

“Steering Our Powers of Persuasion Toward Our Human Future”

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The 18th century enclosure of our planet’s common natural resources that fueled the rise of capitalism began in Britain and was described by Karl Polanyi in the Great Transformation (1946). I explored in depth all the issues of human development and our positive opportunities for more sustainable, equitable, cooperative development in Building A Win-Win-World: Life Beyond Global Economic Warfare (1996, now an e-book). Proliferating global crises have brought human societies to accept the necessities of transitioning to new forms of culture and behavior if we are to survive, envisioned as Three Zones of Transition. (See Fig. 1.) A group of international experts report in [ScienceDaily](#) that “Pervasive human-driven decline of life on Earth point to the need for transformative change”.

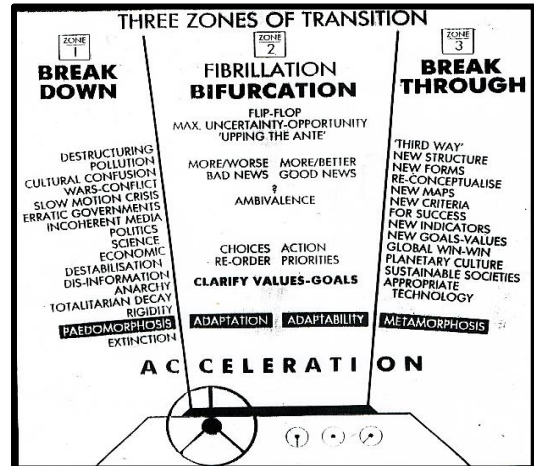


Fig. 1 Three Zones of Transition
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Human societies have always involved the power games of various groups and individuals able to capture resources formerly used freely in common by all, as further documented in many books I cited, as well as Acemoglu and Robinson in [“Why Nations Fail”](#), (2013). Historically, such power and domination have involved violence, conquering of land and subjugation of others by invading hordes, capture, enslavement, torture and murder. Such early power-wielding patriarchal domination has engendered eventual backlashes against tyrants and dominant elites have been overthrown in revolutions.

As humanity’s technological prowess evolved along with the physically destructive power of weapons, ever more sophisticated psychological means of subterfuge emerged beyond instilling fear and terror. Powers of persuasion evolved with the invention of printing and ever wider reaches of communications technologies, from books, pamphlets, newspapers to radio, television, advertising, the internet, satellites, Wi-Fi and today’s social media. Control spread via attention economies, mass media and influence industries based on psychological methods of behavior modification, as described in [“Mediocracies And Their Attention Economies”](#). I began opining in the 1990s about the need for global governance of the emerging Information Age. I became worried that the infant internet was already being overtaken by commercial values and Silicon Valley’s focus on Wall Street’s short-term interest in greed, making money out of money and maximizing shareholders returns. All this consumerism catering to advertising-stoked demand for ever more material goods and desires, was leading to a dystopian “Social Cost Market” of companies trying to clean up the mess. (See Fig. 2.) As markets continually evolve, they became dominant. In the USA markets exacerbated hyper-individualism where families and communities began to dissolve. Economic textbooks see markets as steered by individuals with money used to intermediate individual relationships. This focus on individualism created today’s craving for community and clans potentiated the effects

of social media in fostering networks of “likes” and false communities based on shared beliefs and competing conspiracy theories.

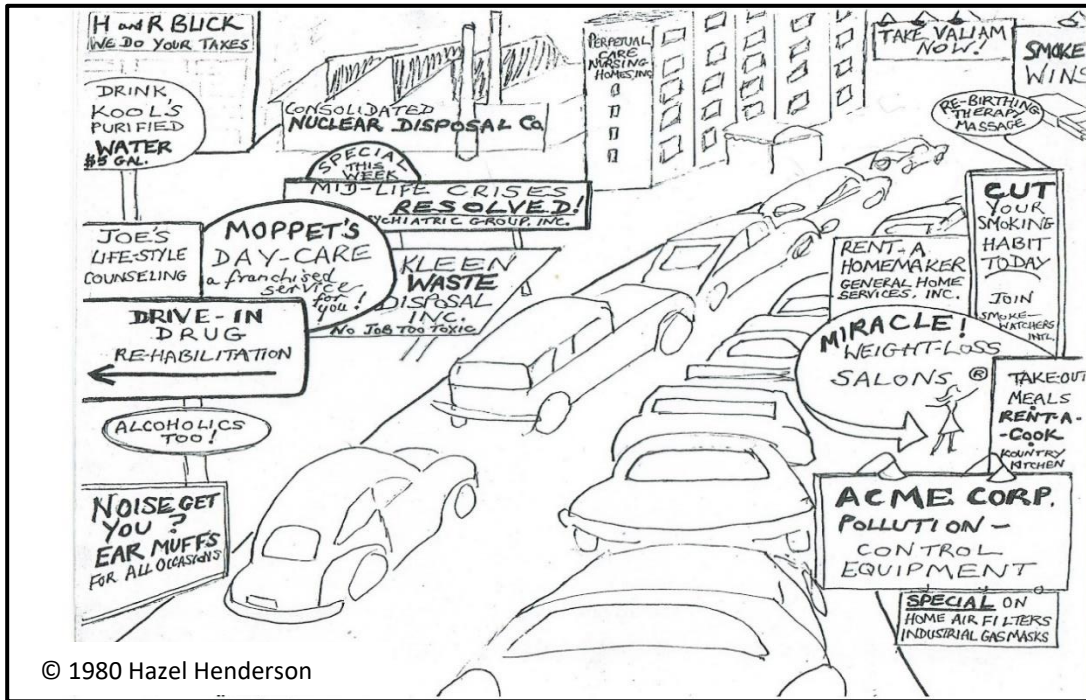


Fig. 2 Social Cost Markets

Power games shifted from realms of physical domination to propaganda, ideologies, censorship, mind-bending and control of human cognitive functions. The rise of totalitarianism was chillingly described by George Orwell in “1984”, (1949) and “Animal Farm”, (1945), and by Hannah Arendt in “The Banality of Evil”, (1963) and others. I documented how markets expanded from barter in village squares to token and money transactions and ever-larger companies, while financial capital accumulated. Surplus finance capitalism exploded national boundaries and grew by enclosing commonly-used planetary resources for mining, manufacturing and energy. Trading expanded into global stock markets and daily electronic currency trading I termed “the global casino”. Psychology and its weaponizing of persuasion tactics spread to international diplomacy, as described by Turkish scientists in “Political Psychology: Contributions to the Discipline of International Relations”, World Affairs, Vol. 23, Number 3, July-Sept, 2019, Delhi, India.

This GDP-driven economic globalization was also based largely on unacknowledged national taxpayers’ investments in undersea communications cables, satellites, transport for goods and people in shipping, airlines ---- all trading on the internet. GDP lacks an asset account valuing taxpayer investment in infrastructure --- recording these only as debt. Advertising and brands proliferated, using many similar forms of mind-bending for selling of products, as described by Vance Packard in “The Hidden Persuaders” (1957), and contemporary critics within this marketing industry, including Phillip Kotler and Christian Sarkar in “[Brand Activism](#)” (2019). Marketing courses in business schools and colleges are now forced to teach courses on “Reputation Risk” to include how bad corporate behavior can rapidly destroy brands on social

media. Social and regulatory pressures can effectively change corporate behavior, provided they experience sustained efforts by protest movements. (See Fig. 3.)

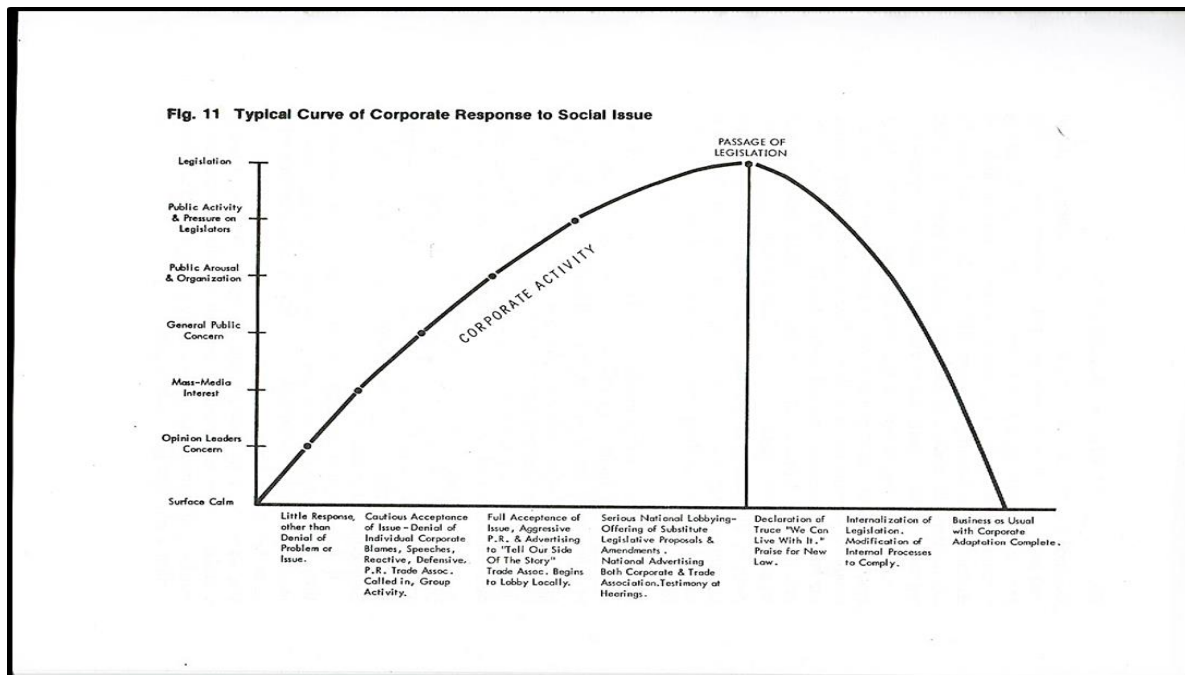


Fig. 3 Typical Curve of Corporate Response to a Social Issue

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Today's forms of persuasion go beyond propaganda and brain-washing. They are again being extended back into the physical world. No violence is needed. Persuasion is now concealed in millions of devices, sensors, wearable paraphernalia: iPhones, watches, fitness monitors, implanted chips, often installed in jewelry, clothing, as I describe in the ["Idiocy of Things"](#) (2016). Prosthetic devices and sensors are often usefully prescribed and installed. Others are surreptitiously operating as well, in our bodies, in our digital assistants, "smart" homes, appliances and vehicles in the so-called Internet of Things. All these digitally powered forms of human behavior-control are advertised and sold, even as gifts to unsuspecting children. They are offered "free" or "for your greater convenience" by the new generation of profitable, monopolistic social media companies displacing earlier industries. Often such apps and devices to "assist" us cause de-skilling, as has occurred in automated airplane cockpits. Investigations found that pilots were unable to over-ride malfunctions of sensors or in computer code ---- leading to several well-documented crashes. The promotion of faster 5G data transmission so viewers can download video faster, also opens new opportunities for hackers to invade homes, cars and control even more aspects of our lives.

Clearly, it is more important to train humans before we train machines ([Let's Train Humans Before We Train Machines](#), 2018), since there is nothing artificial about so-called "artificial intelligence" which is more accurately described as "human-trained machine-learning". These trained computer programs encode whatever the biases and misinformation of their trainers, into the algorithms now controlling decisions that affect our lives, health and finances, as mathematician Cathy O'Neal describes in ["Weapons of Math Destruction"](#) (2018). Britain's data watchdog, the Information Commissioner's Office (ICO) now has rules to require unpacking algorithms and explaining the assumptions they use to make decisions and to justify these results. Failure to be accountable results in large fines. (New Scientist, Dec. 7, 2019). We

might remember the sensible advice of a 1965 NASA report: “Man is the lowest-cost, 150 pound, non-linear, all-purpose computer system which can be mass-produced with unskilled labor.”, (Foreign Affairs, July-August, 2016).

Today’s Information Age is informally governed by computer code, 24/7 electronic monitoring, algorithms engineering our consent by attraction. These psychological methods are taught at Stanford University’s Persuasive Technology Lab, MIT, Harvard, the University of Chicago and other colleges, including nudging and psychological steering of our engagement and cognitive biases as well as in today’s so-called “behavioral economics”, as described by Shoshana Zuboff in, [“The Age of Surveillance Capitalism”](#), (2019) and Rana Foroohar in [“Don’t Be Evil, How Big Tech Betrayed Its Founding Principles-And All of Us”](#), (2019). Our personal information is treated as an economic commodity to be monetized and traded, rather than essential in mediating our social relationships and trust, as discussed in, [“Privacy, People and Markets”](#), Volume 33, Issue 4, Winter 2019, pp. 499-509.

Clearly, those practicing psychology need to demand higher ethical codes of conduct for this profession. For example, a 2019 study in [Nature](#) questions the thousands of experiments on people to ascertain their suggestibility to various words and other cues in a field so-called “social behavior priming”. Results are now suspect and rarely replicated. All this apparent waste of psychologist’s time appears to be merely for the purposes of selling and marketing. ([www.nature.com](#), “What’s next for Psychology’s embattled field of social priming”). Psychologists can learn from marketing guru, Philip Kotler in his “Advancing the Common Good”, (2019). Similarly, economists and financiers can join the many signers of our 2010 statement, [“Transforming Finance”](#).

Today’s new enclosures, of our minds and personal autonomy are the new business models, following the pattern of the industrial revolution’s colonization of every part of planet Earth’s land and oceans. Giant electronic platform-based companies are now enclosing human choices and democratic freedoms of agency and volition in ever more subtle means of persuasion, influence and control. For example, London-based Privacy International looked at 136 websites offering information on mental health conditions and found that 76% of them contained 3rd party marketing trackers. (New Scientist, Dec, 7, 2019). Many researchers, including NYU Stern School professor Jonathan Haight examine how social media---driven by advertising and selling users’ personal data---have created polarization by design as “outrage machines” (“The Coddling of the American Mind”, G. Lukinoff and J. Haidt”, 2019).

Law professors Anne Toomey McKenna, Amy C. Gaudion and Jenni L Evans at Penn State Dickinson Law, address the problems of lawless use of fitness apps and how the information they gather, using satellite-based GPS threatened national security by creating a global “heatmap” on the social media site Strava. Their landmark paper, “The Role of Satellites and Smart Devices: Data Surprises and Security, Privacy and Regulatory Challenges” (2019) covers many recommendations on the urgent need to legislate such uses of commercial devices and regulate cyberspace with international security treaties. Growing fears of warfare in space are leading to a new kind of arms race between the USA and China, now competing to launch the soonest and largest number of satellites, as reported in The Economist. Dec. 7, 2019, pp. 75.

In the 1960’s, the advertising industry demonstrated to reporters in New York City the power of subliminal advertising and persuasion. In a cinema setting, the gathered journalists were shown a film, the contents of which appeared as an entertaining story. Hidden interspersed sequences beneath cognitive detection were ads for a familiar soft drink. At the end of the film, as the journalist filed out, they encountered racks of bottles of this soft drink offered freely. Even

journalists who disliked this soft drink reported that they were shocked to find themselves drinking anyway! This demonstration of the power of subliminal advertising led to it being banned. Today, children are put through magnetic resonance (MRI) machines by marketers to see which candy products light up which parts of their brains. The EthicMark® Awards for advertising and communications uplifting the human spirit and society raises an ethical bar, rejecting such uses and other kinds of psychological manipulation. The decades of annual winners, mostly from non-OECD countries, demonstrate how advertising can be used to inform people of wiser choices and the global environmental concerns over careless consumerism. www.ethicmark.org.

The new enclosures are not only of our minds, imagination, and will power but of cyberspace ---- alongside the conquest of Earth's outer space by satellites and the resulting "prison" of increasing space-junk, (Henderson, 1991,1995). (See Fig. 4.) By what kind of fanciful illusion of human mental abstraction is it deemed possible to capture and enclose the limitlessness of cyberspace? The lawless developments of cybercrime and info wars described in "[The Darkening Web](#)", (Klimburg, 2018), attest to the need for ethical norms and treaties. Proliferating malware, such as Stuxnet and the new digital weapons described in "Sandworm" (Greenberg, 2019) can now destroy physical equipment and infrastructure, as in Russia's second take down of the Ukrainian electricity grid in 2016, threatening millions of civilians. Spyware that snoops on any smartphone is sold by several companies in a booming new business, as reported in *The Economist*, Dec. 14th, 2019.

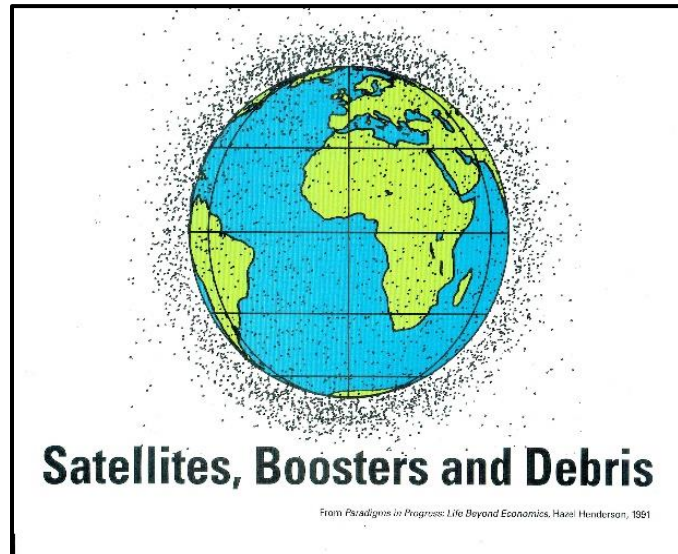


Fig. 4 Satellites, Boosters and Debris

The internet, developed by the US military agency DARPA, created the first "real estate" boom designed in cyberspace, with the apportioning of imaginary code domains. These code domains were actualized legislatively by the US Congress through empowering of the early volunteer coders who created ICANN, the Internet Company for Assigning Names and Numbers. Today, ICANN has ballooned into a powerful bureaucracy, spawning millions of profitable companies, powerful government agencies and charitable organizations. In typical amplification allowed by lack of oversight, ICANN itself now needs watchdogs, such as Jacob Malthouse, who is exposing power grabs and the recent privatization allowed by ICANN of the .org domain, used by non-profits and charities, to be sold to a private equity firm, "[The Nonprofit Community is about to lose \\$90+ Million Dollars a Year](#)", (2019).

Two Major Types of Cybernetic Systems

STABLE, EQUILIBRATING SYSTEM
Morphostatic, structurally stable
E.G.: Thermostat-controlled mechanical system



System internally dynamic, but stable structure maintained and governed by *negative* feedback loops

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UNSTABLE, DIS-EQUILIBRIUM SYSTEM
Morphogenetic, evolving new structure
E.G.: Living, biological systems, human societies



System internally dynamic and structurally dynamic governed by *positive* feedback loops, which amplify small changes into unpredictably large changes which can alter the whole system

Fig. 5 Two Major Types of Cybernetic

amplify unexpectedly, bifurcating and spilling into new domains through feedback and the power of negative and positive “attractors”. (See Fig. 5.)

Today we see these system-level uncertainty dynamics operating in politics, social media, cyber domains, global markets and in the feedback effects now observed by the latest [IPCC Report](#) at COP 25 in Madrid, 2019, as accelerating global climate change. Chaos models also clearly describe the unexpectedly rapid shifts to renewably-based energy, materials and the circular economy, as tracked annually in Ethical Markets’ [Green Transition Scoreboard \(GTS\)® reports from 2009-2020](#).

Traditional models of slower, orderly linear-change rates are based on static equilibrium systems of earlier times. Today, our evolving technologies and markets have created interlinked connections, transportation, accelerating global connectivity now driving dis-equilibrating changes, which are now disrupting all older industries, societies and ecosystems. These processes were described by Alvin and Heidi Toffler in “Future Shock”, (1970) and its 50th anniversary [“AfterShock”](#), (2020). These chaos models also show how most human social groups, policies and goals tend to “over-shoot” into runaway systems, such as today’s enormous growth of Silicon Valley’s social media monopolies, which even their young founders admit they cannot understand or control. We see similar massive burgeoning of the human population, through medical achievements in life-extension along with continued domination of women and lack of family-planning services. The 21st century is now recognized as the Anthropocene Age, as the human species now dominates ---- colonizing all regions of planet Earth, changing the climate with emissions of CO2 and other pollutants into the atmosphere.

As humans, we face the biggest challenge ever to our own survival, and our best hope is our demonstrated ability to expand our own cognition into full planetary awareness. Today, we are forced to realistically learn how our planet functions in relation to our mother star, the sun. This deeper scientific knowledge may enable us to map our options as we accept our fundamental interdependence on each other and all species in Earth’s fragile biosphere. This deeply existential, moral crisis can and must lead us to re-design all our technologies, infrastructure, politics, culture and societies toward mutual survival and our shared common future. These epochal changes are beginning for example, as we gradually learn to shift beyond steering our societies using such flawed metrics as GDP (incentivizing our 7 deadly sins) to the 17

The history of how human processes in societies evolve and diverge into clans, movements and factions has been a subject of study, for centuries, as described in ([Politics of Connectivity](#), 2019). The founders of the USA and its Constitution focused on these tendencies for evolving competing clans and warned that “factions” could divide and polarize citizens within various political parties. Systems theorists describe such social, cultural and material dynamics, as non-linear change processes in chaos theory models of deviation-amplifying systems (as described in [“Mapping the Global Transition to the Solar Age: From Economism to Earth Systems Science”](#), 2014). These computer models show how small initial conditions can

Sustainable Development Goals (SDGs), ratified by all members of the United Nations in 2015, which systemically embrace our traditional human ethics of the Golden Rule.

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