS reported that total green goods and services (GGS) for 2011 in the USA was 2.3 percent of total employment, or 2,515,200 jobs. Colorado's piece of this sector stood as 52,859 jobs or 2.9 percent of the state's total employment, which actually dropped over 1,000 jobs for 2010. The highest GGS employment was Vermont with 3.9 percent of its

workforce in green jobs, while Nevada was the lowest at 1.6 percent (Bureau of Labor Statistics, 2013). Oregon, Washington, and Idaho slightly exceeded Colorado's GGS employment in the mountain and western states, although none exceeded Vermont. And, most other mountain and western states were considerably lower than Colorado in GGS employment and output.

This processed world adduces a coevolutionary order in which corporate capital, state power and consumer culture now jointly constitute Nature as "near" and "far" environments, as part of their own operations to sustain the transnational continuation of their rational planned economies. The turn towards sustainability, realized through "appropriate" or "sustainable" technology, is not unexpected. Indeed, Marx would observe:

Technology discloses man's mode of dealing with nature, the process of production by which he sustains his life, and thereby lays bare the mode of formation of his social relations, and of the mental conceptions that flow from them. (Marx, 1967: 352).

Marx's observation provides useful guidance to rethink Governor Ritter's program for sustainability in Colorado by making any critique of political economy and the environment disclose the social relations and mental conceptions aiming to operationalize sustainability.

Commodities are capacitors of control that have "a definite

social relation between men that assumes, in their eyes, the fantastic form of a relation between things . . . so it is in the world of commodities with the products of men's hands" (Marx, 1967: 72). After two generations of Earth Days, this fetishism is the basis for thinking through ecology to ratify sustainable development turning as the highest stage of capitalism grounded upon lean/green/clean economic growth.

IV. A New Global Ideology: "Green" to "Clean" via "Lean"

Between the 1970s and today, the understandings and uses of sustainability changed dramatically, as Colorado's green economy illustrates. In its original deepest green sense immediately after the first environmental crisis debates unfolded, sustainability was understood by many in the USA as a radical benchmark for the radical human practices, like taking up residence in the zones of Drop City, needed to shuck off the world's most inequitable industrial capitalist and socialist practices and their toxic tendencies. This radical change was needed, first, to ensure the survival of the Earth, and, second, to identify any more balanced, frugal, sensible, enriching, low-impact forms of everyday life that could guarantee the survival of human communities.

Survival implied accepting less consumerist, materialist, and technified material goods for more individual and collective

mental well-being. Johnson's *Muddling Toward Frugality* (1978), Schumacher's *Small is Beautiful* (1975) or Elgin's *Voluntary Simplicity* (1981), for example, all couched the moral imperatives as all people living simpler, more frugally or smaller existences as the most ethical response to the oil shocks, resource shortages, stagnant incomes, and ecological disasters of the 1970s. As Brown argued three decades ago, "creating a sustainable society will require fundamental economic and social changes, a wholesale alteration of economic priorities and population policies" (1981: 8). Thirty-five years ago it might have worked, since human pressure on the environment was nearly in balance in 1980. Over the last generation, however, overshoot has become the new normal (Brown, 2011:7).

Forsaking frugality, however, allowed newer essentially performative "lean" normalization criteria laced around an ethics of efficiency to gel as a normalization apparatus. The denunciations of resource profligacy remain, but The World Commission on Environment and Development (WCED) in *Our Common Future* easily admitted a generation ago "humanity has the ability to make development sustainable--to ensure that it meets the needs of the present without compromising the ability of future generations to meet their own needs" (WCED, 1987: 8).

With this official United Nations report, sustainability discourse floats away from preserving the planet. United Nations' experts still stand against wasteful resource abuses, but then pivot towards normalizing leanness via technoeconomic performativity. That is, "the concept of sustainable development does imply limits--not absolute limits but limitations imposed by the present state of technology and social organization on environmental resources" (WCED, 1987: 8). Absolute limits would imply development as freedom cannot come to pass. For all the peoples of the United Nations, the projects of sustainability oscillate towards the sustainability of economic development, and not of the Earth per se, because "in the end, sustainable development is not a fixed state of harmony, but rather a process of change in which the exploitation of resources, the direction of investments, the orientation of technological development, and institutional change are made consistent with future as well as present needs" (WCED, 1987: 9).

Plainly, with these discourses, the meanings of sustainability are neither easy nor straight-forward. Instead, it is claimed very painful choices must be identified, assessed, and then made. What once were foundational ethics of sustainability for the Earth itself morph into applied sciences

for benchmarking the sustainability of lean, green or clean growth for better planetary market performance. For managing most efficiently "the changing productive potential of the ecosystem" so that "population size and growth are in harmony" (WCED, 1987: 9), sustainable development never will be "a fixed state of harmony" but rather it must push managerially towards the lean goals of finding "the basic needs of all and extending to all the opportunity to fulfill their aspirations for a better life" (WCED, 1987: 9, 8).

A. The Enterprise of "ECO:nomics"

The naturalization of endless capital accumulation in contemporary global exchange as the latest manifestation for green living can underscored by turning to other social hieroglyphs, like *The Wall Street Journal*, for example, and its annual spring celebration of "Environment" in "The Journal Report" on "ECO:nomics." These thematics have now been feted during March professional conferences in Santa Barbara, California for nearly ten years. Regarded as its definitive coverage "on the business of the environment," *ECO:nomics* in March 2011, for instance, focused on "Creating Environmental Capital" (*Wall Street Journal*, March 7, 2011: R1), while the global confab on ECO:nomics in March 2012 centered on a clear need for constant revolutionization in green production. Here,

capital has been transformed into a social force that alone can no longer create value at a high cost to Nature--it must become green "ECO:nomics," as Gore asserted a generation ago (1992).

As Peter Drucker has observed, "every single pressing social and global issue of our time is a business opportunity" (quoted in Lazlo, 2008: 19), and Colorado's legalization of a marijuana economy obviously shows the validity of his insights. Since many businesses now see sustainability as our time's most pressing issue, its provision as goods and services has become one of their biggest business opportunities. From carbon markets to carbon sinks, climate change adaptation to anti-global warming geoengineering, natural capital funds to sustainable biomaterial reserves, resiliency consulting to ecomanagerial training, clean business is for many *the* exciting new mode of capital accumulation and financial circulation.

With the near total globalization of production since 1991 at the close of the Cold War, visions for a green, natural or clean capitalism, like mutable gestalt of trends reappraised yearly by *The Wall Street Journal* at Santa Barbara, occupy the growing market share of development opportunities many managers believe must be "sustainable." The parade of corporate CEOs for global automobile, chemical, oil or transportation companies, who were at the March 2011 ECO:nomics Conference, conceded, for

example, that engineered waste and embedded excess in past practices now are pushing them towards a "green capitalism." This admission, that complex conservationism rather than crude colonialism is emerging as the highest state of capitalism, puts a different spin on Marx.

To paraphrase his *Eighteenth Brumaire of Louis Bonaparte* in today's peculiar circumstances, men and women make their own environment. Still, they do not make it under circumstances chosen by themselves, but rather under circumstances directly encountered, given and transmitted from past. As Colorado's plans for its transition to a green economy indicate, today's capitalist entrepreneurs are working to leverage the current generation's environmental overshoot as the most profitable foundation for their current business plans by opening clean energy firms, creating carbon credit exchanges, and developing new smart infrastructure to cope with the greenhouse gassing, soil depletion, and ecosystem degradation of the past as well as the present. With all of the Earth's existing economies and societies presented as an immense brownfield development option, sustainability becomes the highest stage of capitalism in a green economy, which Denver is hoping to leverage to the hilt.

Creating sustainable forms of capital, as *The Wall Street Journal* sees big business today, sets the laborers to work

within the many linked systems of systems, services of services, and stocks of stocks that "the environment" truly becomes to those taken up by one vision of Wall Street's "ECO:nomics." Natural environments morph into reified sites to harvest energies (wind, solar, tidal, biomass, etc.), exploit materials (industrial waste, obsolete commodities, consumer trash, rare minerals, etc.) or divert services (CO₂ capture, soil regeneration, solar reflectivity, plant pollination, etc.) instead of a vast natural machine hitherto abused by less prescient entrepreneurs who worked to run it to failure.

Assigning economic values, money prices, and aggregate goals to "the environment" recasts Nature as an ever-evolving, continuously improvable agroindustrial infrastructure as the new windmill power stations along the Front Range illustrate in Colorado. The rapid evolution of green capitalism as clean capitalism is but another aestheticized articulation of the lean capitalism at the neoliberal heart of contemporary globalism's on-going economic rationalization (Luke, 1999.) Clearly, it is not shocking that such ideologies can, in turn, become the "object-oriented ontologies" for an ecology without Nature (Morton, 2007) in which an aesthetic fascination with "the mesh of objects" displaces a politics committed to lessening the misery of subjects whether human or nonhuman.

Despite the frothy enthusiasm of CNBC, Bloomberg Business News or *Forbes* magazine, the United States since the Reagan era has not been the world's hot-bed for new business formation. Entrepreneurship is celebrated; but, nationwide most new entrepreneurs typically fail. The rate that businesses are developed actually has been dropping gradually since 1984. With minor recessions in the late 1980s, early 1990s, the dot com bust of 2000, and the Great Recession of 2007-2009, this overall trend steadily has increased, especially since the on-set of the latest economic crisis which is nearing a decade in duration. As the jobs deserts in rural farm country, declining inner cities, and many once prosperous suburbs illustrate, on the national scale, more businesses have failed every 12 months since 2007 than are started each year.

Of course, there are region, sector, and industry specific exceptions. Fracking-based hydrocarbon extraction in the Midwest and Appalachia has generated new jobs, the biotechnology/nanotechnology/infotechnology sector is relatively dynamic, and then, as many Colorado residents recognize, the profusion of microbreweries, boutique liquor distilleries, small vineyards, online gaming, and, last but not least, legalized cannabis in what is still labelled the "sin industry" are giving some cities, neighborhoods, and economies across Colorado

another green tint.

Nonetheless, there is more to life than the "sin business," and it is intriguing to see how "the green economy" going back to the oil crises of the 1970s has been touted as the "next big thing" to revitalize national, state, and local markets in Colorado. Locally, the brief but remarkable existence SERI (Solar Energy Research Institute) in Boulder as well as the Lovins' dogged advocacy at their Rocky Mountain Research Institute are examples that the Reagan revolution should not eclipse. Certainly, the advent of ICT-based transformation have altered America's, and the world's vision of business, employment, marketing, and production since the early 1980s, but the shelf-life of many of these firms is, and has been, short. And, for every job each of these businesses created, two, five, or ten often were lost as the automation, robotization or flat-out destruction of jobs has continued in the USA. In this regard, more cannabis farms and microbreweries hold real promise for growing Colorado's green labor force.

B. "ECO:nomics" as Sustainabilization

By the early 1990s, as political leaders like then Senator Al Gore, Jr. or Mikhail Gorbachev truly saw "Earth in the balance" (Gore, 1992), the allure of "the green economy, strongly beckoned many entrepreneurs. As Jacobs (1992) argues

persuasively in his *The Green Economy*, local economic development, energy conservation, and ecological values could ground a different type of modern, satisfying and equitable way of life. Since the end of the Cold War, this political program blossomed in one of two ways. First, entrepreneurs could look back to attain "global green" (www.globalgreen.com) ways of life tied to Gore's "eco-nomics" in the lost promise of ecological modes of production advanced in the 1970s. Second, and clearly more to the point in practice, investors and managers could treat the still running remnants of America's urban industrial economy and society as thousands of "brownfield" revitalization projects to spark "sustainable development" by bringing them into the "green economy." The ongoing project of commercial, industrial, and social modernization need not stop. Green jobs, green economies, green businesses, then, become a pretext for redirecting capitalism's inherent creative destruction by fusing "sustainability" with "modernization."

During the 1930s, FDR created the Civilian Conservation Corps to provide jobs for hundreds of thousands at many tasks, but most were focused upon creating new recreational infrastructure in America's national forests, monuments, and parks as well as the renovation of many existing urban sites and

systems. While they were not labelled as such at the time, promoters of the green economy frequently look to this effort as a prefiguration of their own jobs programs. Sparked by Van Jones' success (2009) touting "the green collar economy" (Jones, 2009), FDR was celebrated for CCC, because his purposes were to "conserve our natural resources, create future national wealth, and prove of moral and spiritual value" (Jones, 2009: 153) to its enlistees and the entire country. For Jones, the green economy is still about rebuilding the American dream for the 99 percent (Jones, 2013), but others doubt this promise.

Sustainabilization in one sense is this process of continuous improvement. It finds new efficiencies to carry greater human loads on existing infrastructures, buildings, and systems, while at the same time reducing energy inputs, recycling material throughputs, and reusing (or eliminating) noxious/polluting/wasteful outputs. The profit-driven foundations of modern urban industrial economies and societies are unchanged. And, creating green businesses and jobs will permit key infrastructures, urban formations, and natural resources that once met the needs of 180 million in 1965, and 330 million in 2015 and perhaps 450 million in 2050, while most continue holding on to the material lifeworld of everyday modern life. The gradual degradation of the ecosphere is slowed to a

stable level of destruction, and then deemed to be development, growth or innovation. The utopian space age future of "The Jetsons" is still far from being attained, but the future of dystopian collapse from "The Walking Dead" also is avoided.

Global capital networks, whose managers gather to confer at CEO-level meetings, like *ECO:nomics* in Santa Barbara every March, are reorganizing elements in the Earth's ecologies continuously through more efficient mining, building, farming, shipping, engineering, or manufacturing techniques. Such "terrestrial infrastructure" demands more rational clean/green/lean management in keeping with this economy's tight regulatory requirements. *The Wall Street Journal* has touted this understanding of "ECO:nomics," in rhetorics of ecology as economics that highlight "the relationship between the environment and the bottom line" (<http://economics.wsj.com/previous-economics-programs>). Those *ECO:nomic* assumptions also invest the Earth with a unique new technoscientific spatiality. In this respect, the green economy discourse compels producers and consumers, especially at "the CEO-level," in the world economy and planetary ecology to act as if "the global environment" exists per se. In turn, they allegedly can sharply define it, assign reliable metrics, and then tightly manage its cycles as stocks of environmental

capital for big businesses assisted by green research groups. Ideologically, it implicitly concedes that all on-going industrial revolutions, like additive, exponential or smart manufacturing, fully become synchronized with the on-going clean revolutionization of the planet itself. Even if their global ecomanagerialism means deanimating, deruralizing, deagrarianizing, deindustrializing, dehumanizing, and decentering the production of true civilizations as basic human settlements, the clean revolution will occur.

Today's remarkable lifeworld of global urbanization, which once was only "a horizon, an illuminating virtuality" (Lefebvre, 2003: 17) 50 years ago, now is becoming solid profits in the *ECO:nomics* of green commercialism. For the Earth, as this green economy merges with sustainable corporate policies, one quickly realizes the irony of sustainability--it is conservative through and through. Whether it is the planet of slums or a world of dumps, the environment's sustainability can be attained cleanly within the mesh of bioengineered forests, privatized seed strains, cultivated wildlife, and carbon credited/debited atmospheres. Decades after Lefebvre's speculations, then, managing Earth's biosphere with *ECO:nomics* acknowledges that truly planetary visions of economy and society now exist.

V. Continuing Worries

Like Commoner's *The Closing Circle*, these thoughts about Colorado's green economy are "an effort to find out what the environmental crisis means." In so doing, the cross-purposes and contradictory agendas of sustainable development come to the fore, because it is understood, as Colorado's commercial growth since the 1970s indicates, it is not yet a rational "green economy." Sustaining developmentalism is the hard work of bearing, enduring or tolerating the commercial degradation of the ecosphere in more and more places to maintain economic growth differentially for the advantage of fewer and fewer people.

The entrepreneurial logics of green business evolving on Earth in Colorado aim to fit the ecosphere into the more accountable models of green enterprise, but these activities still break the links between each living being and others as well as those between all of them and their surroundings. The ecological interactions that once sustained the whole environment dynamically have, as Commoner claimed four decades ago, have faltered and failed. Driving the ecosphere to collapse more slowly, more accountably, more collaboratively or even more equitably is still forcing it towards destruction. Until sustainability is more than endurable degradation, bearable deterioration, or acceptable destruction, no green

economy can save the planet or its societies (Luke, 2006).

In closing, this study briefly reappraised the evolving project of "the green economy" in Colorado since 9/11. To realize this goal, it moves away from trying to define green economics in terms of "what it is" as an ideal ethical project agenda to assess "how is it understood/used/applied" over time by different social forces using the term. One can argue over how meaning emerges from behavior, as well why activity channels thought, but the stability fetishism behind sustainabilization strangely is embedded in the semantic sources of "sustainability" as such. To sustain some activity, person or thing, as we comprehend this notion in contemporary English, descends through times from the Middle English "sustainen," the Old French "sustinere," and most significantly, the Latin "tenēre." And, *tenēre* here suggests "I hold, have or grasp." It also points toward "I possess, occupy, or control," or, finally, "I acquire, guard or keep."

Sustainable modes of development openly valorize already attained development that has been reached for, grasped solidly, controlled directly, and guarded carefully. To keep, occupy, and hold that which has been possessed, as energy-intensive and resource-wasting modernity without limits, is openly all about "sustainability." Today's strange mixtures of sustainability

values with developmentalist change become more sensible in this light. Although being fixated upon holding what one controls is neither impolitic nor unethical, does sustainabilization evolve into a defensive and reactionary visions of ecological being?

Myths of modernizing developmental change are wrapped around such stasis, while this sustainability becomes all about the dynamics of dominating hard-fought gains for the Cold War era as long as possible. If keeping the mall lights on, and the interstate traffic moving requires the construction of massive wind farms on pristine prairies to illuminate big box retailers and charge battery-powered cars, then the average American consumer, especially in Colorado, will be able to hold tightly to wisps of that idyllic dream world built during the golden age of economic expansion from 1948 to 1973. Greening old-rise buildings in Denver or Colorado Springs with roof-top solar panels, extensive new weatherization measures, smart lighting systems, and more efficient office equipment, of course, is not trivial: it creates jobs, reduces pollution, and increases efficiency. This transformation was SERI's agenda in 1980. In turn, a few projects and practices that the radical ecology movement rejected in those years, as waste-making and mind-numbing urban sprawl, magically are redeemed by the green job retro-fitting into Colorado's sustainabilizing green economy.

Far from being ecological modernization, this regimen of sustainabilization can combine with a reactionary politics of historic conservation, if not cultural stagnation. If the "green economy" or a "clean industry" is needed for its covering myths in Colorado and elsewhere, then this canopy of concepts will be locked down over the creative destruction of continuous growth to shield its explosive expansion in more urban sprawl. To keep the mobilization of energy, materials, information, and workers in "green economies" moving in Colorado, and the USA, along toward 250, 300, 380 or 450 million people as a nation, then, sustainability is no longer as intellectually improbable as it first seems.

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