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The Paradigm in the Iron Mask: Toward an Institutional Ecology of Ecological Economics

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The economy is a wholly owned subsidiary of the environment, not the reverse.
Herman Daly

Anyone who believes that exponential growth can go on forever in a finite world is either a madman or an economist.
Kenneth Boulding

Many of the social and environmental failures of the global economy trace to the flawed and outdated maps of the ***ego***´*-nomics currently taught in our most prestigious universities as scientific truth and echoed daily in the media. Those failures are so significant that they pose an existential threat to the survival of the human species. Recognizing that ego´-nomics shields economic predators from moral responsibility, private financial interests use their financial power to relentlessly promote the maps of ego´-nomics through media, education, government, and even religion.*
David Korten

We will never create sustainability while immersed in the present financial system. There is no tax, or interest rate, or disclosure requirement that can overcome the many ways the current money system blocks sustainability.
Dennis Meadows

Abstract
Various heterodox economists envision some sort of Socio-ecological Economics (armed with complex adaptive systems tools and concepts) as the vanguard of their displacement of the crumbling cultural citadel of Mainstream Economics. This is especially relevant given rapidly converging environmental catastrophes on a planetary scale. Unfortunately, ecological reasoning remains institutionally imprisoned and policy impoverished. Its development has been disrupted by its own disarray and by its subservient adherence to rules and conventions that the mainstream itself regularly violates. In order to mount a serious paradigmatic challenge, scholars and practitioners need be able to dismantle the institutional barricades erected in their path over decades. They also need to build a stronger policy orientation, and focus their efforts on financialization as the prime source of much of the social and natural systems disintegration.

Given the numerous disasters exhibited of late involving Mainstream Economics, various heterodox economists have called for much greater consideration of ecological processes (both natural and social, see Fullbrook & Morgan, 2001). Such processes, in turn, have become increasingly illuminated through the burgeoning science of complex adaptive systems (e.g., Preiser, et al, 2018). What some of these earnest observers fail to fully appreciate, however, is that ecological reasoning demands perspectives that economics as a policy enterprise is specifically designed to obliterate. Merely invoking alternative perspectives without first exploring the stranglehold that mainstream economists have over specific institutions and the culture at large is mostly a fool's errand. Economics and ecology stem from the same Greek root "oikos" or eco (meaning home) and referring to the art of life. Yet, they have become like the twins in the swashbuckling tale by Dumas, *The Man in the Iron Mask* (with one the vile usurper the other the innocent prisoner). Fairly early on economics abandoned concern for widespread human welfare and focused on what the Greeks called "chrematistics" (or "the art of acquisition", see Stahel, 2021). During the middle of the 20th century, Mainstream Economics became less of a science and more like a primitive cult (for a bit comic relief see Leijonhufvud, 1973). It is now primarily practiced to conceal the contradictions and extoll the virtues of yet another predatory epoch (much like the Guided Age, see Veblen 1899). Mainstream Economics is a pretty much a static system virtually out of touch with the dynamics of "living systems" (popularized by Capra, 1996). It is particularly hostile to anything systemic and symbiotic, especially those theories and methods associated with sustainable socio-ecological systems. Over the last few decades, the mainstream has morphed to ignore mounting incongruities, moving from Neoclassical to Neoliberal and now Neofeudal representations, further enshrining inequality and environmental devastation.

Given their appeal to pecuniary interests and proclaiming their status as the supreme social science, economists sought to sufficiently disguise their ideological predilections and their overwhelming allegiance to their generous plutocratic patrons. In the process, mainstream economists became increasing recalcitrant in defense or their fraudulent prestige (e.g., fake Nobel Prizes) and inordinate power (in business & government), not to mention their outsized personal remuneration and blatant conflicts of interest (recall the award-winning documentary, *Inside Job*).

Worse yet, by pretending to be apolitical, ahistorical, and value free, they have clandestinely expanded the vast set of cultural entanglements with a retrograde political economy and associated ecological destruction. Maintenance of their mythology requires increasingly intense societal dementia. The rapacious systems, they so vigorously defend, exacerbate inherent financial instability (see, Minsky, 1980) and accelerate upward redistribution, as well as ignoring the rapidly converging ecological catastrophe (i.e., global climatic chaos). Even under optimistic scenarios these processes will bring with them levels of political oppression and societal immiseration not seen since the Dark Ages.

All the while, the remediative observations of ecologists remain tangential, at best, to serious policy discussions. Catch phrases and sound bites have entered the lexicon, but mostly as "green washing" for corporate and governmental tokenism, and more recently to stimulate popular support for various neofeudal schemes such as the so-called "Great Reset" (see Roth, 2021). Things are indeed dire, but hopefully not so dire, that the public should trust the "Davos Men" (who created these crises) to completely privatize planet and rent it back to them in a less environmentally disruptive fashion. Before these schemes gain more momentum a new breed of scholars should seriously strive to identify and excise the anti-ecological as well as anti-democratic institutions hard-wired into the existing political economy (note Daneke, 2019).

Never Betwixt Will Meet

The forced partition of ecology and economics is obviously complex and convoluted, but for purposes of this discussion John Bellamy Foster (1999) provides a highly simplified, yet useful heuristic, "the four laws of ecology and the four anti-ecological laws of capitalism". ***The Laws of Ecology*** are vague, but, relatively straight forward,

1. Everything is connected to everything else;
2. Everything must go somewhere;
3. Nature knows best; and
4. Nothing comes from nothing.

To the extent that Mainstream Economics makes any sense at all, it is only in the context of early industrial capitalism. At its core, economics is an attempt to memorialize and concertize a brief instance in human history as some sort of enduring natural process. Hence it may be safe to say that Bellamy Foster's laws of capitalism are for the time being the ***Laws of Economics***,

1. The only lasting connection between things is the cash nexus;
2. It doesn't matter where something goes as long as it doesn't reenter the circuit of capital;
3. The self-regulating market knows best; and
4. Nature's bounty is a free gift to the property owner.

Separated at birth in the early 20th century economics thrived politically, but stagnated intellectually. Ecology, meanwhile, remained obscure, but blossomed into a rigorous science of evolution and adaptation. Beginning as a minor subfield in zoological studies, ecology (once referred to as the "economics of nature") has evolved to embrace the dramatically enhanced awareness of human and natural systems interactions. Moreover, they have recently adopted the tools and concepts emerging from computational advances and the science of nonlinear dynamical systems (see, Levin, et al, 2013; Anderies, 2014), as well as those of political ecology and cultural anthropology (note, Fabinyi, Evans, and Foale, 2014).

Unfortunately, while economists use (and abuse) 19th century physics (Mirowski, 1989) to formalize rosy fairy tales (e.g., efficient markets, general equilibrium, etc.), ecology uses 21st century physics to paint unpleasant pictures of pending resource peril. If ecologists were to be taken seriously as social scientists, then would have to address their own deterministic specters (Darwin as well as Spencer), and temper their darkening visions. The Original Institutional Economics (also called Evolutionary Economics) seems to have already laid the groundwork for less deterministic concepts (Hodgson. 2003). Moreover, complexity scientists (with their "far from equilibrium" worldview, see Jantsch, 2022), offered more novel, as well as explosive, recombinations. Together, Institutional Economics and complexity theories generate perspectives where evolving human desires and designs actually matter, and where long-term mutual cooperation prevails over brute competition. Some see in this institutional blending a more solid theoretical foundation for complexity applications (e.g., Gräbner, 2017). Brian Arthur, the godfather of Complexity Economics (2021), suggests that it is by its very nature is an evolutionary eco-system perspective with roots in folks like Thorstein Veblen. Mainstream Economics, with its static equilibrium models, has, of course, already swept most of evolution under the rug. The rare exceptions being when they try to account for the periodic appearance of their technological salvation cycles (note Nelson, 2020; also see Daneke, 1998).

Ecological Economics Blithers Ahead

Having partially escaped their imprisonment, ecological approaches were often blinded by a kaleidoscope of ideologies and methodologies (see, Sagoff, 2012; Lo, 2014; also note, Fragio, 2022). Given their own observations regarding ubiquitous human maladaptations, the ability of ecologists to demonstrate a politically palpable path became problematic. All the more so if they ignored the lessons regarding barriers to change provided by the early institutionalists (note, Smith, 2015). Mounting anthropological (Abel and Stepp, 2003) and "archaeoecology" (see. Crabtree and Dunne, 2022) evidence regarding the regularity of societal devolution and/or "collapse" (e.g., Tainter, 1988; also note Rubiños and Anderies, 2020) tended to fuel more pessimistic prognostications. Meanwhile, the objective reality of large-scale ecological catastrophes in the near future (brought on by civilization's addiction to cheap and/or militarily manipulated fossil fuels amid global warming) should have at least raised the salient of their ideas. Instead, with the help well-funded propaganda (muddying the waters of sound environmental, geologic, and atmospheric science), a culture of denial emerged. More significantly perhaps, ecologists had very little experience "speaking truth to power".

Emerging ecological ideas also rushed headlong into the canonical growth imperative of the mainstream. Anyone who uttered ecology and economics in the same breath was bullied and harassed going as far back as the 19th century, but the battering became more intense in the late 1970s as Neoliberalism was fully asserting itself in the halls of power (Reagan, Thatcher, etc.). The unrelenting and scurrilous ad-hominem attacks on the scholars associated with *The Limits to Growth* (Meadows, et al., 1972) and/or other Club of Rome studies is a clear case in point. Unlimited growth is so essential to the mainstream's systems of power, it was cardinal sin to even broach the subject. One need not, apparently, concern themselves with distributional dysfunctions and the fraudulent nature of financial systems if the pie is always expanding.

Besides the magical device of yet undiscovered technological substitutions could be relied upon to replace all finite resources. Like the joke about the economist, physicist, and engineer stranded on a desert island confronting their only can of beans. "No problem" says the economist, "we'll just assume we have a can opener, and more cans will simply appear from the ether". In reality, the outputs of the US innovation system declined dramatically since the 1970s for various reasons (Arora, et al., 2020). One might expect, however, that the increase in financial tomfoolery (see Mazzucato, 2013) may have had something to do it, with all three of our castaways opting for jobs on Wall Street.

With the support of various groups like the United Nations, Ecological Economics forged their own subdiscipline and persisted in their attempts convince the mainstream that economic development was not the same at GDP growth, and that widespread economic well-being could made much more ecologically sustainable (see, Clark & Munn, 1986). But continued vagaries about nature of development, coupled with severe north/south inequities, made the popular notion of "Sustainable Development" pretty much an oxymoron (note Doyle, 1998). Furthermore, with the inordinate influence of the fossil fuels empire, the thermodynamic insanity of economics seemed the only thing being sustained (see Georgescu-Roegen, 1982). Nevertheless, sustainability, vaguely defined, remains the basic raison d'état of Ecological Economics.

Many ecologically oriented economists, however, after both trying to blend-in and/or beating their brains out against the mainstream fortress, seem to have decided to play "The Price is Right" game. Forgetting the old adage that "an economist is person who knows the price of everything and the value of nothing", they proceeded pell-mell. Initially some rediscovered the long lost "Lauderdale Paradox" (Maitland, 1804) which posits an inverse correlation between public wealth and "use values" on the one hand and private wealth and "exchange values" on the other. Neoclassicists, of course, decided early on to only recognize the relevance of the latter. Jumping into the deep end where welfare and standard environmental economists were already floundering trying to reproduce exchange mechanisms, many ecological economists held tight to the floaty of internalizing externalities and/or the infinite digress of pricing unpriced values. Myriad technical and epistemic, as well as institutional difficulties ensued (note, Vatn, 2007). When attempting to assert multi-attribute utility functions, "horse and rabbit stew problems" readily emerged (i.e., how many ecological rabbits does one need to temper the taste of financial horses?). Meanwhile, the political valiance of cost-benefit analysis was shifting, along with the rise of Neoliberalism. Cost-benefit was originally developed by the Army Corps of Engineers as a shopper's guide for justifying otherwise questionable water projects (e.g., claiming flood control benefits for acreage that would be permanently flooded), but it had morphed into a powerful anti-regulatory weapon, capable generating claims that little of what government does is worth doing (except protecting private property). Plus, Cost-benefit has mostly ignored distributional problems (public costs, private benefits).

"Willingness-to-pay" surveys and other attempts to simulate market discovery mechanisms, were equally disheartening, unless one wished to privatize all of nature. Several self-identified "ecological economists", nonetheless, pressed on with their pricing campaign and ultimately came up with the figure for "natural systems services". The planet's "natural capital" was worth around 33 trillion according to Constanza and colleagues (1997). However, others contended it is quite a bit larger (maybe in the quadrillions) using devices like the "Ecosystems Bundling Index" and if one wants to recoup a portion of what has already been lost (see, Van der Biest, et al., 2014). Such indices are useful in identifying which companies and countries are getting the biggest free ride. But beyond finger pointing, actual policies for reducing the burden on natural systems are few and far between.

While pricing Natural Systems Services was a very dramatic gambit, this may have been a misstep on the part ecologically oriented economists. As capitalism is thoroughly predicated upon maximizing the free use of nature, turning the super tanker around in this narrow inlet is more than monumental task. At a basic level, billing or taxing (actually endless litigating) firms and nations over their use of natural systems may debase the notion of Natural Capital altogether, as well as further inflaming the political eco-system. Plus, one would expect past processes of commodification to proceed apace, not to mention the new incentivizing of hairbrained schemes like geoengineering the atmosphere. The entire process may prove a pyrrhic victory, if exchange values still predominate. Also, all the shadow pricers on the planet are no match for the "Shadow Bankers" (the unholy alliance of hedge or private (pirate) equity funds, mortgage brokers, ratings agencies, insurance companies, pay-day loan sharks, weapons dealers, and major investment banks).

Enter the Eco-warrior

While, the overall record or Ecological Economists in their battle with dismal science is pretty dismal. There were, however, a few minor victories, and one of their more prominent commanders was the late Herman Daly (e.g., 1968; 1986; 1998; and 1999, also note, Daly and Morgan, 2019). He made a dent in the prevailing paradigm by maintaining his Institutionalist moorings, as well as his commitment to the classical notions of a stable economies (which he called "Steady State") involving low throughput processes (Industrial Ecology). While perhaps just as doomed to third class citizenship among the mainstream, Daly presented a special threat. He was not afraid to resurrect long abandoned heretics such as James Maitland the 8th Earl of Lauderdale (1759-1839), Henry George (1828-1897), and Frederick Soddy (1877-1956) who along with Thorstein Veblen (1857-1929) remain increasingly relevant to the current economic conundrums. Daly was also an admirer of Karl Polanyi (1886-1964) and his detailed unnatural history of the "market society" and its explicit dangers (Polanyi, 1944). Furthermore, beyond his unique blending of institutional and ecological elements, Daly recognized that economics was primarily a policy enterprise.

As James Galbraith recently reconfirmed (2021), Mainstream Economics is far less a science than it is a "policy discipline", and a rather undisciplined one at that. Daly believed that it was on this ground that the crucial battles would be fought. Unlike many of the ecologically oriented, Daly was quick to engage it in many a policy skirmish. While respecting much of Neoclassicism, Daly was not afraid to point out its many defects, particularly when they entailed such obvious ethical as well as intellectual lapses. For him economics, especially at the macro level, had totally lost sight of human needs, with its perilous pursuit of growth at any cost. Plus, he recognized that the micro's historic conversion of rents and financial manipulations into "earned income" was a key defect. More importantly perhaps, Daly stumbled upon the real "heart of darkness" in the systems of money and banking. Well before the recent financial meltdown, he exposed the inordinate stupidity at the core of financial institutions, and really struck a nerve by reiterating the call for "100% reserve banking" (Daly, 2016). But Neoliberal forces beat back these discussions and pushed forward into new realms of financial chicanery (e.g., exotic derivatives, mega-rehypothecations, and self-securitizations) claiming them to be vital to US financial leadership of the "New World Order". At the time, moreover, few Ecological Economists, rallied to their fearless leader.

Ecological Economics Without Economists

Eventually it may well be that reforming the mainstream is futile. A few heterodox economists (e.g., Rees, 2019; Norgaard, 2021; Spash and Guisan, 2021) imply that Socio-ecological Economics is far too important to be left to anyone with even a few toes remaining in the mainstream. Rees cogently points out that an effective program of "degrowth" is simply beyond economists' distorted concept of reality. Richard Norgaard labels the current epoch the "Econocene", placing the bulk of the responsibility with economic logic. Like Spash and Guisan, he contends that if economics were more about "social provisioning" then the logic would be dramatically different, starting with the many power and ethical variables that the mainstream completely excludes. Economics has for some time been a highly selective activity with its overly ardent lists of priors (preconditions) and the sleight-of-hand of ceteris paribus (all else equal). It is noteworthy that a "provisioning perspective" might also rejuvenate the institutional concerns of rent-seeking and debt mongering.

Spash and Guisan label their new improved ecological orientation, Socio-ecological Economics, emphasizing a richer admixture of biophysical and institutional dimensions. Mainstream Economics is pushed to the backseat (if not the curb) by redefining the nature of agency and responsibility. In other words, economics, as presently conceived, would play rather reduced role in the pantheon of recursive loops between diversely motivated agents (e.g., reciprocal, "other-regarding", as well as greedy), their institutions, and the environment. This perspective is what Daneke (1999) refers to as "systemic choices" (with patterns of interaction, not individuals, as the unit of analysis).

It is already clear that some of the much more compelling work is being done by social ecologists, with the barest minimum of conventional economics to impede them (note, Kish and Farley 2021). Some even imply that economic thinking, as a cultural variable, is the great fly in the ointment of adaptive human behavior (Schill, et al., 2019). A few directly apply the unique (e.g., "emergent properties") political economy of complex adaptive systems (note Van Heur, 2010) toward the development of novel policy perspectives (e.g., Anderies & Janssen, 2013). However, a few of these may still rely too much on Lin (Elinor) Ostrom and her students' regional and rare cases of temporarily reversed "tragedy of the commons" problems (see, Ostrom, et al., 1994). When one moves from her examples to her theory, they might detect a faint scent of libertarian fairy dust. Plus, her prime examples rely upon lists of priors that would choke a horse and functioning arrangements that require relationships nearly akin to kinship. Nonetheless, her famed "framework" (Ostrom, 2009) and her notion of "institutional grammars" have inspired some very interesting policy process studies (see Bazzan, et al., 2022; and Saddiki and Franz, 2022).

Other socio-ecological scholars, are building upon and enhancing the work of famed zoologist, Buzz (C.S.) Holling and his various colleagues and their notion of "Panarchy" (see Holling, 2001). Of particular import are their applications of "adaptive cycles" (note, Sundstrom & Allen, 2019) and "resiliency theory" to instances of institutional change and resource sustainability (Gunderson, Holling, and Light, 1995; and, Boyd & Folke, 2011). The panoply of Panarchy scholars tend to focus on the co-evolution of similar mechanisms at differing scales as well as certain key policy traps emerging from the outdated "command and control" strategies of resource management. These reinventions of institutional analysis by ecologists, while a vast improvement upon the so-called "Neo-institutional" approach of business and legal scholars (e.g., "transaction costs", see, Williamson, 1981), still might profit from more ingredients from the originals (Veblen, Commons, Polanyi, Galbraith, etc.). Thorstein Veblen, for instance, still has highly relevant insights for the credit crisis (Davanzati and Pacella, 2014) as well as being regarded as the patron saint of Environmental Sociology (Mitchell, 2001).

Along original institutionalist lines, another group eco-modelers (Motesharrei, et al., 2014, and 2016) used their simplified *Human and Nature Dynamics Model* (HANDY) simulation to explore amplifying institutional relationships (e.g., "bi-directional coupling"). Moreover, by applying a predator/prey characterization using the famed Lotka-Volterra equation they illustrate the intense mutual causality of inequality and ecological disruptions. These inventive inquiries suggest that the quest for a more inclusive economy, might begin by unraveling various anti-ecological institutions. As impressive as these efforts are, effective policy chances still demand much better road maps from oligarchy to panarchy. And, a good starting point is the great oligarchic country club of money and banking.

Back to the Heart of the Darkness

While relatively few ecologists view their enterprise a matter of finance, a few brave or foolhardy souls like Frederick Soddy (1922; 1931, also note Zencey, 2009) and the already mentioned Herman Daly (2016) saw it as the head waters of many anti-ecological institutions. Nevertheless, serious research on the relationship between sustainability and financial systems was pretty much a black hole as late as 2015 (note, Aspinall, et el., 2018). Despite (or perhaps because of) the Lietaer et.al. (2013) report to the Club of Rome, "the missing link between money and sustainability", remained pretty much beyond the pale (note Dittmer, 2015; and, Larue, 2020). Nevertheless, "endogenous money" had at least begun to enter discussions by "macroeconomic ecologists" (see Svartzman, et al., 2019).

Recently, however, a masterful revisiting of the so-called "missing link" has emerged reviewing a range interesting new inquiries and policy skirmishes (Alves, Santos, and Penha-Lopes, 2022). They not only confirm the anti-ecological centrality of money and banking, they highlight their contradictions for various cherished notions of transparency and self-government, as well as their overwhelming impact upon inequality. Moreover, they include a number of policy development guidelines, such as Donella Meadows *Leverage Points* (1999). One might only fault their preoccupation with the "monetary monoculture" and hence the can of worms cure of competing currencies, especially in an era of cryptocurrencies.

It is worth re-establishing that Herman Daly (2016) focused on the custom of fractional reserves, as the fundamental fraud at the heart of the money machinery. It is also worth recalling that several hard-core laisse fare economists (e.g., Irving Fisher, 1935) supported 100% reserves to be part of New Deal Reforms (see, Phillips, 1995). What was once partially misbranded the *Chicago Plan* was revisited and praised by scholars at the International Monetary Fund (Benes and Kumoff, 2012). Yet, it is fair to say that bankers, generally speaking, lack interest in having their cash cow cashiered, especially if central banks (backed by tax-payers) continue to act like Pepto-Bismol in stopping the runs.

Other measures suggest having governments simply reclaim their right to print their own "interest free money" by executive order. Lincoln, not wanting to pay usurious amounts to New York banks to finance the civil war, just had the treasury issue his famed “greenbacks” (and planned to use them as well in the Reconstruction). Likewise, John Kennedy simply commissioned “silver certificates” (but try to find one now) to help finance Viet Nam and the Space Program. Both debt free currencies died untimely deaths along with these presidents. The history of governments relishing the relinquishment of sovereignty over their own money has more cloak and daggers than a John Le Carre novel. How many people know about the 1951 Accord which allowed the Federal Reserve (a privately held banking cartel) and the US Treasury Department to effectively swap certain roles? Nonetheless, the pursuit of debt free (as well as diverse) money remains a linchpin among “degrowth” strategists (see Douthwaite, 2012; Jackson, 2016; Hornborg, 2017).

Public banking , might have a better shelf life, especially if used in conjunction with saving small communities’ cherished post offices in the US. Global experiments have prompted mixed results, requiring a more dynamic theory (according to Marois, 2002). A more interesting inquiry might be directed at why there is only one public bank in the all of US (North Dakota). Or why the US Congress cannot get even a partial audit of the US Federal Reserve.

Herman Daly maintained “that it is easier to nationalize the money than to nationalize the banks”. Obviously, there is nothing easy about taking on the most powerful entities on the face planet. The preposterous power plays of money and banking in the last century alone, from Jekyll Island and the “Nixon Shock” (e.g., fiat money) to the Financial Services Modernization Act and Quantitative Easing (QE1, 2, 3…infinity), boggle the mind. Maybe, Henry Ford was correct, that if the American public actually understood their systems of money and banking, then there would be a revolt by morning. For example, the average person has no concept that vast majority of all money comes into being as interest bearing debt to private banks. Actual insurrections, however, are highly problematic and a financial insurrection will take a much wider and more enduring “Occupy Wall Street” type movement, with actual policy proposals. Ecologists might want to get their financial act together before the take the field with the Neo-Austrians, gold bugs, and crypto-knights.

In their proposals for a multi-progged assault on the debt finance nexus, Alves, Santos, and Penha-Lopes (2022) admit that ecologists may have missed an ideal opportunity following the recent meltdown. The first lesson of the policy wonk, is “not to let a crisis go to waste”. But, the overnight reinflation and redistribution of the real estate bubble and chronic quest for new emergency measures suggest that the financial crisis that first came to public attention in late 2007 is far from over, and ecologists may yet get another bite at the apple.

The Rotting Apple Revealed

Social discord over the character of financial systems goes back millennia, and probably explains much of the mainstream’s maintenance of origination myths (i.e., barter, loanable funds, etc.) despite mounting anthropological evidence to the contrary (Graeber, 2001; 2011). The last few decades of hyper-financialization suggest that the predatory ecology of the money and banking metastasized to stage four institutional cancer, requiring ever-increasingly bizarre measures to merely keep the corpse on display. The meltdown in the FIRE (finance, insurance, and real estate) industries, not to mention the many military misadventures, pulled back curtain on the wayward wizards of wealth. And, it is high time to pour over the “technical read-out” for great financial “Death Star” (or Debt Star).

Many were expecting the Democrats to lower the boom on the bankers as FDR had during the Great Depression. But there was no restoration of Glass-Steagall (the fire wall between commercial and investment banking) no Pecora Commission (to reveal the web of corporate “money trusts”, etc.), and no one went to jail. Instead of helping the defrauded home owners, politicians from both parties bowed and scraped to the bankers. It is as if someone set off the Neutron Bomb, destroying most of the people while leaving the banks intact. Banker bailouts and Federal Reserve subsidies totaled in the trillions of dollars. Even the promised pittance for “mortgage relief” was a fiasco, and the papered-over “robo foreclosure scandals” further reconfirmed that financial services ruled the US and by extension, the world.

The on-going financial crisis engendered a level of dispossession not seen since genocidal colonization of Native Americans. Not only did 10 million Americans lose their homes, the government expedited their swift transfer to pirate equity funds who turned a huge share of America’s housing into rentals and securitized the ever-increasing revenue streams for investors (note, Glantz, 2019). Likewise, the instant uber-lords (Bezos, Zuck, Gates, etc.) who earned their wealth the old fashion way by expropriating public infrastructure and investments (i.e., the internet) and violating anti-trust laws, are now gobbling-up 1000s of homes and 1,000,000 of acres of farms. Meanwhile, the corporate sector, hyper-leveraged with weak covenants and questionable collateral, has an armada of “zombie firms” sailing along on a sea of “junk bonds”.

Essentially, American’s have witnessed its own Shock Doctrinaires (Klein, 2007) coming home to roost, and following the “Economic Hitman” (Perkins, 2007) playbook, chapter and verse (financialize, indenture, destabilize, privatize, impoverish, extract, and authoritarianise). It should be no surprise that the lion’s share of pandemic relief for middle America actually went to Wall Street and multi-national corporations (many on the brink of receivership well before Covid). Congress and regulators also greenlighted (as if they needed their permission) more “emergency” shenanigans for the Federal Reserve (see, Brenner, 2020). In essence, the Fed now guarantees that no matter how reckless a certain class of speculators might be, they would never lose a dime. The Fed effectively negates key market mechanisms (from replacing the Repo and Corporate Bond Markets to extending bail-outs to non-financial entities as well as Shadow Bankers), nullifying the risk/reward mythology, and raising moral hazard into the stratosphere. The Fed’s fake money balance sheet began pushing 10 trillion. Meanwhile the public largesse flowing to the Military Industrial, Petroleum, Surveillance Complex remains at full blast. Without ever-increasingly frenetic levels of financial witchcraft and unimaginable levels of new debt the great Ponzi scheme will implode once again.

At present, the planet is drowning in debt. The world’s debts for all corporations, governments, and households are more than 305 trillion in US dollars, or exceeding output by 300%. Plus, that number does not include the nominal value (500 trillion of more) of derivatives betting that the debts will default. Worse yet, the raising of interest rates in the hope of slowing stagflation only makes debt service more tenuous. As a biologist and a banker (May & Haldane 2011), pointed out this deformed debt engine produces vast networks of cumulative counterparty risk, unleashing nonlinear dynamics and triggering cascading criticalities.

Credit, of course, makes productive investment (new products, factories, and employment, infrastructure, etc.) possible. Unfortunately, in the last few decades, corporatization and financialization were exemplified by previously illegal stock buybacks and the Fed serving as a perennial stock put. Finance in general became like the dog eating its own vomit, with speculation in speculation itself, all playing off hyperbolic asset inflation and agglomeration, rather than innovation (Daneke and Sager, 2015). The final insult to this injury is a sort of societal level “protection racket”, with elites promising the public a detour from another economic as well as ecological collapse, if they merely support their neofeudal ambitions.

Final Thoughts

Returning for a moment to the original analogy of the *Man in the Iron Mask* the tale concludes with the imprisoned twin (and rightful king) turning the tables on his evil bother. But first he must quickly learn to behave as a king to actually displace one. To remove their mask, Socio-ecological Economists need to polish their policy acumen, and in fairly short order. External indifference and internal scabbles have undermined a clear, coherent, and manageable policy agenda. Perhaps being imprisoned for so long made many willing to settle for scraps from the king table. Still other elements acted as if a platform for fair and full-throated debate, let alone that the topic of political economy, still existed in policy circles. Beyond name calling and character assassinations, the mainstream monarch rarely engages. Moreover, through fake science, propaganda, and political skullduggery, the mainstream has conditioned the public to believe that "there is no alternative". Perhaps the old adage of "one can't kill a theory with facts, it takes a theory to kill theory" may no longer apply. The rapidly ascending era of Neofeudal Economics involves an entrenched and corrupt policy cartel, and it might well take a cartel to kill a cartel.

Socio-ecological scholars may not have the time nor plutocratic support to become a policy contenders, they have to jump in the ring, nonetheless. The mainstream's meticulous undermining of scientific as well social institutions exhibited a well-orchestrated and patient long game. It is probably a good thing that this strategy is both logistically impossible as well as repugnant, at this point. Socio-ecological economists, beyond having a huge social welfare advantage, have much better tools and concepts as well as battle tested theories (e.g., evolution, entropy, living systems, etc.) to draw upon. They could be ever more well-armed by embracing a full-blown "institutional ecology" (see Daneke, 1999; also note Vatn, 2020), one which aids in the emergence of more adaptive political economy.

It is worth reiterating, however, that better social and ethical science was rarely what the Mainstream was about, and better policy science is certainly another matter. Recall that pre-complexity polymath, Herbert Simon (1975) suggested that much of policy is actually a matter of "design science", and that Veblen favored engineering over business as a model of economics. It is clear that ecological scholars now have epistemic advantage. They can test policy proposals with simulated interactions between heterogeneous agent, evolving institutions, and changing natural systems on a computers (decades of evolution in an afternoon). Yet, they still need to realize that systemic choices are rarely fully manifest in stultified processes of public choices. Convincing the citizenry, furthermore, is made much more difficult amid the current cacophony of internet armchair experts and industry paid professional deniers. Socio-ecological economists would certainly benefit from a couple of crash courses in state-of-art policy process research, as well as media studies. But they will mostly have to master the smoke and mirrors of policymaking on the fly, as it were.

Given the huge power asymmetries, they must choose their battles very carefully and be acutely aware of attempts to steal their thunder, via various Trojan Horses (e.g., unenforceable and cosmetic corporate environmental & social governance guidelines, (Mi)stakeholder Capitalism, and "green" this or that), as well as continuing attempts to curtail purposive public action altogether. Finally, they must recognize one old adage still pertains---"if one wants to attack the king, they had better kill him". If not, Neofeudal Economics will merely absorb the blows, and come roaring back.

Merely attacking around the edges will not do the trick. Socio-ecological economists must stab the mainstream squarely in its barely beating heart. Amid all the atherosclerosis is where economists hide their most desperate and dangerous derangements and disasters, disguised as financial innovations. The mere fact that mainstream economists have been so disingenuous about the monetary systems, not to mention their distributional dysfunctions (laughable Laffer curves, "trickle down", and the virtual demise of progressive taxation) the next time someone calls them out, others might listen. Economics, as the art of dispossession, may at last be vulnerable to substantive change. Without significant alterations to global financial systems, an ecologically sound economic transformation has little to no chance. It is well past time to go eco or go home.

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