

On Becoming A Human Honeybee

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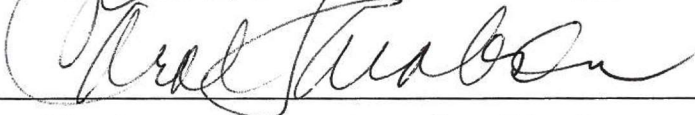
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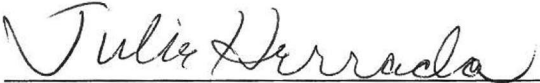
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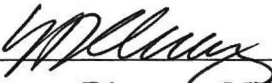
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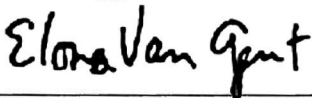
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Abstract

My thoughts on the state of the world in this thesis are based on my three years of coursework and fellowships on the topics of Sustainability, Alternative (Hi)stories, and Localization, in addition to my observations as a graduate student of the social, environmental, political, and economic conditions of production during my visits to Portland, Oregon; Oaxaca, México; Fukushima, Japan; Tanzania; and Dow Chemical Headquarters. These experiences have been moulded by my interactions with such thinkers as Bunker Roy, Ron Broglio, and Tom Seeley, and artists such as Lee Mingwei, Ben Kinmont, Steve Lambert, Oron Catts, and Amy Youngs. These observations and encounters have been tempered by years of reading the works of authors that range from Henry Thoreau and Peter Kropotkin, to David Harvey, Rob Nixon, and Masanobu Fukuoka. I have, whenever possible, tried to remain intellectually omnivorous in an attempt to digest the breadth of work that attempts to confront the meaning of humanity in an age of self-aware, self-inflicted annihilation. I have been careful to meld both data and empiricism, which in aggregate serve as a foundation on which I understand and address the world as an artist, activist, and craftsperson. At times my thesis will be fortified by data, but will most often be based in an empiricism of the spirit. I do not claim to be right. I don't know that I believe in singular answers any more. An array of responses, made with positive intentions and strong insight, seems to be the only approach to the impending "century of crises" and what I describe as the "great transition." However, as I intend to demonstrate, my work seeks to occupy a hybrid practice, one that reconsiders Joseph Beuys' notion of Social Sculpture and his famous maxim "everyone is an artist," and reframes it through the writings of Lucy Lippard, Howard Risatti, Octavio Paz, and Chögyam Trungpa into a theory of "Social Craft." It is my position that everyone is a craftsperson, each of us endowed with the capacities to mindfully transform society in preparation for the Great Transition. Furthermore, I look to honeybee society as a model for social transformation. I contend, as others such as Kropotkin have, that the honeybee exhibits a profound model when considering methods of social change. Therefore, it is my intention in this thesis to demonstrate what a Social Craft practice could be, with the hope that others will realize their own capacities to positively participate in the great transition.

Keywords:

Activism, Anarcho-communalism, Art, Ayn Rand, Colony Collapse Disorder, Craft, Dow Chemical, Energy Decline, Eco-Anxiety, Environmental Stewardship, Food Justice, Flag, Fukushima, Future Scenarios, Green Party, Honeybees, Installation, Joseph Beuys, Neoliberalism, neon, nuclear power, Slow Violence, Social Practice, Sustainability, Relational Aesthetics, Transition, Transformation.

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SECTION I: INTRODUCTION

On not wanting to be a drone.

The story of my fascination with honeybees begins at a dinner with my first year advisor Susan Crowell. I had recently executed my performance *Meeting Bacon* and had invited Susan to my home to host her for a meal - both as a demonstration of my commitment to food and as an alternative space for discussing my questions in regards to ceramics, craft, and the art of living. I can't recall what the menu was. I can't recall what discussion we may have had in regards to my ceramics, or any issues I may have been working through at that time in my studio. All I can remember is our conversation about honeybees and beekeeping. Susan was returning to beekeeping after a hiatus and was explaining how she needed to "get her equipment in order." Phrases like "putting foundation into frames" and "installing a nuc" were floating in the air just beyond the grasp of my comprehension. I had asked if there was any way I could help with such endeavors, not fully understanding what I was volunteering for. I recall Susan seemed somewhat reticent. I didn't interpret this hesitation as a perception that my efforts would be of no use, but rather for what I detected as a deep sense of intimacy that goes into such a practice – something akin to witnessing friends preparing a room for an impending newborn.

Over the course of our meal Susan had described the honeybee situation in the U.S. as bleak, and while I had heard stories in passing, I had no idea how dire the honeybee crises actually was. The complexity of the practice and crises captured me immediately. Within days I was attending a local beekeeping club meeting, and was taken by the way members of the group self-organized the orientation of the room into a space conducive for horizontal discussion without murmuring a single word. Later I realized they had emulated honeybee behavior by worked together in the absence of "normal" verbal communication. The following month I attended my first beekeeping conference and discovered that almost all of my food - the source of my greatest aesthetic pleasures – was entirely dependent on honeybee pollination. It was then I realized that if one is dedicated to a deep food practice and the pleasures of eating, then one must also be dedicated to environmental justice, food justice, and the protection of pollinators. Furthermore, as I continued my research into beekeeping, my fascination deepened as I learned of the complexities of honeybee society and their division of labor based on gender.

Within the hive there are three kinds of honeybees: The queen, the worker, and the drone. The queen is a female

honeybee, and the sole parent in the community. She is responsible for giving life to the hive. As many researchers have recently pointed out the queen is really a powerless mother - not a monarch. Then there are the workers: all female, all sisters, and all daughters of the queen. The workers comprise the majority of the hive's population and provide all the work and hospitality required to keep the hive functioning, including feeding, nursing, guarding, foraging, and cleaning. Finally, there are the drones - the brothers of the workers, and the only male members of the hive. Drones have one responsibility: to mate. If a drone is successful he will find a virgin queen, and together with drones from his own hive and others, will take turns fertilizing her in flight, falling dead to the ground after donating his sperm. The drones who fail to mate spend the rest of their days slowly depleting food stores in the hive without ever contributing to replenishing them. Eventually, the workers catch on, and as the hive prepares for winter, the drones are slowly dragged out of the hive and left to die. The workers do this out of necessity - food stores over the winter will be scarce, and the thermal bivouac their bodies will create to keep the queen warm is comprised of a sufficient amount of mouths to feed as it is - drones need not apply, even if they can double as heat donors. As a result, drones are removed in the fall whether they like it or not.

On several occasions, while out inspecting hives with fellow beekeepers, I have found delight in watching the “dragging of the drones” with fellow beekeepers, sharing in the grins and quiet cheers that come from the event – “Get those drones! Get ‘em!” For me, the joy found in the autumnal ritual speaks to a trauma of a justice denied - matriarchal power over males who fail to participate in the care required to support their families or improve the community. Although I try and empathize with the tiny males who will be left out of the hive to freeze and starve, part of me wishes that they would just ‘figure it out’ – to do something to earn their keep, to stay with the family, and weather the brutal winters with their perseverant sisters. I often ask myself ‘Can’t the drones figure out a way to provide something else of value to the community?’

In response I tell myself “I do not want to be a drone.” And although I don’t want to be a drone, I know I also don’t want to be a queen or worker either. Rather, when I think about participating in a human-honeybee society, I think about becoming an amalgam of the two: a mother, a nurse, a guard, a forager, a feeder – a citizen in the

deepest sense of the word. In other words - as Irina Aristarkhova has pointed to in her writings on hospitality - I want to be a host, both a genatrix and nutrix: a matrix for what I will describe as “The great transformation.” And, so it’s clear, I want others to be hosts as well. And why do I raise such high demands on the rest of humankind? Because hospitality, and hosting all forms of “others,” in all of the complexities and nuances associated with the practice, is what will be required for humankind to survive the impending century of crises.

Therefore, as an artist asking ‘what does it mean to be a human in the age of the Anthropocene and environmental collapse?’ I intend to respond by articulating that the use of provocative and contemplative art objects, in tandem with an environmentally-minded social practice, will be an essential mode of human production to assist in the social evolution of humankind into a new and harmonious form in the world’s larger ecosystem. Such acts and provocations must cultivate a desire in others to be infected with delight of living with rather than living over other human and non-human beings.

I feel I am not alone in my desires, and know as an artist that I am responding to the larger, recent cultural influences that have saturated my world. As Dr. Donna Haraway has stated in regards to interspecies cohabitation “In a situation in which terrorism is cultivated from every angle and we are taught to fear practically everything, why should anybody be surprised that there’s a profound desire for the pleasures of the peaceable kingdom?”

**SECTION II:
STATE OF THE
ENVIRONMENT**

*The Great Transition
and*

The Impending Century of Crises

My work is speculative about possible futures based on the study of both a recent and a distant global past. As I intend to show, humankind - and the planet by proxy- in on the precipice of yet another great transition in the geologic record. However, unlike geologic periods of the past, humankind has not only discovered itself as the first species to accidentally shift the geologic record, but also to realize its capacity to actively alter the future record as well. Our impact on the earth, and our cognitive realization that we, as a species, must shift our modes of thinking and ways of living, serves as the underpinnings of what I describe as “The Great Transition.” This transition, unlike any other in biological history, will be the first of its kind where a species uses freewill in order to evolve into a new form - from Homo sapiens sapiens (the supposed “wise man”) to Homo sapiens nutriens (a “nurturing man”). However, to understand this great transformation, one should understand the environmental underpinnings of the impending century of crises, and the conditions it presents for our species’ required social evolution.

Environmental Collapse:

Our population as a species is currently hovering around 7 billion people. At current rates of population growth - around 1.6% -, it is estimated that we will be a species of nearly 10 billion people by 2050. Civilization as we know it requires vast amounts of resources and energy, all of which is entirely dependent on the world’s natural systems and reserves. And while determining the natural carrying capacity of the earth has been an arduous task for scientist since Malthus¹, it has been proven, even in the absence of concrete numbers, that the impact of human populations on the world’s ecosystems has been unquestionably catastrophic. Climate change , ocean acidification, rainforest depletion, bio-simplification, irremediable toxic waste, and the melting of the polar ice caps, have become the major environmental legacies of the human species, and the defining characteristics of what has been described in the geologic record as “The Anthropocene.” Such effects in aggregate have resulted in what many are now calling the “Sixth Extinction” - the largest die off since the Triassic-Jurassic extinction of the Dinosaurs nearly 200 million years ago, and an event which has the potential to parallel the “Great Dying” of nearly 90% of all life on Earth during the Permian-Triassic Extinction of nearly 250 million years ago. While extinctions are considered “normal”, with an estimated background rate of roughly one to five species extinctions a year, scientist currently estimate that

humankind’s impact on the Earth is causing species to disappear at rate somewhere between 1,000 to 10,000 times
1 Malthus, T. R. 1803. An Essay on the Principle of Population. viii, [4], 610 p. London: Printed by T. Bensley.

as great, with dozens of species going extinct daily. As ecologists have consistently proven, bio-diversity is essential to supporting resilient ecosystems, and humankind's incessant bio-simplification of both "wild" and "cultivated" organisms has put the resilience of the larger biosphere into peril.

To complicate this issue, one must also consider the reality of climate change - the thermal index of humankind's great project of industrialization. At current rates, it has been estimated that the planet's atmosphere could warm by nearly 40°F by 2100. As a result, the formerly infrequent droughts, floods, hurricanes, and ice melts of ancient memory are predicted to be not only more frequent in our lifetimes, but more dramatic and destructive as well .

The concrete truth is, despite any efforts being made, humankind has fundamentally disturbed the stable and edenic qualities of the Holocene, and we are unquestionably looking into a turbulent future often depicted as a future hellscape.

However, as both the Triassic and Permian extinctions illustrate, life continues on, even in near total extinction scenarios. As a result, what we must be aware of from this perspective is not that we are "destroying the planet," but rather ourselves through our destruction of the planet's diverse biomes and their ability to support our species and others. Therefore, humankind has become reconnected with the ancient knowledge that humans are deeply interwoven and dependent on the ecosystem, and that our dependency on the non-human as a host, our behavior as bad guests, and our inability to reciprocate the planet's hospitality, has put our future as a species into question. And as if our destruction of the natural world were not enough to correct, civilization must also adapt to the reality of energy decline.

Energy Decline:

The complexities of our industrialized civilization are largely due to our exploitation of one single natural resource - fossil fuels. Up until the industrial revolution, humans lived in a relatively stable state of population growth, with alterations to the environment at a minimum - the exceptions being the great monuments constructed by the hands of enslaved craftspeople. It is only at the dawn of industry that we begin to see the exponential rise of material

throughput - a metric for understanding civilization's growing technological complexity and its material index. This metric runs in parallel with human life expectancy and fossil fuel use, and inverse to the decline of biodiversity and climate stability. However, our ability to access the rich fossil fuel reserves we once had access to, and the possible impact they will have, has been the center of imagining our future civilization and environment. While in recent decades the debate over the legitimacy and accuracy of Hubbert's 1956 theory of "peak oil" has been the center of economic debate, little attention has been paid to the concrete reality of "energy decline" – a related, but altogether different energy phenomena.

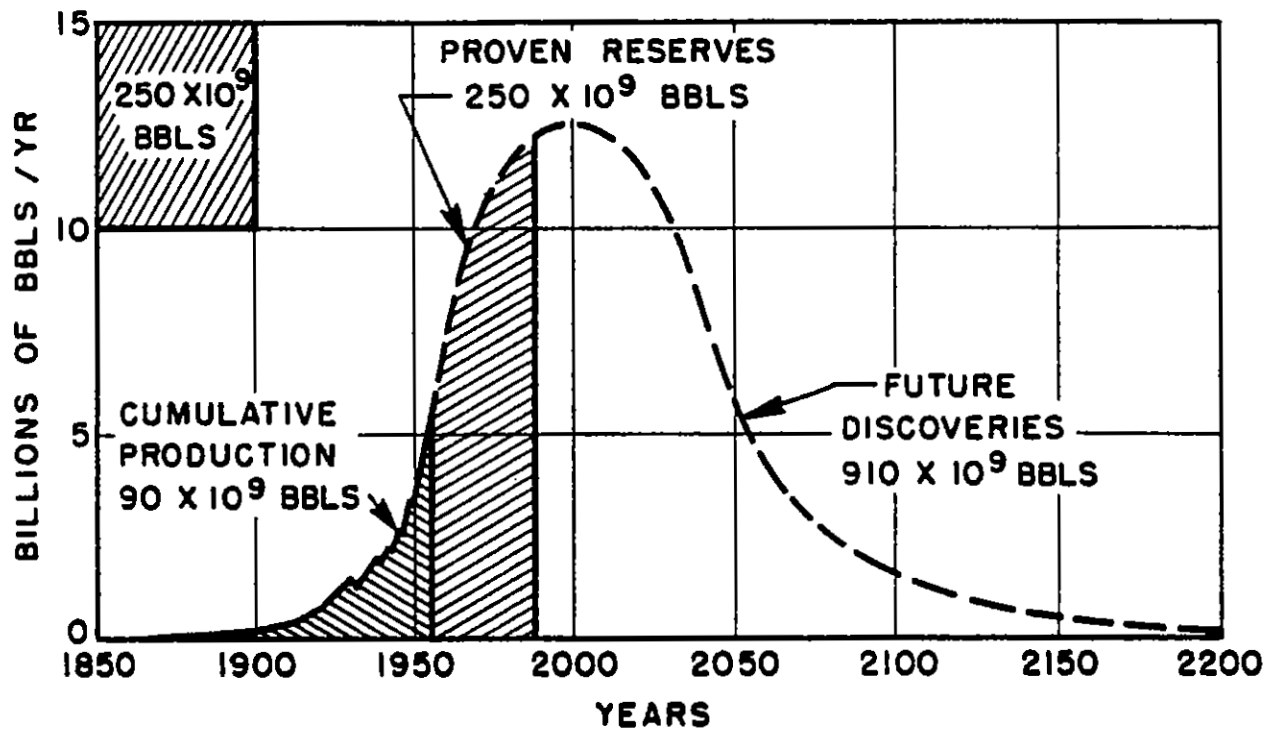


Fig. 1 Hubbert's Peak Oil Curve, 1956

Energy decline, unlike peak oil, complicates the quantitative perspective of "when" reserves will be depleted, and adds a qualitative lens which considers the "how" and "at what efficiencies" reserves will be depleted. Rather than only considering the volume of energy reserves on the planet, energy decline forms a more complex perspective which acknowledges "it takes energy to make energy." This perspective is most elegantly explained in energy-economic terms as Energy Returned on Energy Invested, or EROEI. Simply put, EROEI articulates the reality that a certain amount of energy is required to produce energy, and that this production energy is inherently embodied within the new energy unit.

$$EROEI = \frac{\text{Usable Aquired Energy (UE)}}{\text{Energy Expended (EE)}}$$

As an example, when oil was first discovered, it took the expended energy (EE) of one barrel of oil to locate, extract, process, and acquire one hundred barrels of oil as usable energy (UE) - an EROEI ratio of 100:1. As a result of depleting energy dense and easily accessible reserves, that ratio has since dropped to 10:1. Furthermore, the EE/UE ratio is essential when understanding the amount of energy our current state of society depends on - somewhere between 8:1 (the Amish) and 12:1 (Tokyo). To explain how we are able to function today is answered by supplementing our fossil fuel dependent society with a diversity of other energy sources, including renewables like wind and solar, and non-renewables like nuclear.

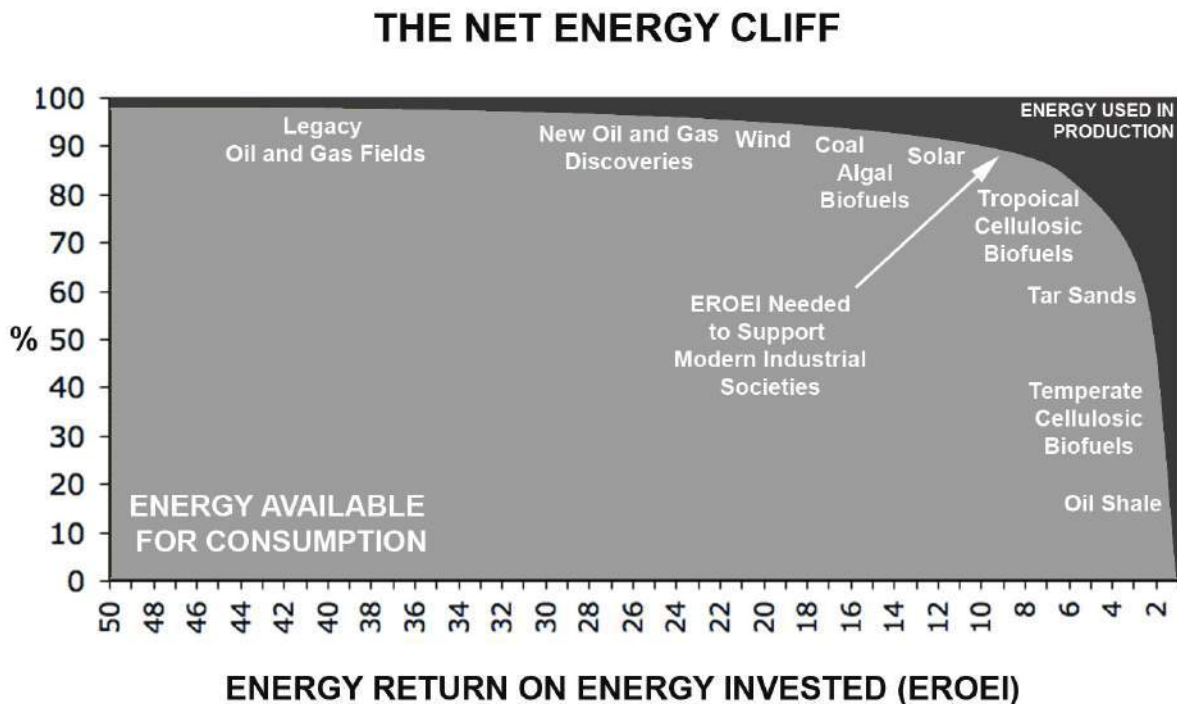


Fig. 2 The Net Energy Cliff which explain the EROEI ratios on various energy sources.

However, the reality is that when current rates of energy production and implementation are considered in light of current population growth, we are far from being able to supply all of our energy needs with renewables and the non-renewable nuclear option. The media may frequently discuss wind, solar, and tidal-based energies, but

their implementation is less than sufficient, and the EROEI ratios of these technologies cannot sustain out current levels of societal complexity. Furthermore, such “green” technologies ignore the major environmental impact associated with the development of such technologies. One need only look at the conflict around the Pebble copper mine in Bristol Bay, Alaska, and it’s impending destruction of the world’s largest wild salmon, as a key test case to understand the tremendous “externalities” of environmental destruction associated with an electro-utopic future. To exacerbate the degradation, industrialists are looking to nuclear power as the primary supplement to an otherwise failing energy system. Although labeled “safe and clean,” nuclear power has been consistently called into question for “once in a life-time” catastrophes such as Chernobyl, Three-Mile Island, the Fukushima-Daiichi disaster, and the vast number of “normal disasters” which have taken place at sites like Enrico Fermi in Michigan² and the plethora storage sites around the world. Such disasters are destructive in both the immediate and long-term; a form of violence displaced over both time and space in what environmental theorist Rob Nixon describes as “Slow Violence.”

As Scientist-activists such as Mary Olson and Helen Caldicott have noted, outcomes of such violence can be contingent on gender, and are distributed over both time and space as both instant and intergenerational mutagenic effects: women suffering more than their male counterparts, and passing on their suffering into the future through mutated recessive genes carried by their children. While Olson has declared the intergenerational effects of nuclear disasters have “a beginning but no end,” such crises also evade any sense of geologic time as nuclear waste accrues and saturates the world without proper treatment or disposal, slowly decaying over thousands of years, exposing generations of new victims in the process.

Though conservative pundits and lobbyists point to Fukushima as the primary example of why we need nuclear power to protect the environment and our economy, none of them are willing to recognize the cost of the externalities embodied in the energy required to cool and dispose of nuclear waste, the exponential rise of cancers and mutagenic effects on living organisms, and the culturcide which destroys the history and traditions of communities forced to leave their homes as a result of nuclear catastrophe. Such destruction is always placed

² On October 5, 1966 Fermi 1 suffered a partial fuel meltdown.

on a cost/benefit scale, failing to acknowledge a third option: willful, and positive energy decline - a “down shift” in production coupled with a global concerted effort to “simple living.” Such suggestions are often portrayed as devolving forms of “primitivism,” never fully allowing the imaginative question of what a low-energy alternative future might look like. And while a minority of citizen-artists, such as filmmaker Akira Kurosawa³, have presented plausible representations of positive low-energy futures, the majority of policy makers ignore that energy decline is real, that we have very few choices in the matter, and that the data stands for itself –there is no choice: we will have to downshift.

U.S. Commercial Nuclear Power Reactors—Years of Operation

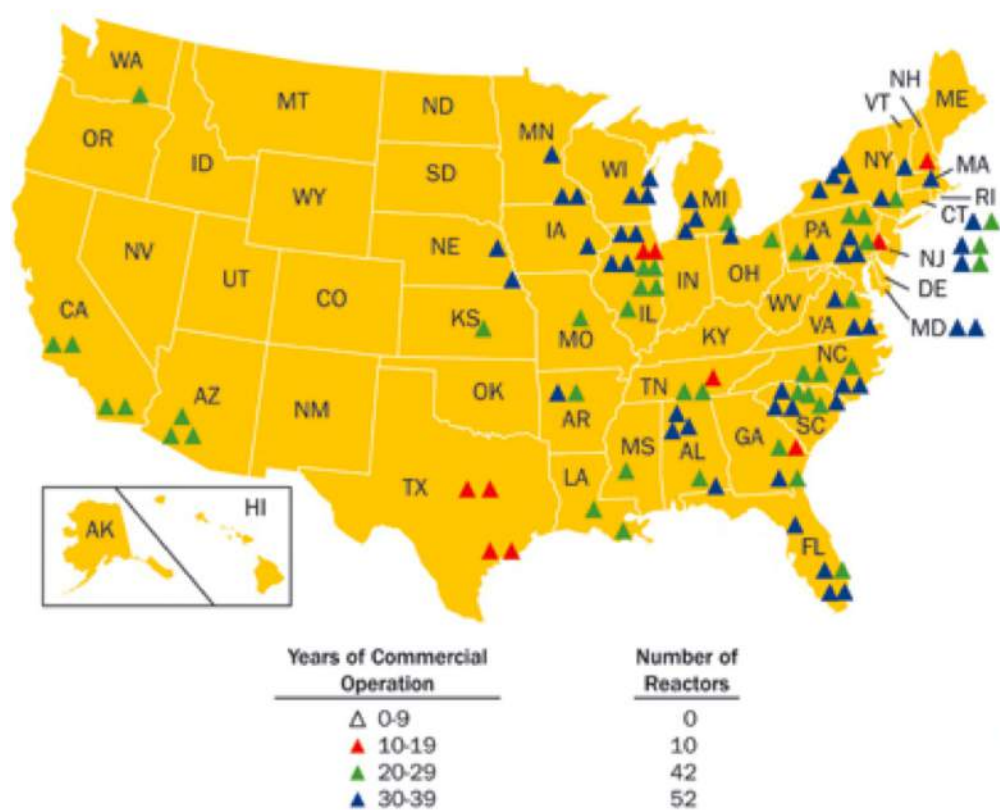


Fig. 3 Location of US commercial nuclear reactors, courtesy of Lara Pierpoint, MIT. 2010

Some thinkers have been proactive in projecting possible energy futures. Of particular importance is the work of David Holmgren, who suggests four possible “future scenarios” for civilization: Techno-Explosion (space travel and colonization), Techno-Stability (a seamless conversion from material growth and energy depletion to a steady state system based on renewables), Energy Descent (a reduction in production, complexity, and population as fossil fuels are depleted), and Collapse (interlocked systems collapsing in the absence of adequate energy reserves, climate change, and resource exhaustion - a fast “die off”).

³ See Akira Kurosawa’s short *Village of the Watermills* in his film compilation *Dreams*, 1990.

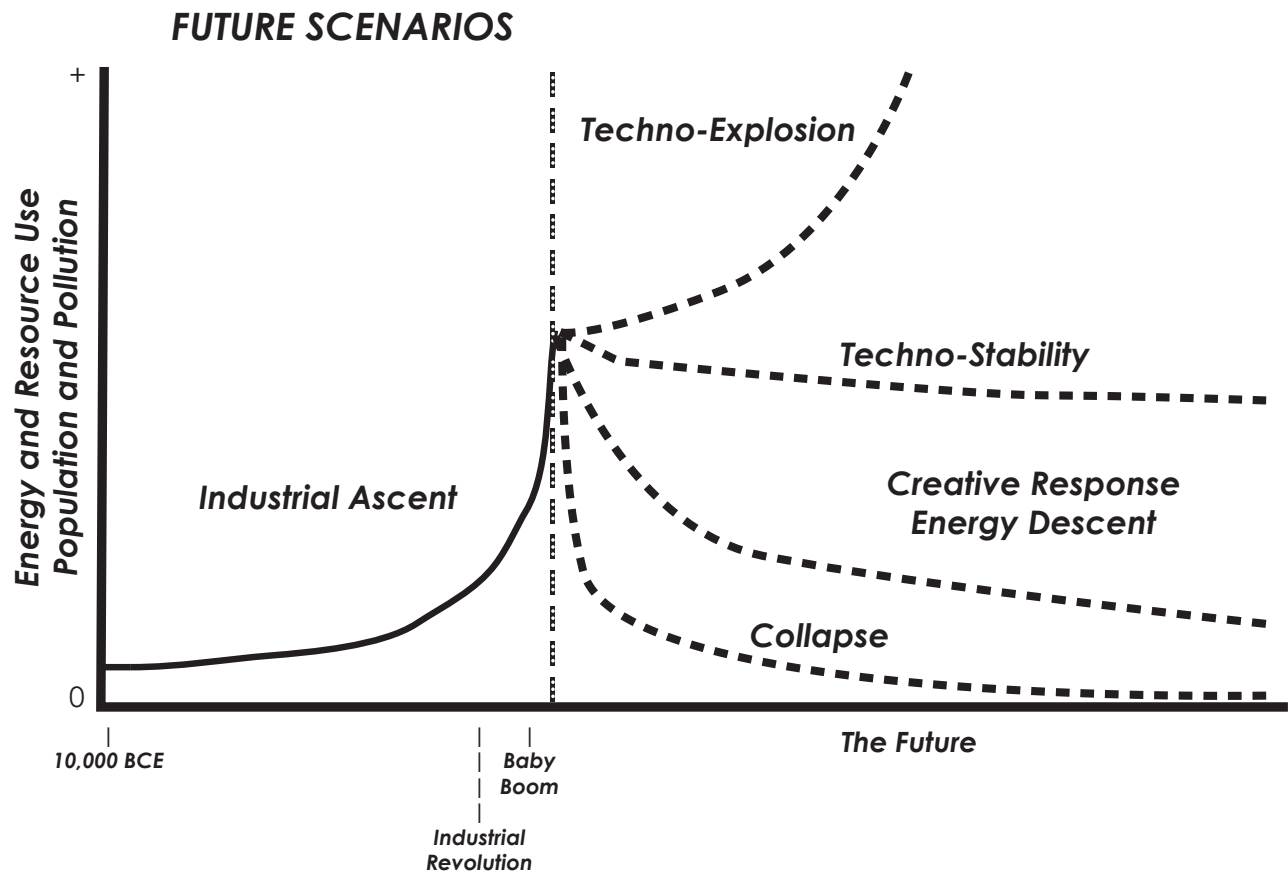


Fig. 4 Holmgren's Future Scenarios Chart, 2009

As it stands, Western civilization as we know it is on a collapse scenario track, with relatively-small gestures towards a Techno-stability future, failing to make the radical moves necessary for a “seamless” transition. As a result, Holmgren points to energy descent, with an emphasis on earth stewardship and green-tech, as the positive scenario to make the impending shift that energy decline demands. He suggests that those who are able to make the transition to becoming earth stewards in the midst of the transitory turbulence will be in a far better position to weather the impending energy and environmental crisis. However, in light of Holmgren’s analysis, the question is how are we going to make the shift? Or to put it more eloquently in the words of Thomas Princen and Ray DeYoung:

“How should societies respond to reemerging and unavoidable biophysical constraints? How can they transition in ways that are peaceful, democratic, just, and environmentally resilient? How might they craft (my emphasis) a society that lives well and well within the limits of this single planet?”⁴

4 De Young, Raymond, and Thomas Princen. 2012. *The Localization Reader: Adapting to the Coming Downshift*. Cambridge, Mass.: MIT Press.

**SECTION III:
ALTERNATIVE HISTORIES
AND MODELS**

*Sustainability, Localization, Anarchism, and
Honeybee Democracy*

They try to solve the problem of poverty, for instance, by keeping the poor alive; or, in the case of a very advanced school, by amusing the poor. But this is not a solution: it is an aggravation of the difficulty. The proper aim is to try and reconstruct society on such a basis that poverty will be impossible.

-Oscar Wilde, *The Soul of Man Under Socialism*, 1891⁵

In 1987, in response to a “widespread feeling of frustration and inadequacy in the international community to address vital global issues and deal effectively with them.” the UN formed the Brundtland commission, a committee that would set the standard definition of sustainability in our time: “Development that meets the needs of the present without compromising the ability of future generations to meet their own needs.”⁶ This definition has since been adopted by most industrial and post-industrial nations as an ambition to maintain environmental quality and social conditions, while continuing to increase economic growth. As a result, the “triple bottom line” - or in more colloquial terms “people, planet, and profit” - has become a popular understanding for a “new” direction in capitalist production. Unfortunately, in the U.S. sustainability is often pitched as both a goal to strive for and as an attainable future, with few understanding the nuanced internal contradictions of sustainability within a capitalist framework.

Sustainability, Greenwashing, and the Libertarian Shift:

For many in the U.S., sustainability has become synonymous with being “green” or “environmentally friendly.” Many will jump on the sustainability bandwagon without ever confronting their own levels of implication in environmental degradation, often ignoring the tremendous complexities of what it means to actually have a “sustainable” society, or how corporations are using sustainability as a term (i.e. sustaining the growth and power of a corporation indefinitely). As economist Herman E. Daly has shown ⁷, “sustainable growth” is an impossible theorem - a fallacious economic ideal that conceals the hidden costs of infinite growth, at an exponential rate, on a finite planet. And as Holmgren suggests, even a steady state economy supported by a techno-stabilized future won't

5 Wilde, Oscar. 2001. *The Soul of Man Under Socialism and Selected Critical Prose*. Edited by Linda Dowling. London ; New York: Penguin Classics.

6 Softing, Guri Bang. 1998. *The Brundtland Commission's Report: 10 Years*. 234 p. Oslo ; Oxford: Scandinavian University Press.

7 Daly, Herman E., and Kenneth N. Townsend, eds. 1993. *Valuing the Earth: Economics, Ecology, Ethics*. 2nd edition. Cambridge, Mass: The MIT Press.

be able to survive the constant warming of the planet or the slow violence of using the earth as an over-saturated waste sink. Therefore, one may be apt to ask if sustainability is a utopian dream, and if so, who's dream is it? It is my contention, within a capitalist context, "sustainability" as a concept has become one of the prime enablers of the neo-libertarian vision.

In the Name of the Best Within Us:

In the late 1970s the world witnessed a radical shift in social organization under the guises of the neo-liberal project. Under the grip of political leaders such as Ronald Reagan and Margaret Thatcher, neoliberal doctrine was implemented in reaction to troubling global stagflation. As Marxist geographer David Harvey notes "All forms of social solidarity were to be dissolved in favor of individualism, private property, personal responsibility, and family values....The freedom of the masses would be restricted in favor of the freedoms of the few."⁸

Social responsibility was ecstatically "shrugged off" by the wealthy to satisfy their individual desires, and neo-conservative patriarchal family values were espoused as the ideal form of social order. Austerity was used to constrict the entitlements of citizens, while the rights of corporations as individuals conversely increased.⁹ In light of a new found ability to access the entirety of the world's labor markets, Unions were crushed and violently punished, production was offshored to the cheapest labor accessible, and state commitments to public services were stripped to the point of near social collapse. Profits for corporations soared while their environmental impacts remained inadequately kept in check. It came as no surprise that this libertarian shift in power from "the people" to "the individual" had tremendous impacts on cultural values and social programs in both the United States and Western Europe. As Margaret Thatcher once stated, "Economics are the method; the object is to change the heart and soul."¹⁰ In response to the corporatist neoliberal wave, communities organized under the umbrella of social justice and environmentalism. Protests and boycotts emerged as the dominant tactic to drive social awareness, generating a social barrier to capital accumulation. As a result capital was forced to socially innovate as a response.

8 Harvey, David. 2005. *A Brief History of Neoliberalism*. 247 p. Oxford ; New York: Oxford University Press.

9 *First National Bank of Boston v. Bellotti*, 1978. The U.S. Supreme Court rules 5 to 4 that corporations, under the first amendment, have the right to make contributions in order to influence political processes.

10 Interview for *The Sunday Times* (1 May, 1981)

As Marx points to in the Grundrisse, Capitalism cannot “abide” by its limitations, - it transforms limits into barriers, which it then circumvents or transcends . Although Capitalism may have circumvented barriers through financial innovation and crushing labor, new socio-environmental limitations had emerged. If the libertarian project were to continue, then social innovation would be needed to transform public approval. While this was carried out in numerous ways, I suggest one of the most powerful tools to gain such approval was the use of Ayn Rand’s popular-fiction as a delivery system to augment larger social metanarratives.

Although Industry legitimized its degradation of the environment by “externalizing” the environmental costs in capital accumulation, eventually public disapproval, natural resource depletion, and eco-toxicity, saturated the reality of most citizens’ quotidian experiences, and by the 1990s socio-environmental concerns had emerged as a dominant barrier to capital accumulation.¹¹ Therefore, capitalism was forced to innovate within the social realm, to coerce the public’s approval any way possible, as a means to legitimize industrial productions environmental impact. As a result, capitalism circumvented the socio-environmental barriers of production through a subtle code switch, with the brute exploitation of nature concealed by moralistic complexity. Rebranded as “eco-friendly” and “sustainable”, satisfying a rather ambiguous and subjective triple bottom line, green-capitalism emerged by the early 2000s as the new paradigm to continue the exploitation of people and planet for profit.

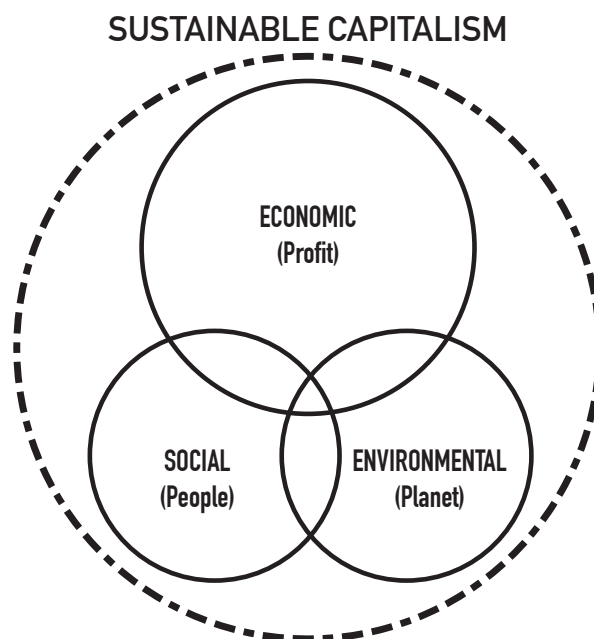


Fig. 5 Diagram of the triple bottom line weighted in a capitalist context.

11 O'Connor, James. 1998. *Natural Causes: Essays in Ecological Marxism. Democracy and Ecology*, xviii, 350 p. New York: Guilford Press.

To be clear, my contention - despite what green capitalists may proclaim - is that the triple bottom line is not a monolithic standard. The balance, mass, and pull of the social, environmental, and economic qualities of sustainability on each other - and the overall definition of sustainability for any given context- will vary according to the larger socio-economic context. Within a capitalist sphere, the weight of economic sustainability empirically distorts the value of both the social and environmental, and becomes the largest element by which sustainability will be defined (see Fig. 5 above). In simple terms, in green capitalism, if it doesn't generate capital then it is simply not sustainable. Such realities, when placed in contrast to the research of environmental economists such as Daly, Hubbert, and Townsend, reveal the environmental internal contradictions of capital accumulation, and what I describe as the fallacy of sustainable green-capitalism - namely that infinite capital accumulation is impossible on a finite planet. And while many will look to technological-innovation to "out-engineer" the environmental barriers, such gestures only shroud the realities that all forms of industrial production contribute to the externalities which may ultimately lead to the demise of the system through the destruction of the planet. Therefore green-capitalism, in its ability to co-opt an environmentalist language, has contorted the activist and environmentalist rhetoric of sustainability to gain public approval to continue the capitalist project. As a device, green-capitalism largely benefits the same corporate entities which environmentalist groups sought to dismantle, calcifies the inequalities of class divide through lifestyle, legitimizes the use of the environment as a waste sink through economic devices - such as carbon credits¹² -, and ultimately replaces the dream of a peaceable kingdom with the nightmare of the creeping normalcy of environmental collapse. Therefore, sustainability as a signifier of environmental altruism, functions as a tool to transform economic barriers, as a shroud to conceal and distance environmental realities, and as a conduit to move capitalism beyond social and environmental barriers.

Two brief examples from my own experience:

1) A corporation espouses plastics as the sustainable panacea to the environmental crises by suggesting that the inability of plastics to quickly degrade make them the ultimate material for making lightweight and durable goods.

¹² Rosenthal, Elisabeth, and Andrew W. Lehren. 2012. "Incentive to Slow Climate Change Drives Output of Harmful Gases." The New York Times, August 8.

Furthermore, the company suggests these goods have the possibility to be made in part with bio-based oils and gas, have a smaller footprint because of their lighter weight, and will ultimately mitigate consumption by producing goods that last “a lifetime.” However, said company denies any responsibility for how, and at what levels, citizens will consume their products. Such a position fails to recognize the more holistic environmental impact of producing such goods in the first place (fracking for natural gas to produce hydrocarbon plastic, or even the high levels of water used in producing “green plastics”), let alone the cultural underpinnings which drive populations to consume “new” durable goods in disposable ways ¹³.

2) A corporation takes an ethical vow by implementing altruistic projects, such as a clean bottled water plant, or a rural beekeeping program. These programs are described as an opportunity to provide healthy resources and sustainable income for communities in the “global south.” However, when questioned, these projects are described as “venture philanthropy,” a form of crypto-colonization in which access to the world’s underdeveloped resources and markets are pulled into production through “benevolent” programs. Clean water is bottled and sold rather than given away to increase stakeholder “ownership,” and beekeeping is used to cultivate sustainable incomes to develop consumer markets in otherwise subsistent populations¹⁴.

As Wilde suggests in *The Soul of Man Under Socialism*, such forms of altruism are not actual resolutions to social, environmental, and economic poverty, but rather the very tools which distract populations from the very necessary project which environmental collapse and energy decline present us: the reconstruction of society on such a basis that these forms of poverty will be impossible.

As a counter definition to the capitalist approach, one need only look at the Green Party’s “Four Pillar” approach - Ecological Wisdom, Social Justice, Grassroots Democracy, and Nonviolence - in which the hedonistic value of profit is abandoned, and the metrics for evaluating a sustainable society are judged by the eudaemonic qualities

13 This account is taken from my experience as a Dow Sustainability fellow and the numerous workshops, presentations, “pitches” and tour of Dow headquarters, given to me by Dow Chemical executives.

14 This account is based on my experience being solicited to start a rural beekeeping training program for a non-profit philanthropic school backed by Coca-Cola and Enel Green-Power.

embedded in the pursuit of living in harmony with the environment, direct democracy through horizontal governance, and a commitment to peaceful conflict resolution . And while critics in the U.S. may dismiss these values as utopian, the reality is that exponents of green ideology are already beginning to take power and implement successful reforms in some of the world’s most prosperous industrialized nations. Furthermore, as I will suggest, a eudaemonistic future civilization is not only possible based on current theories and techniques, but also plausible based on the alternative history of cooperative communities who chose to “live with” both in the past and in the present.

However, as the environmental crises continues to escalate, progressively interrupting “business” as usual,” the binary disparities between the “Me” of the 1% and the “Them” of the 99% are destined to diminish, leaving only the “Us” - humans confronted by an unending future of catastrophe. As a result, the pursuit of alternative forms of “living with” rather than “living over” others is a project that demands humanities undivided and immediate attention.

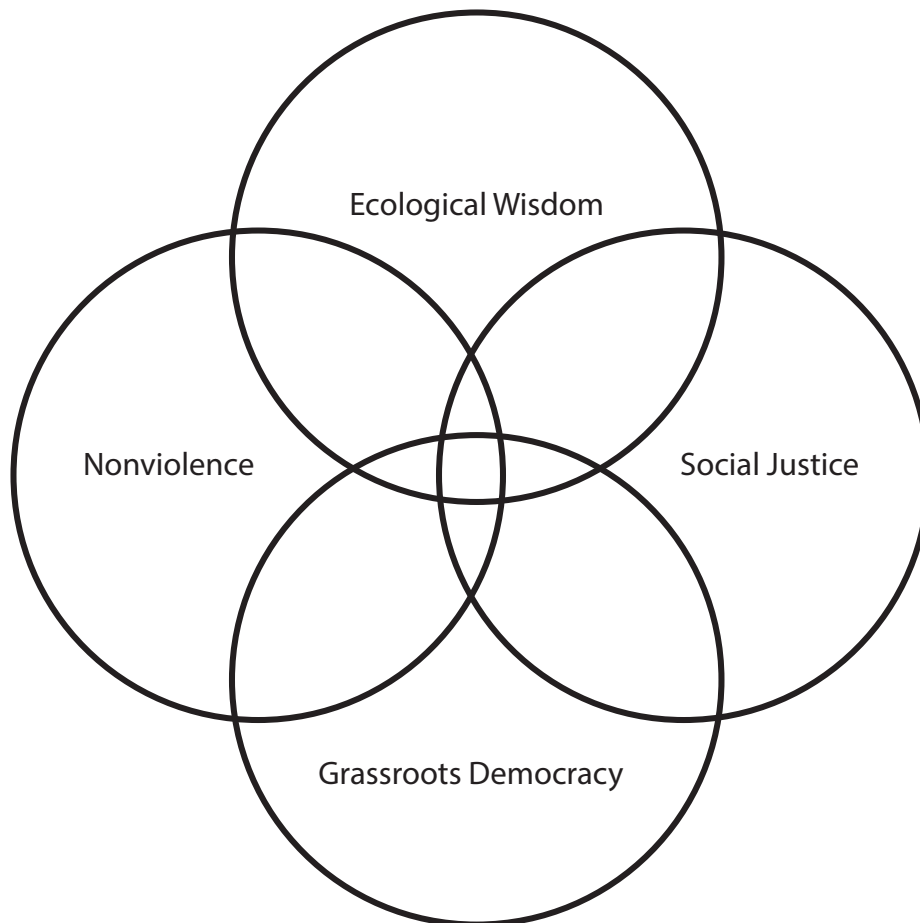


Fig. 6 Diagram of the four pillars of the green party..

Localization:

For Princen and DeYoung, the positive re-crafting society is described as “Localization,” a philosophy focused on shifting quotidian human behavior to focus on the “local” as a response to living within the natural limitations of the environment. As they state in their *Localization Reader*:

“Ultimately, localization high-level goals are increasing the long-term well being of people while maintaining, even improving, the integrity of natural systems, especially those that directly provide physical sustenance.”¹⁵

Because energy decline predicts a reduction in civil complexity, Princen and DeYoung identify “widely distributed authority and leadership, more sustainable use of natural energy sources and materials, personal proficiency, and community self-reliance” as the core tenets of localization. As a result, Localization sees energy decline as a distinct opportunity for civilization to shift its focus from the pursuit of hedonic gratification (material wealth) to eudaimonic enrichment (spiritual and psychological well being). Therefore, as communities pursue principles of Localization {know thy neighbor; learn to cultivate crops and skills; share resources and tools; make “free time” pleasantly-productive; engage people and the environment; slow material consumption; collaborate for positive change; build community and soul; liberate one’s self from energy slavery } their social capital will rise, while their material impact on the environment is inversely minimized - a transition into a new epoch of human civilization. And while it is presumed that such a future is almost certain to begin with an unstable climate, depleted resources, and a lengthy period of social chaos, ultimately those who adapt and shift to localization will be harbingers of what is sure to be the surviving *Homo sapiens nutriens*.

However, rather than point to Localization as a utopian vision of the future, DeYoung and Princen have been dedicated to demonstrating that precedents for localization are not only plausible, but currently in use. Both thinkers have arduously based their argument in years of researching and presenting test cases that range from the Amish of

15 De Young, Raymond, and Thomas Princen. 2012. *The Localization Reader: Adapting to the Coming Downshift*. Cambridge, Mass.: MIT Press.

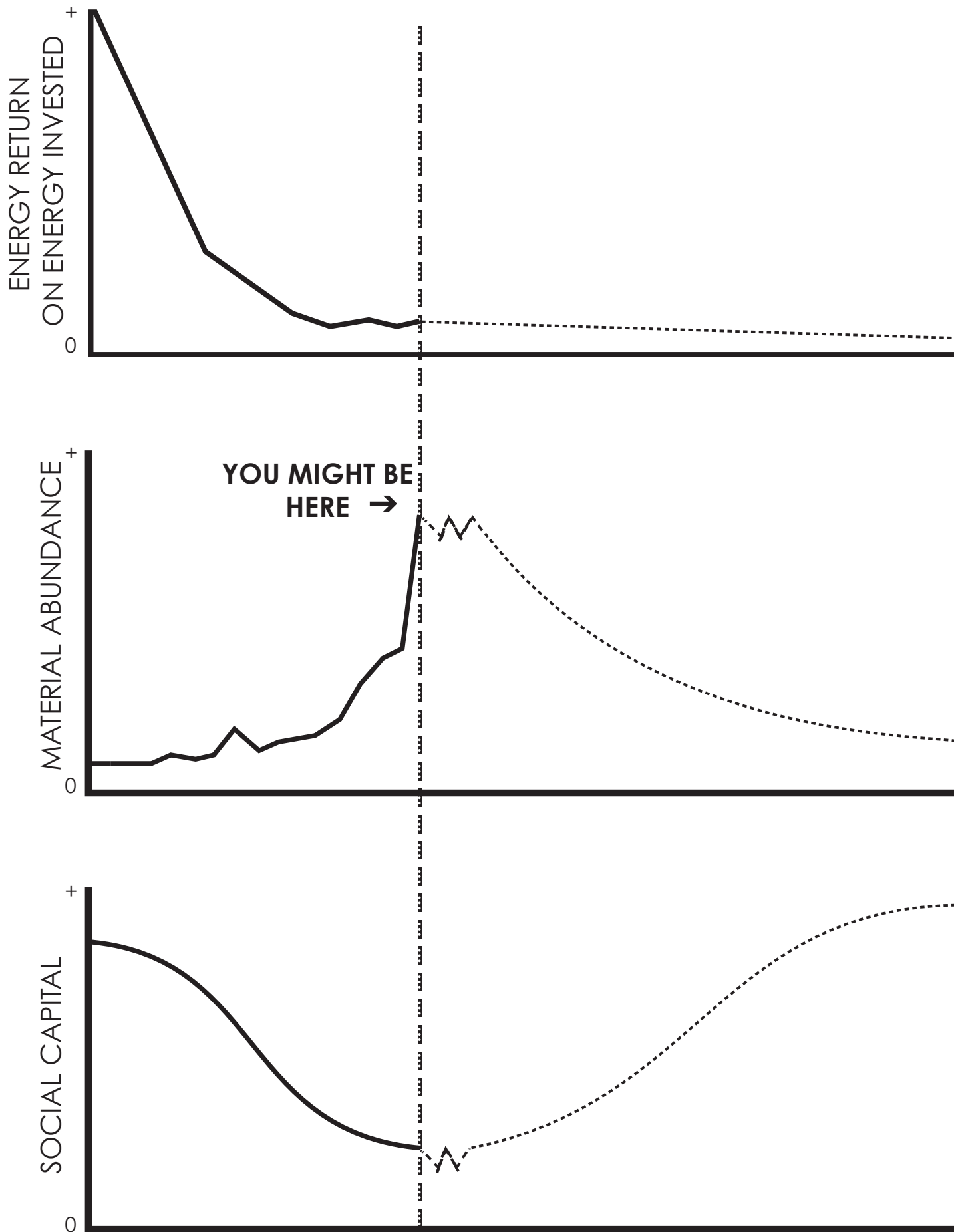


Fig. 7 Diagram explaining the relationship between energy decline, material abundance, and social capital.

the Midwest, to the residents of Hime Island in Japan.¹⁶ However, by adopting James C. Scott's "anarchist squint"¹⁷ I suggest that Localization is one approach within a much longer alternative history of popular movements, revolutions, aspirations and actions by people who may have never heard of anarchism or anarchist philosophy, let alone consider themselves anarchists despite their anarchian-underpinnings. Therefore, Localization, despite its growing popularity as an ethical and positive response to biophysical limitations and capitalist order, is in fact one of the most contemporary expressions of the Anarchist project that some scholars consider nearly three thousand years old.

Anarchy: The (Un)known Ideal:

Laws are to society what cobwebs are to a beehive; they only serve to catch the bees.

- Pierre-Joseph Proudhon

For many, the word Anarchy is associated with "Terror" and "Nihilism," a philosophy expressed in the violent outbreaks of mobs and molotov cocktails. As Peter Marshall notes in his tome *Demanding The Impossible*, Anarchy has gotten a slew of "bad press." And while Anarchy is inherently about negating power structures in the name of self-enlightenment and liberation, its nuances, applications, and methodologies are not nearly as homogenous as popular capitalist-centric narratives may describe. Although many have pointed to Anarchism as a western post-enlightenment project, stemming from Kant's writings¹⁸ and Pierre-Joseph Proudhon's maxim "Property is Theft,"¹⁹ few recognize the anarchist tendencies present in philosophies to be found in longer non-western traditions such as Hinduism, Jainism, and Buddhism. Furthermore, the essential elements of anarchist ideology, direct democracy and self-governance, can be seen as one of the great principles at the foundation of western civilization in ancient Greece. Therefore, it is only in recent history that humans have found themselves in the

16 Fackler, Martin. 2009. "A Workers' Paradise Found Off Japan's Coast." *The New York Times*, April 21, sec. World / Asia Pacific.

17 Scott, James C. 2012. *Two Cheers for Anarchism: Six Easy Pieces on Autonomy, Dignity, and Meaningful Work and Play*. xxvi, 169 p. Princeton [N.J.]: Princeton University Press.

18 Kant, Immanuel. 2010. *An Answer to the Question: "What Is Enlightenment?"* Reprint edition. London; New York: Penguin Books.

19 Proudhon, P.-J., and Iain. McKay. 2011. *Property Is Theft!: A Pierre-Joseph Proudhon Anthology*. 823 p. Edinburgh ; Oakland, CA: AK Press.

struggle of social evolution after the dissolution of feudalism, and a return to a natural order seems not only possible, but likely. This is important to note, as the divide to understand how we will socially evolve in the coming century is still up for debate, especially in light of neoliberal trends to establish a feudal structure based in corporate plutocracy. Furthermore, it should be noted that this libertarian move emerges from the same origin point as its dialectical antecedent of communalism. Both are expressions of the fundamental question of how an individual may fully realize their enlightened potential within the boundaries of both environmental and social conditions. Therefore, one may see the post-enlightenment as a dialogical spiral, oscillating between the sovereignty of the individual over others, and conversely the sovereignty of the community as an expression of collective individual desires to live well in the absence of a state which may enact violence upon them on behalf of a privileged few. No time articulates this complexity more than our own, when citizens occupy Wall Street in the name of the 99%, while libertarians discredit the right of government to tax them in order to fund a welfare state for those who are unable to provide for themselves. In both instances, the two faces of liberalism, while fundamentally in discord, demonstrate that the masses are ready to shed the state in the name of sovereignty, either in “opposition to” or “in the name of” capitalism. And while there is an infinite number of expressions which articulate this conflict, perhaps no example is more relevant to me than the life, history, and plight of the honeybee as both metaphor for social change and as victim of capitalist greed.

The Honeybee as both Model and Victim: Honeybee Democracy and Population Decline

The social life of honeybees serves as a compelling model for how humans might reorganize themselves to support environmental health and sustainability. While anarchist thinkers like Peter Kropotkin pointed to honeybee social structure, with his observations of mutual aid as a key factor of their evolutionary survival, it has only been in recent years that the totality of mutual aid within a hive has been fully understood. Although Kropotkin may have observed the cooperative efforts of honeybees as a form of collectivity under the subjugation of a queen, the reality of a non-hierarchical order that anarchists of Kropotkin’s time may have wished to emulate has recently been found to be true.

In 2010, Dr. Tom Seeley published his observations of Honeybee Democracy: the reality that worker bees are not controlled by the will of the queen, but rather operate through consensus and direct democracy. In his research, Seeley articulates that Honeybee Democracy is a true democracy, unlike our own, as there is no incentive for any single bee to contort the truth of their proposal since the life of the entire hive is at stake. Such a structure, when put into dialogue with the reality of our impending environmental catastrophe, offers a compelling model to consider when approaching De Young and Princen's question on how to craft our response as a society in light of impending biophysical constraints. And although Seeley's research offers recent concrete data on a natural social system for humans to emulate through cultural forms, artists other than myself - namely Joseph Beuys - have looked to the social organization of the hive as an ideal form for human civilization to emulate as a means to achieve harmony with the natural world.

As art historian David Adams notes in *Radical Ecology*:

“(For Joseph Beuys) The source of honey, the beehive, was an embodiment of the social warmth and inclusive cooperative consciousness needed for nonhierarchical harmony between human beings and with the rest of the natural world.”²⁰

Such a perspective emerged for Beuys as a result of his readings of the late polymath Rudolf Steiner, and Steiner's lectures on environmental collapse and honeybees at the turn of the 20th century. Beuys looked to Steiner's philosophy of the “Biodynamic” as a way for understanding a symbiotic-path to fully realize man's capacity to behave as a new kind of ecosystem service provider, a participant in a larger ecology with a completely holistic approach - a kind of human honeybee. Such a social model supports cooperation among citizens in addition to supporting the ecosystem the community is dependent upon. Although honeybees were able to evolve their social organization in the absence of culture, I contend culture, as a human technology, is an essential tool for crafting the evolution of human social organization.

20 Adams, David. 1992. “Joseph Beuys: Pioneer of a Radical Ecology.” *Art Journal* 51 (2): 26–34

However, it is important to note that the social model honeybees present us is in jeopardy as a result of our own consumerist behavior. Despite Steiner's prophetic lectures nearly a century ago on the possibility of honeybee population declines we face today, and Rachel Carson's *Silent Spring* in 1962²¹, it has only been in recent years that humans have begun to listen and understand the crucial role honeybees play as major ecosystem service providers.

As UN Under-Secretary-General and UNEP Executive Director Achim Steiner stated in 2011:

“The way humanity manages or mismanages its nature-based assets, including pollinators, will in part define our collective future in the 21st century. The fact is that of the 100 crop species that provide 90 per cent of the world's food, over 70 are pollinated by bees. Human beings have fabricated the illusion that in the 21st century they have the technological prowess to be independent of nature. Bees underline the reality that we are more, not less, dependent on nature's services in a world of close to seven billion people.”

In recent years, honeybees have been dying at alarming rates, with an exponential rate of roughly 30% of the total population dying off annually. Such a decline is the result of a complex web of causality - the interrelated effects of pesticides, miticides, pest, pathogens, industrial agriculture, and commercial pollination services; in sum, the expression of corporate capitalism's arrogance on our living systems. As Achim Steiner suggests, the meta-narrative that humankind is independent of its non-human counterparts has fundamentally put our existence on this planet into question. Now, perhaps more than ever, is the time for society to evolve into a inter-species hive.

While Beuys used art as a tool for social change²², including the methods of drawing, sculpture, installation, and performance, his most generative method - perhaps best articulated in his co-founding of the Green-Party in Germany – came to be known as Social Sculpture .

21 Carson, Rachel. 1962. *Silent Spring*. A Fawcett Crest book M1268. Greenwich, Conn.: Fawcett Publications. “The apple trees were coming into bloom but no bees droned among the blossoms, so there was no pollination and there would be no fruit.”

22 While Beuys has been lauded for his work in Social Sculpture, some critics have found his past as a Nazi pilot problematic. While I acknowledge there are latent ties to Beuys' work to notions of “Green Fascism” (see the writings of Sakai, Staudenmaier, Biehl, and Gle-signer) I look to Beuys as an artist who brought the notion of society as a medium to the forefront of contemporary practices.

“THINKING FORMS--how we mold our thoughts

or

SPOKEN FORMS--how we shape our thoughts into words

or

SOCIAL SCULPTURE--how we mold and shape the world in which we live.

SCULPTURE AS AN EVOLUTIONARY PROCESS; EVERYONE IS AN ARTIST.”²³

It is from this Beuysian position that I anchor my own methods of producing both art objects and experiences as part of my environmentally minded social practice. However, before I move into presenting my work, it will be important to contextualize my understanding of what Social Practice is, how it operates as an artistic form, and what its potential pitfalls and successes may be.

Social Practice as Environmentalist Praxis:

In recent years, Social Practice has emerged as a major form within contemporary art discourse with the emergence of specialized graduate programs, major exhibitions, and numerous articles and publications dedicated to the subject. Although theories and forms of Social Practice can be found in almost every other field outside of both the arts and “Social Work,” Social Practice within the arts comes from a particular set of concerns and understandings which presents its own unique set of conditions, challenges, and criteria. While a concrete definition of what Social Practice is remains in relative flux, many will describe Social practice as something that one simply knows after they have experienced it. As acclaimed Social Practice artist Harell Fletcher has described:

“(Social Practice) is an approach that emphasizes collaboration, shared authorship, public participation, site-specificity, and interdisciplinarity, is often presented in non-art locations, and has no media or formal boundaries.”²⁴

Such a definition articulates the incredibly elusive nature of not only what Social Practice is, but why it has also

23 Stiles, Kristine., and Peter Selz. 1996. Theories and Documents of Contemporary Art: A Sourcebook of Artists' Writings. California Studies in the History of Art ;35, xxii, 1003 p. Berkeley: University of California Press. pg. 633.

24 <http://www.harrellfletcher.com/?p=884>

been under such intense criticism. More often than not, Social Practice gets lumped in with “Relational Aesthetics” and comes under fire for either “not critical enough”, and/or operating as a poor substitute for adequate social programs in light of state failure. To paraphrase critic and art historian Hal Foster:

“(Social Practice) represents a truly final end of art, remedial work in socialisation, and part of the general movement for a ‘post-critical’ culture - a mere ‘arty party.’”²⁵

And while such a position can be accurate and useful for the critique of specific projects, broadly applied it flattens the complexity of what social practice as a field may have the capacity to achieve, and minimizes what the intentions of an artist could be within a larger approach. While critics such as Claire Bishop are right to question the platonic subjugation of art into being “useful, which she grounds in the classical definition of “arte util”, her critique fails to acknowledge deeper relationships that exist between utility and aesthetic experience which can be found in more poetic understandings of craft. Therefore, rather than place Social Practice only within the discourse of fine art, I embrace the field’s utilitarian tendencies, and shift the terms by which we may discuss such practices by placing it within the realm of craft. Furthermore, I will point to non-western traditions, which do not depend on platonic hierarchical divides between “artist” and “craftsmen”, and consider craft and experience within the Pazian analysis that such expressions are of exemplary merit because they are both useful and contemplative. As a result, I reframe my own engagement in the field not only as Social Practice, but more specifically as Social Craft.

Defining Social Craft:

As craft theorist Howard Risatti has noted, current popular understandings of craft have largely been framed by the perspective that craftwork be functional in some capacity and defined by it’s material – clay/ceramic, fiber/textile, glass, and wood. However, as Risatti points out, such understandings fail to consider broader criteria for understanding craftwork by basing judgment primarily on the implementation of “traditional craft materials,” failing to distinguish “craft as a class of objects” rather than “craft as a process of making” (my emphasis). Such orthodox

definitions of craft omit wider possibilities of what constitutes material, function, and form. As Risatti has pointed

25 Foster, Hal. 2003. “Arty Party.” London Review of Books, December 4.

out, the division between art and craft based on material and process is problematic, and one need only consider the many works of “Fine Art” which are composed out of similar materials with and techniques as many “Craft” objects - for instance a terracotta sculpture vs. a terracotta pot. Therefore, Risatti shifts the meaning of “craft” away from material and technique and reorients the term in relation to process . For Risatti, craft as a process must have a close relationship to the body as a site, utilize high levels of skill – or as I would argue, care - and should be based in “practical physical function.”

“The concept of practical function avoids any adversarial relationship with fine art and sidesteps preconceived notions about what craft is or should be and forces one to explore the subtle but complex relationship that exists in craft between function and other elements such as material, technique, workmanship, craftsmanship, and their relationship to conventions of meaning/signification and artistic expression.”²⁶

In my own theory of Social Craft, I extend Risatti’s analysis by placing it in dialogue with Octavio Paz’s meditation on the binary of practical function vs. conventions of meaning in Paz’s 1973 essay *Use and Contemplation*. In it, Paz dismantles the divides between art and craft, art and life, and useful and contemplative forms, and deconstructs the meanings of such notions as beauty and utility in an attempt to point out that form - “the way in which a thing is made” - and meaning “the purpose for which it is made” are not autonomous, and in fact come together to produce functional objects that are “beautiful things because they are useful things.” Such an assertion is used as a platform to support his belief that “art is not a concept” but rather “a thing of the senses.” Therefore, with the sensuous as a primary criterion for understanding both utility and beauty, Paz goes on to separate and define three modes of production: 1) Artistic Objects: an autonomous, self-sufficient reality; 2) Industrial Objects: Precise, obedient, mute, anonymous instruments, produced to have maximum efficiency by way of minimum of presence; and 3) Craftwork: a physical presence which enters us by way of the senses and in which the principle of maximum utility is continually violated in favor of tradition, imagination, and even sheer caprice. Craftwork operates within a constant shifting back and forth between usefulness and beauty, ultimately resulting in a sense of pleasure. For Paz,

26 Risatti, Howard. 2007. *A Theory of Craft: Function and Aesthetic Expression*. xvi, 327 p. Chapel Hill: University of North Carolina Press.

this sense of quotidian pleasure is no less essential to one's life than the nourishment of food and the satiation of water. In Paz's own words:

"The handmade object is a sign that expresses human society in a way all its own: not as work (technology), not as symbol (art, religion), but as a mutually shared physical life."²⁷

It is from this assertion, the notion of a mutually shared physical life focused on pleasing the senses, that I position my notion of Social Craft as a form that can satisfy De Young and Princen's use of the term craft, and as a way of answering their call on of how we may begin to shape a world that lives well; well within the limits of this single planet, - and I contended - well with others. However, it is important to emphasize that my notion of "others" is expansive, and includes more broadly that which one is not. My intentions are to use Social Craft as a method for forming horizontal social relations grounded in unconditional respect for others regardless of their gender, race, sexual orientation, or species. Such a position emphasizes Paz's notion of a mutually shared physical life, and has largely been informed by the work of Lucy Lippard and her writings on craft, community, and feminist aesthetics. As Lippard states in regards to craft:

"Because women's traditional arts have always been considered utilitarian, feminists are more willing than other to accept the notion that art can be aesthetically and socially effective at the same time."²⁸

Lippard goes on to note that such practices are almost immediately drawn into a good/bad binary - an inherently paternalistic structure of aesthetic judgment which silos such social forms as "bad art" as they run counter to "the history of male avant-garde as responding in reverse (and perverse) to society as autonomous, out-of-touch idealist."

Therefore one may look to Lippard's metrics for a feminist value system and the three models of interaction she

27 Paz, Octavio. 1993. *Essays on Mexican Art. Essays.English.Selections*, x, 303 p. New York: Harcourt Brace.

28 Lippard, Lucy R. 1995. *The Pink Glass Swan: Selected Essays on Feminist Art*. viii, 342 p. New York: New Press.

describes as criteria for form:

- 1: Group an/or public ritual
- 2: Public consciousness-raising and interaction through visual images, environments, and performances (i.e, aesthetic experience)
- 3: Cooperative/collaborative/collective or anonymous art (or I would argue craft) making.

It's important to note that such criteria share the common quality of inclusiveness and immersion. In my own work I seek to expand upon these qualities, and emphasize elements of intimacy, vulnerability, and empathy. When brought into triangulation, such qualities create a space which is at inherently focused a shared experience, one in which the ego-centric identity emphasized in western culture is relieved in favor for the pleasures of what a shared and co-authored experience can provide. Such pillars also support the notion that we are all craftspeople, all fully capable of satisfying the mutually shared aesthetic experience of a peaceable world:

No *one* is special. *Everyone* is special. No *thing* is precious. *Everything* is precious. No *one* makes form. *Everyone* makes form. Form is *contingent* on shared experience. Form exists *within* shared experience.

Furthermore, my theory looks to Lippard's writings on feminist value systems and the dematerialization of art, and frames Social Craft in her words as "a logical expansion of a notion that has popped up through the history of the avant-garde – that of working in the gap between art and life."

While there a wide spectrum of thought which considers a praxis of working in the gap between art and life, perhaps no other line of thought has informed my own practice then the writings of Wendell Berry and his essay The Pleasures of Eating. In it, Berry describes eating as both an agricultural and political act, calling upon people to transform their passive behavior as ignorant consumers, the result of a "cultural amnesia" that he underscores as both "misleading and dangerous." Therefore, Berry calls upon his reader to actively pursue the pleasures of eating,

and to demystify the realities of their consumption as a political act – an act which seeks to take back the pleasures of eating that industrial food production both denies and destroys.

The pleasure of eating should be an extensive pleasure, not that of the mere gourmet. People who know the garden in which their vegetables have grown and know that the garden is healthy will remember the beauty of the growing plants, perhaps in the dewy first light of morning when gardens are at their best. Such a memory involves itself with the food and is one of the pleasures of eating. The knowledge of the good health of the garden relieves and frees and comforts the eater. The same goes for eating meat. The thought of the good pasture and of the calf contentedly grazing flavors the steak. Some, I know, will think it bloodthirsty or worse to eat a fellow creature you have known all its life. On the contrary, I think it means that you eat with understanding and with gratitude. A significant part of the pleasure of eating is in one's accurate consciousness of the lives and the world from which food comes. The pleasure of eating, then, may be the best available standard of our health. And this pleasure, I think, is pretty fully available to the urban consumer who will make the necessary effort. Eating with the fullest pleasure—pleasure, that is, that does not depend on ignorance—is perhaps the profoundest enactment of our connection with the world. In this pleasure we experience and celebrate our dependence and our gratitude, for we are living from mystery, from creatures we did not make and powers we cannot comprehend.²⁹

Therefore Berry's call to indulge in the pleasures of eating is an outstanding example of one form of Social Craft – the contemplation and care for the world that creates us, and intimacy as a technique to generate empathy with others. Furthermore, Berry's essay is useful in highlighting Social Craft as an anarchian method, one that seeks to avert the senseless efficiencies and distancing caused by 'industrial form' and hierarchical capitalist production. Conversely, Social Craft moves society towards a horizontal structure in which the individual is both conscious and grateful for the physical and social sustenance the 'hand crafted' experience provides. Furthermore, such a position of Social Craft avoids the conditions of the ineffectual, autonomous, self-referential 'artform' which Bishop is so critical of. Rather, Social Craft presents a practice which offers an eudemonic approach to everyday life, one which promotes intimacy, compassion, and thoughtfulness, and stands as alternative to the hedonistic values of Capitalism and its discontents of isolation, existential crises, and environmental degradation.

Furthermore, I extend my theory of Social Craft, and its focus on intimacy, compassion, and thoughtfulness, by drawing upon the work of poet, artist, and Tibetan Buddhist monk Chögyam Trungpa, and Trungpa's writings on Dharmic art, and art in everyday life. For Trungpa, the notion of being an artist is directly tied to his philosophy of

29 Berry, Wendell. 2010. *What Are People For?: Essays*. Second Edition edition. Berkeley, Calif: Counterpoint.

Awareness Practice:

“Awareness practice is not just sitting meditation or meditation-in action alone. It is a unique training practice in how to behave as an inspired human being. That is what is meant by being an artist.”³⁰

Awareness practice parallels Berry’s emphasis on a general sense of appreciation, a notion that Trungpa describes as synonymous with “artfulness.” When put in dialogue with Paz’s notion of contemplation, and Berry’s insistence of consciousness, Trungpa’s criteria for artfulness underscores the Duchampian notion that our encounter with art need only reside within the internalized deciphering and interpretation of the outside world . However, Trungpa is quick to differentiate between inward thinking and outward thinking, a difference which he describes as mindfulness and awareness. For Trungpa, the mindfulness approach centers on the internal experience of the individual (duty), whereas an awareness approach is focused on the phenomena of the world both inwardly and outwardly with a sense of appreciation. From this perspective Trungpa considers orthodox notions of art solely as exhibition, and while he places no derogatory judgment on such works, he differentiates them from what he calls art in everyday life. For Trungpa, art in everyday life is comprised of seemingly banal and repetitive acts that are treated with intention in relation to being aware of that which is outside of oneself. To be mindful is to reside solely within one’s own consciousness - an inward focus on what one is thinking grounded in the cartesian notion that existence begins with one’s own cognition. To be aware - and by extension an awareness practice - is to turn mindfulness outward, and consider and appreciate that which is outside of oneself. To place this in terms of Social Craft as a practice, one is focused on being mindful of the self, while at the same time being aware to the widest extent of that which is outside of the self. Therefore, from a Social Craft perspective, the purpose of a practice is to craft a response to the world that comes from a place of intention, inspiration, and appreciation.

Furthermore, Trungpa goes on to state that one of the primary barriers that inhibits the possibility of art in everyday life is a sense of aggression. For Trungpa, aggression is the approach that treats everything as “the same”

30 Trungpa, Chogyam. 2008. True Perception: The Path of Dharma Art. Edited by Judith L. Lief. 2nd Revised edition. Boston: Shambhala.

and without appreciation, with impatience, thoughtlessness, and crudeness - aspects of what he defines anti-art. However, it should be made clear that “treating everything the same” is not synonymous with equality, with the former as the index of absentmindedness, and the later as an expression of consciousness. Therefore, such a position places awareness - and most importantly experience itself - as the primary form.

However, the notion of experience as form is nothing radically new in the discourse on the desire of artists to blur the line between art and life, and has continually reappeared throughout time in the work of thinkers such as Leo Tolstoy, John Dewey, and Nicolas Bourriaud . And while I do not wish to winnow through the entirety of their arguments, the criteria for art as experience set by Tolstoy, Dewey, and Bourriaud is essential to understanding the criteria for evaluating Social Craft, namely that it infect others through the artist’s sincerity, that this infection causes a perception of one’s own sensitivities, and that such an arousal results in the form of a lasting encounter. As such, these notions of art as experience, when enacted in tandem with the qualities of awareness practice and the utility of Social Craft, are the central qualities of a eudemonic practice focused on Ecological Wisdom, Social Justice, Grassroots Democracy, and Nonviolence - the useful pleasures of the great transition.

Therefore, in sum, my work combines the thinking of Paz, Risatti, Lippard, Berry, and Trungpa, as a means to extend Beuys’ notion of Social Sculpture, and to reframe his famous maxim “everyone is an artist,” into a theory of Social Craft in which everyone is a craftsperson fully capable of transforming society in preparation for the great transition.

As I have noted, I do not assert that such a position original, and underscore the regularity at which similar modes of thinking have consistently emerged in human civilization over thousands of years. However, the question remains, why has this perspective failed to gain traction as a social norm? When considering this in the past, I have returned to my observations of the dragging of the drones and my desire for the drones to change their behavior. It then occurred to me that I was placing a human perspective onto honeybee society, and that an inverse understanding behavior could similarly be applied. As a result, I have considered the possibility that conventional

human-centric modes of thinking may create the blockages which inhibit societies ability to move beyond it's current behaviors. In other words, we are too close to our own reality and need to develop forms of objective distance to see our behavior. Therefore, the use of non-human models as metaphor offers a powerful tool for us to reevaluate and change social behaviors. While there are any number of "alternative" social models to engage when considering methodologies and social structures for collective social change, none have been as inspiring to me than that of honeybee society.

In every aspect of their lives, honeybees place the practice of crafting social relations at the center of their existence. From collectively constructing their domestic space by secreting wax from their abdomens in unison, to mass feeding through trophallaxis, to protecting the hive with propolis and suicidal-stings, honeybees display what a selfless and highly cooperative direct democracy looks like. Furthermore, the behavior and actions of honeybee democracy not only protects and benefits the members of the community, but also provides for others in the world's larger ecosystem. As such, honeybee society offer a model in which living well within a community is synonymous with living well with others outside of the community. Therefore, I have looked to honeybee society as a model matrix for hospitality, and social and environmental justice, and focused my practice to emulate the behavior of honeybees as a methodology. Through my attempts to become a human honeybee, and as the primary methods of my practice, I have worked to craft new social relations by utilizing multi-sensory communication, nurturing the body and soul of others, and by creating transformative domestic spaces. In all of my work, I work to demystify social, environmental, and political conditions; transform detrimental meta-narratives; and develop pedagogical forms of activism to raise awareness. Ultimately, my goal is to transform society as a material, and engage policy, education, and politics as qualities of its condition.

**SECTION IVa:
PRACTICE**

Crafting Metanarratives

FIFTY CENT PIECE



My intentions to complete graduate work at the University of Michigan were driven by a desire to have a broader understanding of what “Sustainability” actually means, and to explore possible methods for its implementation. As a result, my initial cognates were focused on a certificate in Industrial Ecology, and I began my studies in Mechanical Engineering for Sustainable Design. While the course was relatively broad in scope, ranging from general theories of Sustainable Production to more specific problems requiring engineered solutions to pollution mitigation, my participation in the course as an artist consistently brought a “non-linear ” approach. During the question period at the end of the first class, I was quick to ask if everything within the course would be discussed within a capitalist framework. The professor was startled by the comment and answered that he didn’t have an answer. He suggested that we assume that all “sustainable conditions” would exist within a Capitalist context because, as he stated: “we’re living in a capitalist country.” Throughout the course I would continually bump up against this barrier, not out of antagonism, but as a result of my innate perspective of the world. On several occasions I openly suggested answers to presented problems despite the fact my solution had not been presented as one of the options. You can imagine my surprise when each time I did this it was confirmed by the professor that I had in fact found the solution in the description of the problem without ever trying to solve for it. The situation came to a climax while I was doodling with my head down in class while the professor presented a metaphorical problem:

“Class. Imagine there are a bunch of coins on a table. Let’s say you can take twentyfive cents, and you can choose either one quarter or twenty five pennies. Raise your hand if you would take the quarter.”

I kept both my hand and my head down.

“Ok. Now raise your hand if you would take the pennies.”

I raised my hand.

“Mr. Bianco. You’re the only one who has raised his hand for the pennies. Why did you make this decision?”

I looked up to see that out of two hundred graduate students I was the only one to pick the pennies.

“Because the pennies would be easier to distribute to other people.”

My professor looked at me completely puzzled. I had turned his notion of efficiency on its head - A quarter was more efficient for the individual, but I had shown the pennies were more efficient for the many.

It was at this moment that I realized that there was something fundamentally different about how I was thinking about the world, and I was curious if others thought differently as well. As a result, I constructed a dialogical work comprised of one-on-one interviews. I invited participants into my studio, and crafted the conditions of the space with intention. Each participant was presented with a contract outlining the conditions of participating in the work, and after they had agreed and signed, I presented the participant with one quarter and twenty-five pennies. I then asked the participant five questions:

1) Which would you choose, one quarter or twentyfive pennies?

2) Let’s pretend there are 25 people in the room. You have to give away either 1 quarter to 1 person, or 1 penny to everyone. Which would you choose? Why?

3) For the sake of being fair, if you could ask me any question you would like within the context of this discussion, what would you ask me?

4) Do you feel the work you have performed for this conversation has been worth 25 cents?

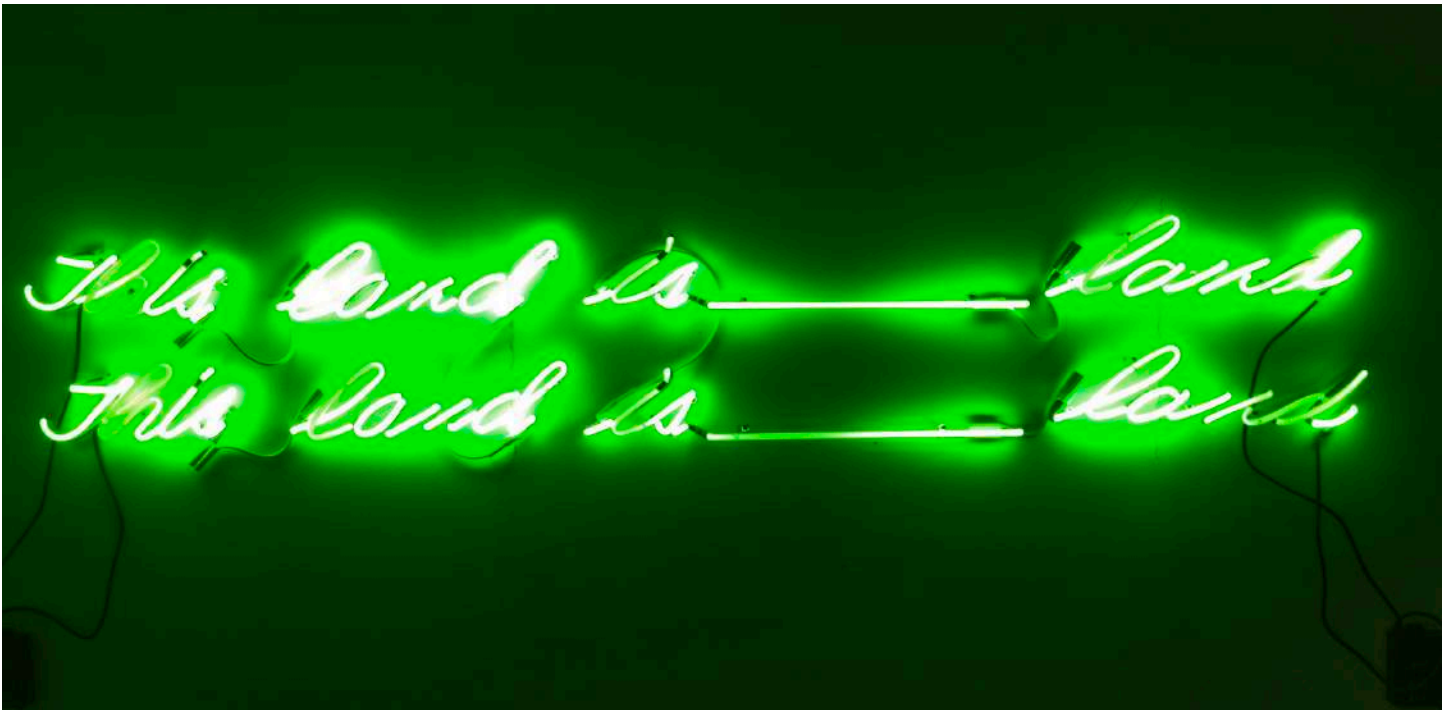
5) In light of our conversation, let's return to the first question: Which option would you choose now? One quarter or twenty-five pennies?

To conclude the conversation, I gave the coins the participant had selected in question five, and placed them into an envelope along with the contract.

Invariably responses differed greatly but almost always developed into discussions of value, both of valuing others (strangers) and valuing art and artists. After engaging in this self-reflexive process, half the participants changed their decision on which coins they would select, ultimately representing a re/connection with beliefs on society in relation to personal behavior. In the years since I conducted this performance I have received numerous correspondence from participants who still think of the performance and how it changed the way they think and their behavior towards others in the world. While such correspondence represents minor evidence of a lasting encounter, ultimately the true impact of such work will be unquantifiable as it ripples through the environment over both time and space.

This technique of self-reflexive discussion has been an essential aspect of my practice, one that allows participants to see themselves in relation to others, and offers the opportunity for participants to observe the difference between metanarratives placed on them versus their own rational personal values. Ultimately, the discussions assist participants to transform their behavior to align with their values – an essential aspect and technique of Social Craft.

~~GOD BLESSED THIS LAND FOR ME~~



God Blessed This Land For Me, 2013

Forest green neon in Woodie Guthrie's Handwriting, 24" x 96".

During the Winter Term of 2013, I was fortunate to take a course entitled Alternative (His)Stories with McArthur Fellow, and professor of American Culture, Tiya Miles. The premise of her course was to investigate the divide between the practices and impact of academic history vs. popular history. Throughout the course we focused on the construction of narratives to create truths, and how "stories" can in fact have tremendous real world ramifications. Of particular importance to me was the work of Dr. Jean O'Brien and her work *Firsting and Lasting*, an academic analysis of the physical writing of Native Americans out of existence - or what O'Brien describes in her book as "Documentary Genocide." Coincidentally, my moment of discovering O'Brien's theory occurred while taking notes with a wooden pen I had had laser inscribed with Woodie Guthrie's famous guitar declaration "This Machine Kills Fascists." Such an overlap of content gelled in my thoughts, and brought the sounds of Guthrie's famous *This Land Is Your Land* to mind. It occurred to me that Guthrie's original activist narrative - one that was questioning issues of property ownership in light of the depression - had been essentially reframed and repurposed into a pro-American anthem. In response, I wanted to construct a new sign, one that would draw upon Guthrie's iconic lyrics but remove the possessive pronouns of "your" and "my." My intentions were to create a space for the viewer to place either new language into the phrase ("This Land Is Our Land"), or perhaps even use the absence of language to create a phrase that ignores the possessive altogether (*This Land Is Land*).

The work was constructed by using one of the first electric sign technologies of bent Neon, a skill I had learned as an undergraduate, and a craft in decline as a result of the efficiencies of LEDs. I chose Forest Green as a color to gesture towards "green" ideology, but was pleased that the piece creates a form of retinal saturation which "tints" the viewers world a shade of hot pink. Ultimately, the combination of semiotics and optical affect work to create an alternative perspective of the world after the viewer turns away - a phenomenological shift of how one sees in tandem with how one may think about the world.

THE ECO-CHAT LINE



The Eco-Chat Line

Eco-Chat Line, 2013 - ongoing. Fliers, website, Skype line.

In the summer of 2012 I was asked to participate in a “site-generated” exhibition in Detroit. At the time I was focused on issues of human apathy and depression in the wake of environmental crises, and an emerging psychological phenomena commonly being described as “Eco-Anxiety.” I was interested in how people would describe their helplessness in regards to their eco-anxiety, and it occurred to me that the people I was speaking with had internalized outside narratives about who they were and how they should behave. At the time I was reading the work of Australian physiotherapist Michael White and his writings on Narrative Practice, a form of psychotherapy which concretizes the patient’s neurosis through signs and metaphors, and allows the patient to place their issues “outside” of themselves as a way for them to deal with their issues objectively. In response to my interests in both Eco-Anxiety as a phenomenon and White’s writings on Narrative Practice, I purchased a Skype number and created a free hotline for anonymous members of the public to share their eco-anxiety with me. Fliers were posted around Detroit, on Craigslist, and in the gallery. I received numerous calls from participants, the majority of which were sincere in trying to understand how to deal with their Eco-Anxiety. In most instances I was able to work with the callers to facilitate a self-reflexive discussion, which again offered the opportunity for participants to observe the difference between meta-narratives placed on them verses rational personal values. Again, the discussions assisted participants to transform their behavior to align with their values, offering them the tools to self-empower and proactively transform their eco-anxiety. Ultimately, the qualities of intimacy, vulnerability, and empathy were key to co-crafting positive responses to our shared eco-anxieties.

SISYPHUS PROPOLIS



Sisyphus Propolis, 2013 - ongoing.

Ayn Rand Books, natural fiber rope, beeswax, honeybee drone. Dimensions Vary.

Detail: Sisyphus Propolis, ongoing. Ayn Rand Books, natural fiber rope, beeswax, honeybee drone. Dimensions Vary.

In light of the financial crises of 2008, I left my home in the Bay Area of California. Exorbitant rents, an abysmal support system for the arts, and the rise of the .com class had wreaked havoc on the former hotbed for counterculture, and transformed it into an inhospitable cultural desert. Such cultural shifts were beyond my comprehension, and I eagerly searched for explanations of how such a culturecide could have happened. An answer was found in Adam Curtis' documentary *All Watched Over by Machines of Loving Grace*, and its emphasis on "The Californian Ideology" based in the "objectivist" philosophy and writings of Ayn Rand and her book *Atlas Shrugged*. Although I had grown up in the Bay Area, and had worked for a .com in high school³¹, it wasn't until I watched Curtis' film that I understood how Randian Objectivism had ultimately destroyed the culture of my home.

Years later, as my fascination with honeybees began, I learned of a naturally antiviral, antifungal, and antibacterial resinous material bees produce called propolis – in Latin "for the betterment (pro) of the community (polis)." Bees will sterilize every part of the hive in propolis, and even use it to mummify foreign entities that might otherwise endanger the community. As a result, propolis stood out to me as both a powerful metaphor and material.

It was also around this time that I became acutely aware of the reality that Rand had a major cult following and her philosophy was at the foundations of the libertarian Tea-Party movement actively eviscerating all forms of public welfare in the name of individual freedom. Therefore Rand, and her use of *Atlas Shrugged* as a celebration of

31 In 1999, as a senior in high school, I was hired as the 65th employee of *epinions.com*. While my job was to manage content on the site, ultimately my role was to be the company's mascot – to play games with the corporate executives and to add an even younger touch to what was already a barely 30 population. Of particular interest to me are the many hours I spent playing Ping-Pong with one of the company's founders Lou Montulli. Montulli is the co-author of *Lynx*, and the inventor of HTTP cookie (simply known as "cookies") – one of the main data tools now used for spying on citizens. Its interesting for me to consider my own critique of the neo-liberal plutocracy and it's .com underpinnings, considering I used to play games with the very man who invented one of the foundational devices which enabled the new plutocracy to exist.

the individual's ability to shrug off their responsibilities to the world, seemed in direct contrast to my interests in collectivity and the honeybee as a model for socially responsible behavior.

As a response I began purchasing used copies of Rand's books *Atlas Shrugged*, *The Virtues of Selfishness*, and *Capitalism: The Unknown Ideal*, and in the manner of a human honeybee, began to "propolize" them by carefully binding and coating them in beeswax . It was my intention to make the craft of transforming the books visible - to demonstrate the care of my hand and labor - and to make the work aesthetically seductive through the smell and color of the golden wax. I wanted to call attention to the physical necessity of trying to contain Rand's philosophy, and drew a parallel between the mythological figures of Atlas and Sisyphus - one who Rand inspires to "shrug" the rock of responsibility, and the other for me to emulate in my desire to repeat my labor without reprieve as an expression of social responsibility. Ultimately, I see the work as a meditation on the division within liberalism: Anarcho-Capitalism (Free Market Capitalism and Rand's Objectivism) on the one hand, and Anarcho-Communalism (Honeybee Democracy and Kropotkin's Mutual Aid) on the other – two plausible directions in an unforeseeable future of state, environmental, and energy decline.

**THE MOBILE INSTITUTE
FOR
ANARCHO-COMMUNALIST HISTORY
AND
SOCIAL TRANSFORMATION**







The Mobile Institute for Anarcho-Communist History and Transformation, 2013 - ongoing.

144” x 56” x 96.”

Trailer, Topbar beehives, Solar panel system, Corrugated Tin, Cedar shingles, and lumber recycled from a beekeepers roof.

The Mobile Institute for Anarcho-Communist History and Transformation is a mobile exhibition space for the history of Anarcho-Communist and a transformative apitherapy house. The project is inspired by the Ukrainian beekeeping tradition of crafting small huts for people to sleep with bees. It is believed that sleeping with bees offers a physically and psychologically therapeutic experience, one that leaves individuals with a broader sense of wellbeing. The Mobile Institute for Anarcho-Communist History and Transformation considers this folk tradition, and extends it by putting it in dialogue with the cooperative and “anarchist” social behavior of honeybees described in Dr. Tom Seeley’s *Honeybee Democracy*. The structure is based on vernacular beehouse architecture, and features small exhibitions of Anarcho-Syndicalist ephemera as a complement to the apitherapy.

The mission of The Mobile Institute for Eco-Anarcho-Communist History and Transformation is to provide a space for participants to transform their inner narratives by offering both a therapeutic experience of sleeping in proximity to an alternative social model, while at the same time being immersed in an alternative history which points to harmonious forms of living cooperatively with humans and nonhumans alike – an ectogenetic interspecies womb, and a site for transforming humans from a larval stage of *homo sapiens sapiens* into a mature, interspecies-bee-nurtured, *homo sapiens nutriens*.

**SECTION IVb:
PRACTICE**

Demystification

MEETING BACON







Meeting Bacon, 2012.


Performance with handmade bacon, bread, lettuce, tomatoes, grill, tablecloth, ceramics by the artist, and a pig's head.

Meeting Bacon was a response to the Farm-to-Table movement. While many are happy to have artisan foods, and find comfort in the concept of their food being treated humanely, few can stomach the reality of actually confronting the animal they eat. As a result, Meeting Bacon was intended to convey to others the active knowledge that can come through cooking and eating. In the performance I prepared a lunch of BLTs with bacon I had cured myself. The performance began by talking about the importance of knowing where one's food comes from, discussing the virtues of self-sufficiency by being able to craft both my own ceramics and artisanal foods, and by exhibiting the bacon and plates I had made to the audience. After seeing the audience's delight, I produced a pig's head much to the audience's dismay and placed it on the cooking table. One at a time, I prepared BLT's for each audience member, carefully placing it on a ceramic dish glazed with my finger marks, and offered it to them with the words "this is a gift." I presented the sandwiches in such a way that participants had to acknowledge the pig's head prior receiving their sandwich. I wanted to create a sensory experience where participants would have to negotiate the pleasures of frying bacon with the confrontation of the pig's severed head, offering a moment of contemplation to consider the origins of their pleasure.

DEMYSTIFYING DOW


Michael E. Witt, Ph.D.
 Global Director
 Toxicology & Environmental Research and


CONNIE L. DEFORD
 Director, Global Product Stewardship
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Michael Bianco

Masters/Professional
 University of Michigan





Demystifying Dow 2013.

Tour of Dow Chemical Headquarters and Animal Testing Facilities.

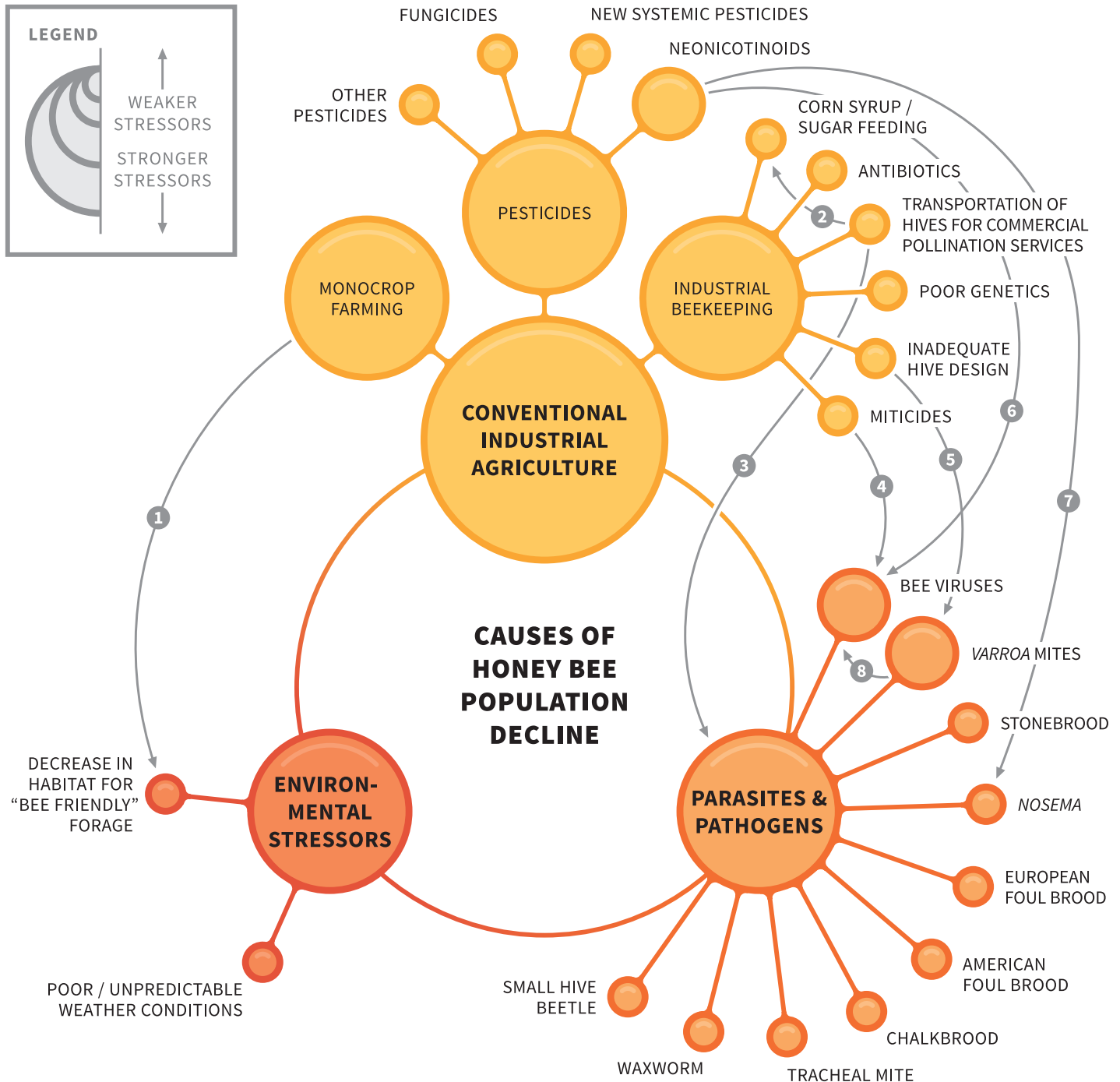
In 2013 I was awarded one of the first Dow Sustainability Fellowships at the University of Michigan. I used this opportunity to request a visit to Dow Chemical headquarters. I was informed that such visits had been open to the public in the past, but had been terminated as a precautionary measure after the 9/11 attacks of 2001. I, along with five other fellows, each representing the schools of Public Health, Public Policy, Law, Business, and Natural Resources and Environment, traveled to Midland, Michigan for our private tour. Upon arrival, our van was escorted through an anti-terrorist checkpoint, and parked in a secured area. We were asked to exit the vehicle and enter a security station; at which point all cell phone cameras were promptly censored. We were then transferred in a secured Dow vehicle, and brought to the Environmental Health and Sustainability building. We were given presentations by members of Dow Chemicals executive sustainability committee and served a lunch of Jimmy John Sandwiches on styrofoam plates. After lunch, executive presentations continued. A Q&A period was offered, and I used the opportunity to explain my work in Social Practice, and ask the committee questions about Dow's production of Sulfoxaflor - a systemic pesticide that many link to massive honeybee die offs. My question was not well received, and I received a sharp tone rebuttal from the Vice President. The Q&A period was promptly ended with members of the executive committee quickly leaving the room. Following the Q&A, we were given an extensive walk through Dow's animal testing facilities. The experience was traumatic as every device, protocol, and desensitized story about animal treatment was shared with us.

Prior to our tour of the testing facilities we had been informed that 90% of the materials in our phones were Dow Chemical products, as were the majority of plastics, resins, and other materials to be found on almost every industrial product we use in our daily lives. As a result, I became acutely aware of my deep implications in the very conditions that I was fighting against, and my levels of participation in Dow's animal testing.

Because my tools for recording the experience were censored, I relied on asking an employee with an uncensored

phone to take the only photo documentation I have from inside Dow. My excuse for having the picture taken was that as an artist I thought it would be nice to have a photo of the group in front of the only artwork I had seen inside headquarters. To support this lone photograph, I have related objects, photographs of my censored phone taken after my departure, and images reconstructed from memory. I share these artifacts with others through storytelling over a meal evocative of the one I was served at Dow headquarters. My intentions for the work are to share with others the tremendous complexity of dealing with issues of sustainability and our widespread participation in a system that we may otherwise righteously refute.

**PROTECTING OUR
FOOD SYSTEMS**



CONNECTIONS BETWEEN STRESSORS

- 1 **Monocrop farming ► decrease in habitat.** Can create “food deserts” when the crop does not provide forage for the bees, or when a crop that does provide forage is not flowering. Also tends to eliminate uncultivated habitat that provides diverse forage for bees.
- 2 **Transportation of hives ► corn syrup/sugar feeding.** Beekeepers often feed the bees corn syrup or sugar mixtures while they are in transit and unable to forage.
- 3 **Transportation of hives ► parasites & pathogens.** Facilitates rapid and geographically broad transmission of bee parasites and pathogens to previously uninfected bees.
- 4 **Miticides ► bee viruses.** May increase honey bees’ susceptibility to viruses (Locke et al. 2012).
- 5 **Inadequate hive design ► Varroa mites.** The typical honeycomb foundation pattern used in industrial beekeeping has been found to facilitate *Varroa* infestation (Piccirillo and De Jong 2003).
- 6 **Neonicotinoids ► bee viruses.** Can increase honey bees’ susceptibility to viruses by weakening their immune systems (Di Prisco et al. 2013; Doublet et al. in press).
- 7 **Neonicotinoids ► Nosema.** Can increase the severity of honey bees’ infection with the microsporidian *Nosema* (Doublet et al. in press).
- 8 **Varroa mites ► bee viruses.** Serve as a mechanical and biological vector for viruses. The mites provide viruses an entry point into bees’ bodies and help transmit viruses between bees (Martin et al. 2012).

Protecting Our Food Systems. 2013 - 2014

Collaborative research project and policy paper with Michelle Fournier and Jenny Cooper.

In 2013 I formed an interdisciplinary team of graduate students from The Ross School of Business, The School of Natural Resources and Environment, and the Ford School of Public Policy. Our task was to demystify and visualize the complex web of stressors that were causing massive honeybee die off in the United States. The research project lasted a year, and included research trips around the country, discussions with honeybee researchers, both large and small scale beekeepers, lawyers, pesticide company toxicologists, and policy makers. The result was a white paper that was published in the Michigan Journal of Public Affairs entitled *Protecting Our Food Systems*. Just prior to publication, we received a request from the White House to review our material. Several months later, President Obama issued a memorandum called *Creating a Federal Strategy to Promote the Health of Honey Bees and Other Pollinators*. In it, Obama calls for federal policy changes in regards to creating “be-friendly” habitat, many of which fall in line with the proposals we had suggested in our paper. Furthermore, prior to our paper, there had been no publicly available diagram that presented the larger and more complex web of causality that was leading to honeybee population decline. As a result, our paper actively worked to demystify a highly complex and opaque phenomenon into a visually legible and transparent condition.

LET'S EAT FUKUSHIMA



Let's Eat Fukushima, 2014.

Gyoza, Peaches, Ceramic Plates, Chop Sticks, Napkins.

In 2014 I received a Smucker-Wagstaff grant to travel to Fukushima, Japan, to study what the effects of the Fukushima Daiichi disaster had on Japanese food systems. As a child of the West Coast with a deep family history in Japan, I had been deeply affected by the Tohoku earthquake of 2011, and the subsequent Fukushima Daiichi nuclear power plant meltdown. For both Japanese and Americans alike, the realities of life in Japan post 3/11, and the future of food systems in both countries were a complete mystery. As a result, I felt deeply compelled to go to Fukushima, see the situation for myself, and grapple with the realities firsthand. I had been drawn to the trip based on a similar research trip to New Orleans I had taken with Matt Coolidge of CLUI only a year after hurricane Katrina had raged through southern Louisiana. The trip had been a deeply influential experience in my ability to “know” a place despite what popular media might describe. Therefore, I traveled to Japan and spent a week meeting with average citizens, political activists, and farmers, and visited sites that ranged from contaminated peach orchards outside of Fukushima City, to Tepco Headquarters in Tokyo.

Like my experience at Dow Chemical headquarters, my trip to Fukushima revealed the tremendous complexities of sustainability and environmental catastrophe. As a way of sharing my insights with others, I prepare a lunch centered on pre-3/11 Fukushima foodways. Prior to 3/11 Fukushima was largely known for two culinary attractions: Dumplings (called Gyoza in Japanese) and Peaches. Because of the Daiichi disaster, food from Fukushima has largely been presumed toxic, ultimately casting a larger shadow over the regions proud tradition of foodways and its cultural sense of self. As a result, I prepare Gyoza and peaches to share with others, and use the meal to share my understanding of post 3/11 foodsystems, and my experience in Fukushima.

TROPHALLAXIS



TROPHALLAXIS



Trophallaxis

Performative honey tasting. Honey, Surveys, Zines, Buttons.

As part of my final thesis exhibition I presented a performative honey tasting called Trophallaxis. In scientific terms, trophallaxis is the transfer of food or other fluids among members of a community through mouth-to-mouth (stomodaeal) feeding. It is most highly developed in social insects such as ants, termites, wasps and honeybees. In honeybee society, trophallaxis is an essential form of communication among workers to share both internal and external conditions to/of the hive. I put this phenomena into play by asking the following questions:

Are humans capable of interspecies trophallaxis with bees?

What does putting the honey that comes from a honeybee's mouth into our own communicate?

Can interspecies trophallaxis communicate conditions of our shared environment with bees?

Could interspecies trophallaxis regulate our own engagement with the outside world and each other?

During the performance participants were offered a survey sheet that asked them questions about their honey consumption habits and knowledge of current honey production conditions. While many assumed that the survey was for me, my intentions for the survey were to offer a self-reflexive moment for participants to realize how much – or how little – they knew about bees and honey. I presented three kinds of honey, each of them different than the other by color, texture, taste, color, and smell. I asked participants to taste, look, and smell each of the honeys, and for them to describe and rate the quality of their tasting experience for each sample – to judge their full aesthetic experience of honey. After participants made their selections, I described each honey in terms of its implications in the larger industrialized food and economic systems. My intentions for the piece was to try and connect taste to politics for participants, and to demystify intentionally concealed realities and to reveal alternative truths. Ultimately, the project was the physical encounter of the research I had done in Protecting Our Food Systems, with an intention to shape the perception of individuals separately rather than shape the social-material of public policy.

**SECTION IVc:
PRACTICE**

Social Craft as Pedagogical Activism

**ON BECOMING
A
HUMAN HONEYBEE**





On Becoming a Human Honey Bee, 2013 - Ongoing.

As a response to the recent honeybee population declines, I have dedicated myself to the plight of the honeybee and focused on understanding honeybee behavior, beekeeping history, and the honeybee's relationship to humankind. I have studied the various social behaviors that honeybees exhibit, including nursing, feeding, guarding, and physical communication. As a result of my studies, I have begun an active campaign to spread awareness about the plight of the honeybee, emulating honeybee behavior as a framework for my actions. In the spirit of colony reproduction, *On Becoming a Human Honeybee* seeks to create intergenerational efforts to correct honeybee population decline. As a result, I have become an active member in the broader American beekeeping community by conducting research on honeybee population declines, co-developing the University of Michigan beekeeping program (UMBees), organizing public discussion on the importance of pollinators, reviving apicultural techniques such as bee hunting and apitherapy, and most importantly by communication with anyone about bees.

**A TOUR OF
THE ROSS SCHOOL OF BUSINESS
ART COLLECTION**





A Tour of the Ross School of Business Art Collection, 2014.

Detail of discussing didactic associated with Joseph Beuys Print Creativity = Capital

In 2014, the Ross School of Business at the University of Michigan, moved a 250 year old Burr Oak 500 feet to make room for an architectural addition. The moving of the oak, which had been originally scheduled to be cut down, incited unrest among the environmentally minded students, faculty, and staff on campus, and called the school's "sustainability" values into question. In response, Ross tried to appease the community by moving the tree at a cost of \$400,000. Such a lavish expense not only enrage the community more, but presented deep ethical questions on issues of sustainability. The tree was moved, its possibility for survival questionable, with a large number of students locked in a permanent state of anguish over the matter.³² While I myself was disturbed by such a move, the gesture seemed reminiscent of how a collector might thoughtfully move a sculpture to make room for a new couch or television.

Fortunately, because of my interdisciplinary practice, and extended network of students throughout the various schools on campus, I was invited by a group of graduate students to give a tour of the Ross art collection. While the invitation was made in the absence of any criticality of the oak tree, I used the tour as an opportunity to educate fellow graduate students on the themes of "Art," "The Environment," "Society," and "Intervention" already present in the collection, with the intention of framing the oak within a larger discourse of relational aesthetics.

A Tour of the Ross School of Business' Art Collection, 2014.

Detail of group discussing the movement of the Ross Oak as a "Social Sculpture"

While the tour took every opportunity to point out the oddities in the school's relationship to the art and the environment, including pointing out a Starbucks placed in front of a work by Lita Albuquerque, it also pointed to the work of Nikki Lee and Joseph Beuys as examples of artists who create interventions and participate in socially engaged work, offering a moment of reflection for the audience to realize I was attempting the same methods. Of particular importance was my discussion of Beuy's use of the term "Social Sculpture", his philosophy of oaks as

32 This thesis has been written in the midst of the tree's recovery time. It is yet to be determined if the tree wil survive.

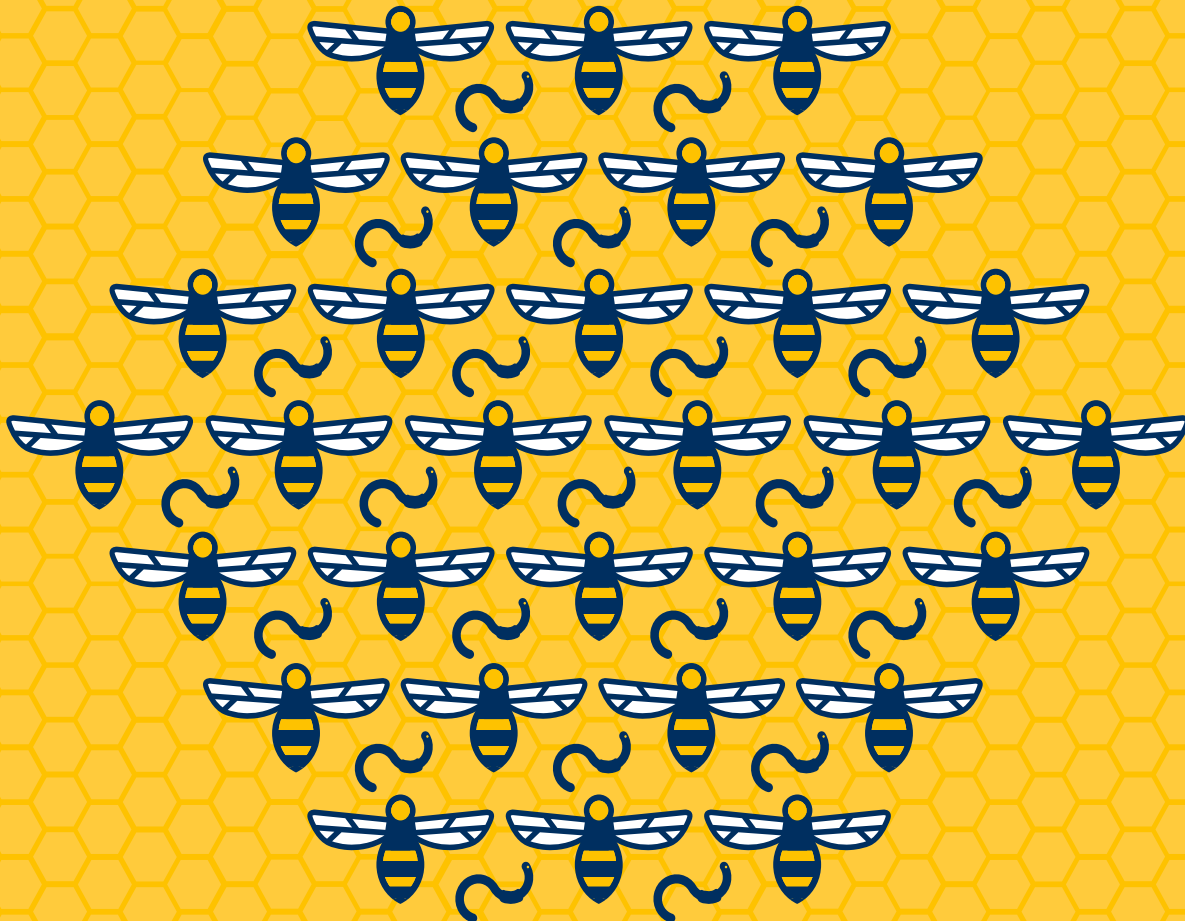
druidian sculpture, and his landmark project 7000 Oaks. This history primed my audience for the surprise work of the tour: the moved oak.

Because I had framed the moving of the oak within the themes already present in the schools collection, and informed its move with Beuy's own notions of sculpture, I was able to open a discussion of the tree that went beyond anguish and into debate. Through this debate students were able to have a thoughtful discussion on what the criteria for both art and sustainability are. Collectively we worked through the moving of the oak as a relational work, and consequently were able to have a more complex discussion on the often challenging nuances within the discourse of sustainability and capitalism. Ultimately, the entire process felt both pleasurable and cathartic, a form of nurturing with only one or two of the participants eventually acknowledging they had been involved in a form of my Social Craft.

**LIVING WITH
A SYMPOSIUM**

LIVING WITH

A DAY OF INTERDISCIPLINARY TALKS FOCUSED ON THE SUBJECT OF LIVING IN HARMONY WITH BOTH HUMAN AND NON-HUMAN LIVING BEINGS. LIVING WITH WILL LARGELY FOCUS ON THE IMPORTANCE OF URBAN AGRICULTURE, ROOFTOP BEEKEEPING, AND ARTISTIC APPROACHES TO LIVING WITH BOTH EARTHWORMS AND HONEYBEES.



SATURDAY, APRIL 11TH, 1-5 P.M.
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UNIVERSITY OF MICHIGAN



How do we become better
guests/hosts?



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LIVING WITH was an interdisciplinary symposium and workshop focused on the subject of living in harmony with both human and non-human living beings. LIVING WITH focused on the importance of urban agriculture, rooftop beekeeping, and artistic approaches to living with both earthworms and honeybees. The symposium featured talks by Chicago-based rooftop beekeeper Michael Thompson and Ohio-based artist Amy Youngs. Thompson presented a long-view history of beekeeping that contextualized the mystic origins of beekeeping and the art associated with, and of, beekeeping, within his own practice as a rooftop beekeeper working with previously incarcerated citizens. Youngs gave a presentation on her artwork and focused on the larger notion of “living with” other organisms as a foundational aspect of her practice. The conditions for experiencing the symposium were highly considered as well, from local vegan cookies for attendants, to a farm-to-table dinner for the guest speakers. I opened the symposium with Linda Hogan’s poem *Innocence*, and closed the event with Marge Piercy’s poem *To be of use*. The intention of the project was to facilitate a dialogue and to craft conditions that would inspire participants to pursue alternate forms of living based on interspecies co-habitation and cooperation.

SECTION V: CONCLUSION

Pause. And Begin Again.

Conclusion

The problem is not with People's taste, but with defining art as one thing only. Art is that which functions as aesthetic experience for you. If a certain art works that way for enough people, there is consensus; that becomes art... That which we feel is worth devoting one's life to and whose value cannot be proven, that is art.

-Lucy Lippard

My practice draws upon a variety of methods: ceramics, gardening, beekeeping, cooking, neon, sculptural objects, and social situations. While such a plurality of techniques may seem illegible as a consistent practice upon first glance, I contend that a variety of methods are required to adequately approach a philosophy of Social Craft – a practice that must inherently respond to a wide variety of conditions. Such forms point to what Lucy Lippard describes as inherently feminist values:

“Collaboration, dialogue, a constant questioning of aesthetic and social assumptions, and a new respect for audience.... The contribution of such feminist values reveal themselves not in the evolution of shapes but rather in structures, and therefore the meaning of art in society... We take for granted that making art is not simply ‘expressing oneself’ but is a far broader and more important task – expressing oneself as a member of a larger unity, or comm/unity, so that in speaking for oneself one is also speaking for those who cannot speak.”³³

My intention is to work in the liminal space between art and life, to speak for and with those who cannot speak, and to use of a wide variety of materials and methods to do so. Such an approach points to what Lippard identifies as a favorite feminist metaphor: the collage aesthetic: “the web, or network, or quilt as an image of connectiveness, inclusiveness and integration” – what I describe as both a breakdown of barriers and the construction of a hospitable matrix. Such a breakdown defies the structures that isolate the artist in a studio as a laborer of style and as a slave to a singular production in the names of efficiency, packaging, and the market. Tragically, as New York Times critic Holland Cotter has noted, such conditions, despite their destructive capacities to artists, communities,

and culture, and have remerged as the norm in light of neoliberal hegemony and global capital. In response, Cotter
33 Lippard, Lucy R. 1995. *The Pink Glass Swan: Selected Essays on Feminist Art*. viii, 342 p. New York: New Press.

has called on a new generation of artists to “learn that art and politics are inseparable, and both can be anything and everything” and that such an understanding will be essential to “bring art back from the brink of in consequence.” In response to Cotter and Lippard, I assert that I, like every other living being, have many capacities, and I choose to share all of them with others as a way of living in the complexities of every daily life.

At times a literal sign may suffice to call into question the narratives that exist just beneath the surface, framing and directing our thoughts and behaviors. At other times I will respond by making space for others, to engage my audience in conversations, and to feed them as a strategy to engaging their beliefs within a heightened and considered aesthetic experience. In certain instances my work may simply be the experience of a situation itself with the intention of developing awareness in my audience to their relationship to the larger environmental conditions that surround them. The conditions for sharing my practice are not limited either; a gallery, a boardroom, and an open meadow are all equal in value –they differ only in that each offers a specific set of experiential conditions that I can utilize as different qualities of encounter. In a gallery I can utilize the conditions that make my audience vulnerable to a heightened aesthetic experience. In spaces outside the gallery, I use the experience of everyday life as a material to work with, crafting experiences that may alter the perception of an audience that is likely unaware that they are always in attendance. Such a practice is always engaging a meta-figure-ground relationship: the citizen as a figure who occupies a precarious position on a ground of social, environmental, economic, and political conditions. Composing the relationship between citizen and environment is the ever-present work of the activist-artist.

While I assert my notions of Social Craft will be essential for the transformation of our society in preparation for the great transition, I recognize that such desires as mutual respect, empathy, intimacy, and vulnerability, are difficult tasks for most humans to pursue as a constant way of being. Although I remain optimistic, it is still questionable if we, as a species, will in fact make the necessary leap - the direction we will take going forward is certainly yet to be determined. Every day I wake to a barrage of natural and synthetic information that assures me the end is most certainly near. Such messages cause many to be frightful of collapse and apathetic under the oppression of their anxiety - or inability - to see a precedent for revolutionary change. Business as usual moves

forward with the tint of the money it seeks to acquire. Meanwhile, the green tech movement continues to expand, growing ever short of reaching a sufficient capacity, minimizing the deep changes required in human behavior for our species to survive the coming century. And there is of course the Techno-Explosion - i.e. space colonization, gene therapy, transhumanism, and singularity - a future which transcends any environmental boundaries that global warming, rising oceans, or the ramifications of toxic waste presents us: life everlasting modeled in the science fiction of Kim Stanley Robinson's 2312. Based on current trajectories in biotechnology, perhaps my metaphor of becoming a human honeybee could actually become a biophysical reality, one in which trans-genic, trans-species, and trans-human realities become the norm – the realization of a Moreauian dream to throw us beyond our human limitations.

It pains me to accept my vision as utopian; that a thoughtfully crafted future can only exist as a representation of an artist's speculative dream. I refuse to accept such dismissal. I stand firm in my conviction that the artist's craft - to see the unseen, to reveal the hidden truths buried beneath the surface of an incidental encounter, and to reflect a more positive vision back to those living in a grim reality - is the practice that will empower others to thoughtfully shape and refine a peaceable future.

It is my conviction that we have it within us to evolve into what we need to become, so that the human spirit will not only stay alive, but also grow to live in harmony with the rest of the natural world. Humankind's pursuits of perfect platonic order, while ultimately fraught, and laden with disaster, may perhaps be the very pursuit that holds the ember of our salvation. The proto-Beat anarchist poet Kenneth Patchen perhaps articulated this best in the closing stanza of his 1943 poem *What is the Beautiful*:³⁴

I believe in the truth.

I believe that every good thought I have,

All men shall have.

34 Patchen, Kenneth. 1968. *Collected Poems*. Fifth or Later Edition edition. New York: New Directions Publishing.

I believe that what is best in me,

Shall be found in every man.

I believe that only the beautiful

Shall survive on the earth.

I believe that the perfect shape of everything

Has been prepared;

And, that we do not fit our own

Is of little consequence.

Man beckons to man on this terrible road.

I believe that we are going into the darkness now;

Hundreds of years will pass before the light

Shines over the world of all men...

And I am blinded by its splendor.

Pause.

And begin again.

The environmental turbulence we now encounter is clearly an opportunity to pause in our trajectory in development, and offers the opportunity to reevaluate our approach to the future. The time has clearly come to practice deep hospitality on the planet. As Kim Stanley Robinson has noted, civilization's middle way between catastrophe and utopia simply does not work anymore. It's now Utopia or nothing.

Will we change our narratives in time to tell a new story of how humans embraced "Living With" rather than "Living Over" as a central theme of our new existence? Will we take this moment to begin again as a new and nurturing species? Time will tell.

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