

# Cyberculture's Abstract Utopia: Silicon Valley and Cleaner, Greener, Leaner Rules for a "New Economy"\*

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## Introduction

This preliminary analysis connects the dilemmas of eco-pessimism and eco-optimism and links them to a number of core and peripheral thinkers in the US during the twentieth and twenty-first centuries who have sought an escape, or "an out," from the deepening deterioration of both Nature and Society making many feel pessimistic about the environment. As New York City choked through eerie days cloaked by nearly impenetrable clouds of wood smoke in June 2023, the sky turned a Martian orange in the sunlight from dawn to dusk. At the same time, coastal homeowners along Atlantic, Gulf, and Pacific beaches received notices that their property insurance costs would be greatly increased, or their policies canceled permanently, due to the increasing frequency and destruction of severe coastal erosion and weather events. Meanwhile, the American Southwest was being smothered in prolonged intense heat waves punctuated by massive hailstorms, intense rainfall, and tornados. Due to so many coincident catastrophes like these, the experience of eco-pessimism today is growing in its breadth and depth as climate change simply becomes more problematic, personal, and pervasive.

To an extent, environmental destruction has cast troubling shadows over the gains of industrial society for 250 years. Yet, the ill-effects of coal, gas, oil, plastics, mechanization, and urbanization piling up in daunting new trade-offs between power and pollution are making many question the material powers they gain against the miserable pollution such degrading empowerment entails. Others, however, are more than willing to accept the bargain, believing they must embrace an eco-optimism ready to evade the entrapments of modernity in the myth, or reality, of technological innovation's "the endless frontier." US Representative Ro Khanna from District 17 of California, which is the core of the still "promised lands" of Silicon Valley, California, the New West or America itself, is exemplary in his enthusiasm for these prospects. [<https://www.congress.gov/bill/117th-congress/house-bill/2731>]

In so doing, he gives voice to the ecomodernist hopes winding down many different paths through disturbing studies of the systemic entropy rising from industrial society, while searching for cleaner, greener, leaner rules for a "new economy" with an anti-entropic, if not utopian, potential to attain entropy's uncanny antithesis in "extropian" forms of existence. While he is not a professed

extropian, his ecological and economic good cheer appear rooted in notions close to “EXTROPY — the extent of a system’s intelligence, information, order, vitality, and capacity for improvement” (More, 1998).

As one considers today’s starkly eco-pessimist social movements, from Extinction Rebellion to Fridays For Future, they tend to have younger, more radical members who will live through much of the twenty-first century suffering under the failure to limit global warming by 2030 and preventing further releases of dangerous greenhouse gases. By and large, they are suspicious of technofixes and tend to attack almost all high technology for today’s proliferating forms of pollution. On the other hand, eco-optimist groups, like the Earth System Governance Project or Future Earth, believe global climate change will be slowed and then stabilized on time, thanks to their global sustainability research. Any technofix that works is well worth the effort to deploy.

It is intriguing, in turn, to see how seriously today’s eco-pessimist resistance groups are taken by their ecomodernist opponents, who churn over eco-pessimist rhetoric to decisively affirm their own eco-optimism. For such thinkers, like Michael Shellenberger and his former associates in the San Francisco-based Breakthrough Institute, they call for “the death of environmentalism and the politics of possibility” (Nordhaus and Shellenberger, 2007) in their quest to accelerate technological progress to shape a new economy and ecology around their cheerful strategies for solving ecological crises by mobilizing better environmental engineering.

This defensive stance against eco-pessimism now animates various concrete dystopian “outs,” emerging from Silicon Valley’s abstract schemes for realizing new modes of digital being rooted in cleaner, greener, and leaner modes of everyday life both online, like the augmented reality of “the Metaverse,” and off-line, like elite enclaves for “the one percent” off-north in Idaho, off-shore in New Zealand or off-world on Mars for this digital vanguard. Such self-assured presumption to take responsible guardianship over Nature and Society into their own hands is not new to the San Francisco Bay area. Instead, such ecomodernist moments of “California dreamin’,” rooted in Silicon Valley or metro Los Angeles, are only the most recent iterations of several prior waves of solutionist visions for the US from the West Coast, which should be recalled from this region’s past.

Over 150 years ago, another small cadre of California-centered naturalists, who had trusted President Lincoln’s 1864 grant of protection to Yosemite Valley would ensure its security for “public use, recreation and enjoyment, inalienable for all time,” became distraught in the 1880s over the rampant over-use of adjoining sections of unprotected lands around Yosemite for cattle grazing, timber cutting, mineral prospecting, and small-scale farming. These key thinkers, like nature writer John Muir and magazine publisher Robert Underwood Johnson, fretted over where and how the protective boundaries between “Nature” and “Society” were drawn across the region’s natural wonders as developers encroached on the Yosemite Valley and lumberjacks eyed the Mariposa stand of giant sequoia trees. During the late nineteenth and early twentieth centuries, these progressive naturalists campaigned for years as an elite vanguard of nationalistic activists and intellectuals eager to mobilize government authority and expertise to protect and preserve these sites and their extraordinary natural features.

To a degree, they succeeded, but their efforts to preserve every wonder for its own sake quickly cratered in bureaucratic tussles between Sacramento, San Francisco, and Washington, where local politicians, regional investors, and urban interests made it very clear neither the state nor the nation could maintain all-natural wonders and power up unrestrained urban growth at the same time. This contradiction required hard choices. In California, keeping Yosemite nearly pristine led to the sacrifice of the Hetch Hetchy Valley to supply the booming Bay Area with a reliable water source. Just as unique as Yosemite, on the one hand, the Hetch Hetchy’s geology, on the other hand, was ideally

suiting to construct a large and reliable reservoir. Its sacrifice marked the limits of cherishing a natural treasure over the growth of new municipal infrastructure to build The City by the Bay.

At this juncture, then, these original “guardians of Nature” (King, 2023) cut their biggest and best political trade-offs between eco-optimism and eco-pessimism by selling the loss of irreplaceable natural wonders at one site as an energizing lobbying tactic to gain the preservation of many different additional wonders at other sites. Such decisions also promoted cleaner, greener, and leaner environmental protections in many places with less remarkable natural qualities by building bureaucratic, corporate, popular, and technical support for their environmental protection actions. It was, and still is, accepted as the defense of both “the economy and the environment.” This logic twists the folds of policy trade-offs and suggests how the negativities at one eco-pessimist conjuncture often sparks counter-reactions with broad bands of positivity for eco-optimism in closely related political dealings.

Two puzzles appear here. First, after becoming so well-supplied with waters from the Tuolumne River dammed up in the Hetch Hetchy Valley, San Francisco and the larger Bay region strangely morphed into the seed-bed of abstract utopias in which California’s electronic cyberculture has come together in high-tech visions for over a century. From 1909, when Charles Herrold set up the first radio communication station in San Jose for wireless communication, to the unveiling of ChatGPT by OpenAI in San Francisco in late 2022, when Adobe, Alphabet, AMD, Apple, Microsoft, Oracle, and Nvidia all pounced on such generative AI chatbots to reimagine digital computing, the protection of small bits of “Nature” has fueled the proliferation of huge concentrations of “Society.” In particular, much of the emergent direction and substance of “becoming electronic,” and then “being digital,” arose from the currents of inventive curiosity, commercial greed, war-time necessity, and pioneering zeal anchored around the San Francisco Bay since the 1900s. Second, this utopianizing assemblage of cognitive capitalism now includes more dystopian developments in “neobiological” (Kelly, 1994) visions beyond ordinary eco-pessimism, which underlay the eco-optimist slumber of new ecomodernist dreamers fixated on developing the newest artificial intelligence, metaversalism, social media and posthumanism on the “endless frontiers” still to be discovered in Silicon Valley (or at its outposts in Austin, Boston, Phoenix, Seattle and elsewhere).

## The Ends of Utopia

To pull together the pieces from some of these puzzles, Marcuse’s sense of “utopia” provides a useful point of departure. As a project of social transformation that is considered to lie in the realms of no-place, impossibility, or fiction, the utopian must be rethought. He asserts, “utopia is a historical concept. It refers to projects for social change that are considered impossible. Impossible for what reasons? In the usual discussion of utopia, the impossibility of realizing the project of a new society exists when the subjective and objective factors of a given social situation stand in the way of the transformation -- the so-called immaturity of the social situation” (Marcuse, 1967). For abstract utopias, immature social conditions may persist. Yet, for concrete dystopias of Silicon Valley, the projects for a new society continuously have been and are still being generated due to fewer subjective and objective factors blocking the transitions to transformation. These more mature social conditions in and around Silicon Valley crystallized into a collective imagination of how almost nothing is allowed by its advocates to be considered impossible, including the endless reproduction of more intrusive high-tech artifacts, codes, and platforms through everyday life. To deeply embed immature technical systems in culture and society to wildly steer everyday life, to reduce the barriers against deploying cybernetic devices amid immature psychosocial conditions or to make degrading disruptive

digital practices possible by brushing off resistance against them is the tech mogul's ideal job. Most significantly, this region's Kultur is centered upon an endless quest to eliminate, ignore or overcome any subjective and objective factors limiting access to new "products and services" by their "users" to valorize the investments by their "developers" behind such tech-driven social change. Even the worst vendor practices then are often rarely regarded, at least initially, as impossible, implausible or improbable.

## Destiny Made Manifest

In the pursuit of what has been revered as this nation's "Manifest Destiny" for centuries, generations of Americans have regarded the North American continent as a tabula rasa for realizing their dreams and schemes. Not entirely unlike Ernst Bloch in *The Principle of Hope*, they began by asking – especially once they first found themselves living around San Francisco Bay -- the central questions of human existence: "Who are we? Where do we come from? Where are we going? What are we waiting for? What awaits us?" (Bloch, 1938-47). Bloch's intent in these challenging queries was to affirm the centrality of "learning hope," which he saw as the essential emotion of change, development, and struggle to make the transition to socialism. Yet, comparable "learned hopes" were sustaining the dreams of profit by Silicon Valley Bank and the array of high-tech managers and their commercial firms that mismanaged their assets, while they "hoped to learn" how to become influential, powerful, and wealthy. Such hopeful hubris also anchors Silicon Valley capitalism.

Hope, in fact, "requires people who throw themselves actively into what is becoming, to which they themselves belong," as they push across the broad plains of What-Has-Been by recognizing "the dawning of the In-Front-of-Us" that demands "its specific concept, the Novum, the concept of the Front"(Bloch, 1938-47). As Bloch's phenomenological probes of time and possibility suggest, one must embrace the challenges and contests of change in concrete contexts. In this ontography of the utopian, what lies amid "the What-Has-Become" can appear almost anywhere. Incredible possibility usually lies before imaginaries of "The Future" rising ahead of waves made at "The Front" in all of the promising contingencies of inventive agency. The cli-fi, enviro-fi, sci-fi clatter of eco-pessimism rests in dour readings of the "What-Has-Become" in CO2 ppm in the atmosphere, the rising temperature of the ocean, the global decline of biodiversity. Affirming its presence, however, negates the normality it belies in Silicon Valley's abstract utopias for beta testing cyberculture's cleaner, greener, and leaner rules for a new economy and the ecologies required to extinguish eco-pessimism.

As people struggle at the "conscious production of history," they ultimately discover "the concept of the utopian (in the positive sense of the word) principle, that of hope and its concepts worthy of human beings," such as "expectation, hope, intention towards possibility that has still not become" realized through its "utopia of One Thing Necessary," or "the practice of concrete utopia" (Bloch, 1938-47) through a Marxian metamorphosis, as the realization of socialism. In these encounters, smart people sense the polymorphous possibilities of "The-Not-Yet." In Silicon Valley, a few anticipated that it has been by the lights of an emergent "Ontology of Not-Yet-Being" that they continually come to assemble around the Bay area. Arguably, it is a misbegotten, elitist, and disruptive "concrete utopia." Still, it remains a strange attractor drawing thousands to its domains to fulfill their strongest hopes, even though Bloch would agree they are still short of the transition to the socialism envisioned by Marx. Nonetheless, the hopes are powerful, and "the Future" looms along "the Front" where some imagine there must be a Tesla in every garage, a Google coder on every Blue Origin rocket flight, Siri speaking from any device, an Alexa waiting in every kitchen or an iPhone 14 in everyone's coat pocket (Brooks, 2001; and, Deresiewicz, 2014).

When Bloch deploys his readings of “the concrete” to ground “the utopian,” he is aware of how they ring in clear Hegelian tones, as instantiations of *con crescere*, or the drawing together of a particular actuality, latency, possibility at the nexus of natural reality and human praxis. Authentic agency may well bring people to their fullest potential. Yet, more often, it never will be wholly attained because the historical, material, or social conditions essential for its complete realization are not yet themselves evident. Here, Marcuse’s sense of the utopian brings it from the abstract realm of “the alternatives” to concreteness that colonizes everyday life all the time for almost everyone: “we live and die rationally and productively. We know that destruction is the price of progress as death is the price of life, that renunciation and toil are the prerequisites for gratification and joy, that business must go on, and that the alternatives are Utopian. This ideology belongs to the established societal apparatus; it is a requisite for its continuous functioning and part of its rationality” (Marcuse, 1964: 86). Bloch would not wholly disagree. The What-Has-Become of capitalist markets continues to thwart The-Not-Yet-Being of an authentic socialist mode of everyday life.

One only needs to look into the materialist manifestations of banal nationalism, racial expansionism, and settler colonialism (Noble, 2018) that has typified a darker side of California since its original statehood as the short-lived “Bear Flag Republic.” That said, Bloch would ask all to not forsake the imperatives animating hope with its always emergent “Ontology of Not-Yet-Being.” Here are the layers of pulling real possibility from the ether of impossibility. Eco-pessimism and eco-optimism mingle in the different imaginaries of utopia tied to high technology, California’s wildernesses, 1960s counterculture, and over-heated 2000s cybercultures. On one level, their abstract utopian visions do energize social changes, economic innovations, or political movements that have pressed to realize The-Not-Yet-Being as a choice to construct and occupy concrete utopias. And, on another adjacent plane, these visions drew from venture capital, inventive risk, government funding, higher education, and human imagination from around the world into the central vortices of contemporary capitalism as they developed in and around Silicon Valley and its regional supply chains over the last century.

## **The Hopes of California Dreaming?**

Throughout the nineteenth and twentieth centuries in the USA, making the journey “To California or Bust” has served as one of the more enduring concrete utopias of generations of Americans. As the Far West of a political culture that imagined “Going West” as one of its greatest equal opportunities for adventure, enrichment, and self-cultivation, hundreds of thousands first trekked across the Trans-Mississippian territories of the Republic on foot, in wagon trains, on the transcontinental railroad or later in automobiles motoring across the country down “The Mother Road,” or Route 66, to reach the promised land of California. In particular, the places around San Francisco from Marin County to Berkeley to San Jose to Stanford have been the destination for millions to attain their self-realization of what Not-Yet-Being for them, like visions of living on a houseboat in Sausalito, taking a degree at the University of California, growing produce in Santa Clara Valley or starting up an electronics company in a garage in Palo Alto.

While many dreams are still dreamt in California, it is the crackling imaginary of some garage-born, high technology tinkering with electronics that dominated the hues in the Bay Area’s rainbow of enterprises leading to both rapid enrichment and permanent precarity. Indeed, this entire area has been reconfigured repeatedly around the endless frontiers of technology to be discovered in “Silicon Valley” thanks to immense federal spending and the energy and entrepreneurialism of mythic bands of engineers. Training usually at Stanford or Berkeley, successive waves of innovation have carved

Silicon Valley into California's, America's, and then the planet's history.

Whether it was Bill Hewlett and David Packard (Hewlett-Packard) in the 1930s, Russell H. Varian, Sigurd F. Varian, William Webster Hansen, and Edward Ginzton (Varian Associates) in the 1940s, Sherman Fairchild and Arthur Rock (Fairchild Semiconductor) in the 1950s, Gordon Moore and Robert Noyce (Intel) in the 1960s, Steve Jobs and Steve Wozniak in the 1970s (Apple), John Warnock and Charles Geschke (Adobe Systems) in the 1980s or Larry Page and Sergey Brin in the 1990s (Google), they created the boxes and wires, aesthetics and codes, microchips and memory circuits, search functions and cyber-ethics behind today's digital life. As the core of today's most dominant concrete utopian turn, their aesthetic yet abstract utopias for the nation's informational mode of production scattered across "the Sunbelt" since the 1960s and 1970s did pull off Silicon Valley's aesthetic appropriation of the Real, once embedded in the coal-burning, metal-bending, and soul-crushing industrial cities around the Great Lakes of "the Frostbelt" from Chicago, Milwaukee and Detroit to Akron, Cleveland and Buffalo.

Of course, these putative high-jackings all too soon revealed the *recuperations* of the much rawer realities behind the Reagan-era hyperreality intrinsic to the CIA intrigues, venture capitalism, DARPA contracts, post-Fordist neoliberalism, and paper entrepreneurialism rising from the 1980s and 1990s. The adventures of "the PayPal Mafia" after 2001's dot-com bust, in turn, have further solidified these concrete utopian moves in the twenty-first century, as exemplified by new enterprises launched by Peter Thiel (PayPal), Jeremy Stoppelman (Yelp), Elon Musk (Space X, Tesla), Reid Hoffman (LinkedIn) or Steven Chen (YouTube) that energize today's American cognitive capitalism.

### **Where Would We Be Without Nature as "an Out"?**

California is also imagined as America's last Great Eden after 1849, pulling Americans West to meet their destinies. Since the Sierra Club's founding in San Francisco in 1892 by the famed writer, naturalist, and conservationist John Muir, along with a group of Bay Area academics, attorneys, and artists, San Francisco has also been a green citadel. Activists harbored hopes to protect this Eden by realizing more progressive conservationist thought in pragmatic policies for California lest it slip away into the "What-Had-Become" more dehumanizing and disastrous in unchecked resource exploitation elsewhere across the country. Hoping to slow, if not halt such ecological degradation, Muir and the Sierra Club members successfully lobbied in Sacramento and Washington to make Yosemite Valley America's second national park in 1890, and the organization continued this success by backing the creation of the Sequoia and Kings Canyon National Parks (1890-1940), Mount Rainer (1899), Glacier (1910), Grand Canyon (1919), and Zion (1919) National Parks across the American West. Saved from extractive development plans of miners, oil drillers, lumberjacks, dam builders, or farmers, the national monument and park systems favored by the Sierra Club did not reverse development. Rather, they favored attractive development schemes to draw outdoorsmen, car campers, hikers, and nature lovers out into Nature.

Containing this unchecked resourcification and unrelenting exploitation of California's and the West's mineral, soil, timber, and water endowments by accepting other already lost regions as national sacrifice zones, the Sierra Club stepped up its resistance tactics. Under David Brower's leadership in the 1950s and 1960s, the Sierra Club morphed into a specialized culture industry, representing "the Great Outdoors" with arresting new images of pristine perfection in coffee table books, nature calendars, and magazine covers, which enabled American taxpayers and voters to see "an out" for themselves from the pollution, despoilation and crowding of post-war urban sprawl. At the

same time, the idea of “wilderness areas” free from scarring by automobile roads afforded a means of interpreting vast areas in wild country as a pause, a utopian alternative, if not “an out,” from the prospects of sacrifice to the accelerating expansion of the nation’s Gross National Product.

Many in the counterculture movements of the 1960s embraced new hopes for living simply in such natural surroundings. They were drawn to California as what they believed could be “an out” from dystopian times of nuclear stalemate, racial conflict, urban unrest, economic stress, and foreign war. San Francisco itself seemed to many like a concrete utopia. During pop culture’s “Age of Aquarius,” people there wore flowers in their hair, prepared to move to the country, erect domes, form a commune, become artists, build windmills, and ignore the world. While it now seems delusional, incredible, or naïve, it was a brush with the hope of “The Future” beyond what wishful dreams might provide. And, some of the seekers ultimately ended up in Silicon Valley.

Local dreamers in the Bay Area, like Stewart Brand, pulled together the *Whole Earth Catalog* in 1968. Its craft-like, large newsprint format displayed potent images of “The-Not-Yet-Being” promising “The-Near-To-Become” as it afforded *Access to Tools* for scores of intentional communities out in the woods and abandoned urban zones. It was eagerly embraced as a concrete materialization of “the principle of hope,” because Brand claimed, “a realm of intimate, personal power is developing -- power of the individual to conduct his own education, find his own inspiration, shape his own environment, and share his adventure with whoever is interested” (Brand, 1968). To underscore these high hopes, Brand famously asserted, “We are as gods and might as well get used to it” (Brand, 1968).

By 1974, however, This-Not-Yet-Being was becoming entangled within what already was What-Has-Become. Brand’s career, in turn, led him to found *CoEvolution Quarterly* magazine, with its focus on inventive Nature/Culture fusion. It ran for 11 years until he merged it with *The Whole Earth Software Review*, which evolved into a companion periodical to *The Whole Earth Software Catalog*. AS the near-lost 1960s San Francisco counterculture faded, its precepts morphed into green foundations for the emerging complexes of digital 1980s cyberculture (Turner, 2006). Playing to this new hopeful host of dreamers (Stock, 1993) in his career of serial utopianizing, Brand repackaged these digitally recoded publications as the *Whole Earth Review* that circulated from 1985 to 2003.

An advocate of what he deemed “Whole Earth Discipline,” Stewart Brand reinvented himself as the exemplar of another “new out” through “ecopragmatic” approaches for administering the “resourcification” of fossil capitalism that wagers on rapid economic growth, tied to fossil fuel use, against the downside of its externalities against today’s global energy regime. This market structure tried to bet on decades of gradually accelerating growth in hydrocarbon energy use against its known, but yet fully grasped costs (Luke, 2020). In the 1960s and 1970s, Brand’s *Whole Earth Catalogue* spread his eclectic readings of pragmatic technology in use for human survival throughout the 1960s counterculture. That aura of great credibility was drawn into the abstract utopias of the cyberculture, especially as many others opened their eyes to fresh possibilities in Silicon Valley’s emerging cognitive capitalist and informational economy that Brand had not fully appreciated in 1968.

### **Inconvenient Truths as Detournements of the Real?**

Despite the recurrent energy crises in the 1970s, and years of stagflation during the 1980s, worldwide levels of growing industrial pollution and production after 1989 prompted many experts to push for decarbonizing human energy use. This change is now more commonly accepted as imperative to avoid, or at least adapt to, major ecological changes around the planet, which Bill

McKibben (1989) tagged, as the Cold War closed, “the end of Nature.” For the most part, green thinkers from the 1970s through the 1990s often proved to be apocalyptic brand builders for eco-pessimism, fully intent on arguing that the ultimate catastrophe was nearby. Naomi Klein’s polemics are a good case in point. As she opines about how globalization twists into corporate logo consciousness, as states advance their policy agendas for disaster capitalism, and anxious teenagers wallow in the doom and gloom of climate catastrophes. Here Klein perfectly exemplifies the chiliastic clash of “capitalism versus the climate” pushed by “the old environmentalism.” Brand’s digitally-remastered ecological pragmatism, in turn, is now a default ethical-political alternative to such warmed-over eco-pessimism to reorient contemporary ecomodernist designs for “saving the planet.”

Indeed, McKibben’s and Klein’s environmentalism of catastrophes has triggered spirited rejections from the “New Environmentalism,” pioneered by the green skepticism of Bjørn Lomborg, and then picked up by contemporary Bay Area thinkers like Ted Nordhaus and Michael Shellenberger. With strong ties to Silicon Valley venture capitalists, digital futurists, and fossil fuel interests, they essentially argue that “the old environmentalism” mobilized in the 1960s must be retired due to its fixation on decrying apocalyptic cataclysms tied to rapid climate change, biodiversity losses, plastic pollution, environmental toxins, and sea rise. New Environmentalists dismiss these tactics as far too dire. Admitting that today’s negative climate trends are probably anthropogenic, “the environment” for them is still seen as resilient enough to offer other trails to “an out.” They treat climate risks, first, as nowhere near as pernicious as they have been portrayed by the old environmentalists, and, second, they propose more hopeful, positive technocratic programs for implementing high-tech ecological modernization programs to create new jobs, slow climate change, preserve (or produce more) biodiversity, neutralize toxic pollutants, adapt to sea rise, and thereby remake society.

William McDonough and Michael Braungart from beyond California also maintain parallel principles of hope essentially by touting new aesthetic and design principles, which enable ordinary people to tackle the same big wicked green problems by approaching them in small, manageable, and ordinary steps. They tout “cradle to cradle” engineering ethics for agriculture, construction, industry, and management to emulate Nature’s closed loops for circulating energy, matter, and information with little or no waste. Building “a new economy” with such environmental goals should also require jobs that are fresh opportunities for existing workers, as highlighted by President Biden’s signing of the Inflation Reduction Act (IRA) on August 16, 2022. Even though most of today’s UAW members have careers entangled with internal combustion engines and fossil fuels and are holding out against a fully electrified automotive sector that will require fewer workers to build less complex electric vehicles, ecomodernists believe they can provide the designs required to quell any resistance to their eco-optimistic solutions.

Such eco-optimism also refines “green” values further to define “leaner” lifestyles and “cleaner” energy sources to improve Bloch’s “The-What-Has-Become” of twenty-first-century culture. While his prospects for victory have not been high, Michael Shellenberger campaigned in 2018 and 2022 for governor in California to realize his dreams for the state remade into a new ecomodernizing Eden. As a “no party preference” candidate, his platform proposed scores of “inherently safe” modular nuclear reactors, funded by one of Bill Gates’ many post-Microsoft start-up companies, to realize New Environmentalist hopes. Indeed, his new Environmental Progress organization (<https://environmentalprogress.org/>) prides itself on helping to save not only endangered whales but also nuclear reactors around the world that face decommissioning. With such out-of-the-box ecomodernist programs, he sees his eco-optimistic conservationism as the Golden State’s most promising new



green business plan.

### Seeing Extropy as “an Out”?

Amid such confident technophilia in Silicon Valley, many others are finding their utopian visions for “The-What-Is-Not-Yet-But-Still-Near” principles for resisting the ordinary entropy of earthly existence in the eclectic designs for “transhuman life,” first expounded in abstract utopian prophecies of “extropy” as propounded by Max More and the “Extropy movement” based in Los Angeles. As President of the Extropy Institute (ExI), Max More asked would-be members of his movement a number of questions that resonate well with those accustomed to living off multiple monetary streams of compound interest, savvy puts in the options markets or lucky calls by their private equity advisors. Nothing quite equals anti-entropic effects, as the eternal life of dead labor swirling through the simple circuitries of M-C-M' at accelerating profit rates. For utopian capitalists feeling better, bigger, and bolder with each new deal paying out big gains, they already feel the blessings of human beings becoming extropian. Such underpinnings have made it easy for More to ask all those harboring the transhuman aspirations some savor the exciting prospects for anyone seeking to surpass humanity's finest exemplars:

- Do you want to make the future immeasurably better than the past?
- Do you want to live beyond the normal human limit?
- Are you attracted to innovative, market-oriented solutions to social problems?
- Do you want to upgrade your intellectual power?
- Do you want to dispel the clouded thinking of the eco-doomsayers and pessimists?
- Do you want to throw off ingrained barriers to effective thinking and action?
- Do you want to continuously improve yourself - physically, intellectually, morally?
- Do you think that technology can and should help us overcome biological, genetic, and neurological limits to our abilities and goals? [<http://www.mit.edu/people/jpbonsen/extropianism.html>]

For Extropians, the trap from which humanity needs “an out” is simply being human and believing that the human species/being must remain forever fixed and unalterable. Instead of treating the body and soul as already limited by their organic boundaries, extropian thought looks beyond human beings as “wetware” to reboot it continuously with neo-biological “hardware” and/or “software” (Kelly, 1994).

As More's queries to these hopeful concrete utopians promise, human individuals and

societies must migrate into transhuman states of being to attain posthuman becoming, which the embrace of the Anthropocene in many intellectual circles today seems to make even more imperative. If the Nature of the Holocene is no longer fixed, predictable, or unalterable, extropian improvements to individual humans and their species-being is crucial for thriving in the throes of De-Holocenation. If the Anthropocene is a trans-natural condition created by human disruption, extropian practices, in a sense, anticipate the Anthropocene's trans-natural instability with transhuman adaptations to these new coevolutionary conditions. Since these changes are technologically imaginable for Extropians, this accelerated evolution must be launched. The imperatives are obvious to More and the Extropy Institute:

Technological and social change continues to accelerate, thrusting us into a future of unprecedented possibility and choice. Increasingly, gerontologists agree that aging will be partly or wholly controlled in the next few decades. Drastic extension of the human lifespan will be accompanied by the ability to radically increase human intelligence using advanced nootropics (smart drugs) and neurological augmentation with implanted miniaturized computers. Advances in genetic engineering, biochemistry, and nanotechnology (molecular machines) will enable us to heighten our senses, boost our strength, bolster our immune systems, and increase our resistance to injury and death.

Computing power and communication bandwidth continue to grow explosively, enabling the development of virtual reality, making accessible oceans of information, and allowing the creation of electronic markets and distributed virtual communities. We can expect to see the evolution of truly intelligent artificial persons and to overcome biological and neurological limits through human-machine symbiosis. These and other technology-driven revolutions, such as space habitation and nanofabrication, offer the potential both for progress and peril. Extropy Institute endeavors to prepare our human culture for the dawning of the posthuman era, in which today's beliefs, technological achievements, and culture will seem as primitive as those of the Middle Ages seem today. [<http://www.mit.edu/people/jpbonsen/extropianism.html>]

While the Extropian message is pitched in universalistic language as it scans humanity's coming expectations and possibilities, these prophecies from 30 years ago are not actually cascading out into the body and mind of the digital elites at light speed. In many ways, the movement has run almost like a human colonial cargo cult rather than a transhuman cohort of cyborgs. Even then, such radical transhuman "possibility and choice" will not be available to just anyone (Moravec, 1988; and Mazlish, 1993).

In a society where even century-old drugs, like insulin or antibiotics, cost many times more than they did in the 1990s, it is clear only the top five, two or one percent of society would ever be able to afford access to these rarified extropian elite circles to enjoy such exciting opportunities. While DARPA and Big Pharma are always probing these frontiers of bionic transhumanism, there have not been many breakthroughs on the open market to afford would-be extropians new artifices for partly or wholly controlled aging, radically increased human intelligence via nootropic "smart drugs," neurological augmentation thanks to implanted miniaturized computers or advanced genetic engineering to heighten their senses, boost their strength, bolster their immune systems, and increase their resistance to injury and/or death. For the Silicon Valley digiterati, however, this is a plus. When science and technology are steered to provide these extropian supplementations, they

plainly see themselves as the chosen elect, or “The-Already-Able-We,” at whom such measures “To Enable Us” will be aimed to test the range of transhuman species-being in the concrete dystopia of turning into the Anthropocene.

In this shift, one hears Steward Brand, after his cybercultural turn, make extropian hopes appear like his next vision of human development: “junior deities, we want to be. Reality is mostly given. Virtual reality is creatable” (Brand, 1987: 116). With an ever-accelerating potential for generating trillions of dollars, or perhaps even better, crypto-coins, such god talk is almost to be expected in Silicon Valley. Its elites are prone to naturalizing their net connections as divine endowments because money, at least for them, largely must pose no barriers as well as should mark them as worthy of some extropian “out” from mere humanism to boldly go “transhuman.” In some sense, the immortal growth of compound interest with the spontaneous ordering of uncertain consumers with resolute producers in open markets enables the twists of profit to tie together those commodified exchanges, transforming “M” into “M” that subconsciously appear to be the coded kernel of Extropian imagination.

To resist or vanquish entropy, then, Extropians embrace transhuman principles meshing “personal growth” with “breaking barriers” in which life well-lived is not unkind “investment well-positioned” to attain the new margins of self-satisfaction gained from,

**BOUNDLESS EXPANSION:** Seeking more intelligence, wisdom, and effectiveness, an unlimited lifespan, and the removal of political, cultural, biological, and psychological limits to self-actualization and self-realization. Perpetually overcoming constraints on our progress and possibilities, expanding into the universe, and advancing without end.

**SELF-TRANSFORMATION:** Affirming continual psychological, intellectual, and physical self-improvement through reason and critical thinking, personal responsibility, and experimentation. All while seeking biological and neurological augmentation.

**DYNAMIC OPTIMISM:** Positive expectations fuel dynamic action and adopting a rational, action-based optimism, shunning blind faith and stagnant pessimism.

**INTELLIGENT TECHNOLOGY:** Applying science and technology creatively to transcend “natural” limits imposed by our biological heritage, culture, and environment.

**SPONTANEOUS ORDER:** Supporting decentralized, voluntaristic social coordination processes and fostering tolerance, diversity, foresight, personal responsibility, and individual liberty.

Extropianism is a transhumanist philosophy: Like humanism, it values reason and humanity and sees no grounds for belief in unknowable, supernatural forces externally controlling our destiny, but transhumanism goes further in urging us to push beyond the merely human stage of evolution. As physicist Freeman Dyson has said: “Humanity looks to me like a magnificent beginning but not the final word. (See Extropy #11, 2nd Half 1993).

Some already imagine they will, in fact, enjoy a new kind of immortality as fully digital beings on the

Net once the famous “singularity” of silicon consciousness matches, and then exceeds, that of its carbon-based hominid forebearers.

As John Barlow asserts, “when the yearning for human flesh has come to an end, what will remain? Mind may continue, uploaded into the Net, suspended in an ecology of voltage as ambitiously capable of self-sustenance as was its carbon-based forebears” (quoted in Slouka, 1996: 11-12). Clutching this faith on the US 101 commute down the Valley to a Big Tech office park might serve as a psychosocial bond and an ethico-political mark of extreme distinction. For those workers with the technical imagination and monetary net worth who want to dream they will one day equal all of their firms’ hardware, network, or software, it is possible to see how they might want to be known as members of a chosen extropian cyborg elite. It plainly would cleave a colorful path through the grit of “The-What-Has-Become” of the present to “The Future”, lying latent in the twenty-first century as “an out” few more ordinary mortals will have.

## Conclusions?

Silicon Valley and the greater San Francisco Bay area have been where knowledge has been put to work, “inventing the future” for over 160 years, but this ethos largely suffuses the entire Golden State. The fusion of humans and technology/Nature plus Culture/biology is the new social capital at the “neo-biological” core of Kevin Kelly’s *New Rules for New Economy* (1994). The digiterati’s radical strategies for commanding and controlling this “connected world” largely plays off the concrete utopia of “techno-progressivism,” which continues to grow in the wake of the post-1981 personal computing, post-1990 World Wide Web/WYSIWYG browsers, post-2007 smartphone revolutions, and post-2022 generative large language models. These material and immaterial innovations are more than suitable examples to see how Silicon Valley’s high-tech billionaires and venture capitalists regard the concrete utopian life they have sold to their “users” as transporting humanity from “governance by men to the administration of things” now morphing into an ultimate realization of human liberation.

Much older craft-based values, as touted by John Ruskin, William Morris, or Frank Lloyd Wright from the nineteenth century, have been twisted into the dreams of Silicon Valley, like many ideals of the twentieth century’s “last intellectuals” (R. Jacoby, 1987). Yet, they became something else, once intertwined in twenty-first-century cybernetic circuits. From extropianism, immortalism, or posthumanism to transgenderism, singularitarianism or technogaianism, the digiterati’s will-to-power schemes still are evolving along the edge of the corporate cloud, ubiquitous computing, applied bioengineering, quantum nanotechnology, and consumer robotics (Luke, 2020). As the antithesis of entropy, extropy continues to be sold as eternal life, but signs of gaining this perfection largely come from its believers’ buzz and swag scooped up in the halls of computer trade shows, the World Economic Forum, bioengineering conferences and software innovation retreats (S. Jacoby, 2008).

Meanwhile, as cyberculture devotees await their full-blown mind and body upgrades for extropian life, fresh previews of teleported body and mind traces are promised to soon be available in the Metaverse to all who don the latest AR goggles and telepresence rigs. Are the abstract utopian hopes of chastened C-suite Silicon Valley innovators delivering another concrete utopia now? More virtual than wholly material, *Time* magazine declares the Metaverse is closing fast; in fact, as it looks ahead “Into the Metaverse: The Next Digital Era Will Change Everything” (Ball, 2022: 46-50). Such declarations presume still evolving technical apparatuses are Bloch’s “The-Not-Yet” nearing some plausible approximations in “the Singularity’s” promise of eternal online life in cybernetic networks with its portals to countless 24x7x52 addressable utopias in Internet of (All) Things, Systems, Beings

and Applications both on and off an almost wholly “infrastructuralized” Earth. Having re-terraformed this planet to indeed be a “Google Earth,” the Silicon Valley vanguard now contemplates -- in the billionaire ranks of figures like Bezos, Branson, Gates, Musk or Zuckerberg -- the exo-colonization of the nearby solar system to make such once merely human, now nearly transhuman forms of being, an also multi-planetary space-faring forms of life (Vaidhyanathan, 2018).

While sounding like the dream world of those anxious to escape California and its many problems, such abstract aspirations are taken seriously in Silicon Valley and beyond. Indeed, the so-called “fourth” and “fifth” industrial revolutions return, in a sense, to the political ideals of the “capitalist-as-commander” selling the world’s cyber-proletariat and many microserfs new modes of liberation. Somewhere in smart cities served by ubiquitous systems, “the Novum” behind Bloch’s principle of hope will be attained. The price might well be the surrender of all freedom, information, and choice to the behavioral surpluses that keep these highly charged digital circuits of exchange rolling as “Metaman” (Stock, 1996; and, Mitchell, 1995), but now they must ask whether they are really alive or just generative AI. This concrete dystopia turns Marx from his *The Eighteenth Brumaire of Louis Bonaparte* on his head. In recharging the generative pre-trained transformer treads, “the tradition of all dead generations weighs like a nightmare on the brains of the living. And just as they seem to be occupied with revolutionizing themselves and things” (Marx, 1852). There are no guarantees that sweet dreams will occupy the brains of both the undead and unliving extropians trapped in large language model (LLM) neural networks to, as Apple would assert, “Think Different.”

While this “The-Not-Yet-Here” Future is presented as “the Front” of freedom for all, it largely now evolves as a fluid realm of soft authoritarianism, regulatory regimentation, near-total surrender, and life-long powerlessness for cutting-edge consumers, who can pay to be “the user.” The state of emergency “total lockdowns” during the COVID-19 pandemic plainly accelerated these trends by normalizing telematic anomie as one’s best hope for thriving in today’s continuously evolving administration of fear. These non-places, no-wheres, and no-entries have all been streamlined into a tolerable mode of soft suppression in everyday life made possible by “Better Living Through Zoom.”

The shift from these somewhat amorphous abstract utopias is slow. Yet, the prefiguration of these principles of hope for extropians arguably are in play, if not completely in sway, through the swarms of start-ups that San Francisco, San Jose, Sao Paulo, Seattle, Singapore, Shanghai, Stuttgart, and Sydney still sustain their development along with thousands of smaller cities and towns now colonized by the virtual utopias of remote telework by e-lancing “knowledge workers.” Meanwhile, the growing ranks of the superfluous or obsolete precariat continue to sleep restlessly in their camps, on sidewalk tent cities, or in the beach squats of depopulated metroplexes dreaming about what will be in the community food banks, “pay what you can” local eateries, and flexi-work ads tomorrow where the entropic sinks of now lost, once state-of-the-art skilled human work appear to grow larger by the day (Eubanks, 2018). Why do too many people wonder why Zuckerberg and Company pulled out their dog-eared copies of Neal Stephenson’s sci-fi novel *Snow Crash* to prototype the Metaverse 1.0 to sell the latest concrete utopia of “augmented reality” for “their users” to push social media beyond the primitive “ideal speech situations” of Facebook, Instagram, or TikTok? (see Posner, 2001).

Against these horizons, this preliminary study has explored where would humans be, without always having an “out”? The principle of hope, however, behind The-Still-Not-Yet-Here-Today, whether they rise from Americanized cybercultures, ethnocultures, countercultures, ecocultures, or technocultures, as possible “outs” increasingly feel like abstract utopias “imagineered” for our special “critical supply chain needs” by Watson-like AI packages, which as IBM boasts, advance “trust from principle to practice” (Bridle, 2018). Transparent processes provide insight into AI-led decisions,

replete with fully enabled “data privacy, compliance and security” plus the support by “an open, diverse ecosystem driving responsible use of AI” (IBM, 2022). Such rhetoric, however, rings more like a hope for fresh principles to reenergize cognitive capital accumulation instead of the fullness of hope for truly human autonomy itself in the smart cities of the endless frontier.

Without a utopian vision for putting an end to oppression, exploitation, ecological degradation, climate injustice, and the myriad intersecting socio-historical problems reinforced by global capitalism, whatever lies ahead in “The-Not-Yet” might be nearly impossible to face (O’Neil, 2017). Nonetheless, the concrete utopia provided by these, and so many other Silicon Valley-inspired visionaries continue to only hover around such questions, pretending liberation requires such abstract utopian visions. Yet, one wonders if it is indeed too late for those of us in search of some new “out” from the tedium of everyday life in the twenty-first century because these concrete utopian visions perhaps are always already in service of more repressive forces?

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