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As if This Is Home

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Abstract

In *Doughnut Economics: Seven Ways to Think Like a 21st-Century Economist* (2017), economist Kate Raworth calls for the need to recreate or re-recognize ties between economic activities and complex social, biological, and cultural systems. Such re-integration, she argues, is the foundation of a necessary shift from extractive to regenerative systems. In this paper I discuss some of the critical challenges and compelling possibilities that arise when we try to imagine how human self-understanding could be integrated with regenerative practices. Throughout, I focus on co-constitution or mutual causality as a key dynamic that connects Raworth's "seven ways," Buddhist epistemology, and permaculture practices.

Keywords: Kate Raworth, Buddhist Economics, Regenerative Systems, Permaculture, Mutual Causality

Introduction: Households

For some time, I have been interested in connections between human self-perceptions (or self-projections) and the ways that we organize exchange of things we value, including ideas. A classic take-off point is Marcel Mauss's theory that human development of networks of exchange began with relatively small groups embedded in systems that he called "total social phenomena." This meant lived worlds where economic, social, and sacred ties were not separated. In a similar spirit of recognizing economic relations embedded in multiple interwoven fields of practice, in *Doughnut Economics: Seven Ways to Think Like a 21st-Century Economist*, economist Kate Raworth calls for the need to recreate or re-recognize ties between economic activities and complex social, biological, and cultural systems. Such re-integration, she argues, is the foundation of a necessary shift from extractive to regenerative systems. She writes:

> When political economy was split up into political philosophy and economic science in the late nineteenth century, it opened up what the philosopher Michael Sandel has called a "moral vacancy" at the heart of public policymaking. Today economists and politicians debate with confident ease in the name of economic efficiency, productivity and growth—as if those values were self-explanatory—while hesitating to speak of justice, fairness and rights.

> Talking about values and goals is a lost art waiting to be revived.[1]

Though "the economy" has become a fetishized rationalization for extractive and exploitative behaviour, the circulation of goods, services, and cultural practices was not always oriented toward growth of profits. As both Mauss and Raworth point out, the art of economics has roots in human organization around hearth and household. Raworth notes: "The word *economics* was coined by the philosopher Xenophon in Ancient Greece. Combining *oikos* meaning household with *nomos* meaning rules or norms, he invented the art of household management, and it could not be more relevant today."[2]

Today, whether we recognize it or not, the multicultural global economy is the hearth around which most households are organized. At the same time, we are becoming ever more aware that we have created a Burning House akin to the death-trap vividly evoked in the *Lotus Sutra*. This awareness—though most climate-change science points to the grim likelihood that it is too little, too late—is finally generating a sense of urgency about the need for collective action. Though we have not yet been able to institute a global regulatory system, a global sense of "household," there have been increasingly visible attempts to organize global protests against destructive practices. There are also increasingly viable experiments in small-scale networks of households organized around regenerative systems. Complementing these grassroots protests and experiments, theorists in a number of disciplines[3] have converged in the call to discard mechanical models and adopt complex-systems models. In economic terms, this would entail shifting away from linear, "growth"

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[1] Raworth, *Doughnut Economics*, 36.

[2] Raworth, *Doughnut Economics*, 4.

[3] The list is long, but those who have influenced me include Joanna Macy, Isabelle Stengers, Bruno Latour, Timothy Ingold, Elinor Ostrom, and Joseph Stiglitz.

models dependent on non-renewable extractive practices, and moving toward collective participation in cyclical regenerative systems.

In this paper I focus on two different kinds of practice-oriented models of regenerative systems, Raworth's "Donut Economics" and permaculture principles as inspired by Geoff Lawton. Neither model is Buddhist, but both are permeable to Buddhist practices. By "Buddhist practices" here I am drawing from principles of Buddhist epistemology as debated in Madhyamaka and Yogācāra contexts.[4] I focus on the principle of mutual causality and the co-constitution of subject/object, foundational for Buddhist articulation of path-schemes aimed toward direct nondual perception. I discuss some of the critical challenges that arise when we try to imagine how a path toward human self-understanding could be integrated into an art of regenerative economics.

Part-playfully and part-mournfully, I offer these models and debates as contributions to a new bodhisattva field, that of the "Earthstore-Householder Bodhisattva" (*Dizang zaijia pusa* 地藏在家菩薩). I am calling this a "new field" because, as Raworth argues, we humans have never before been forced to try to override our cumulative history of survival skills, in order to survive. If, as Bruno Latour says, "we have never been modern," perhaps true modernity would entail a radically new notion of the human household.

Yet this "newness" is also humanity as self-imagined in a venerable tradition. I refer to a homology that has echoed through the halls of Chinese Buddhism over the centuries: *ren* 忍, forbearance, the first stage in the bodhisattva-path,[5] is linked to *ren* 人, humanity, through the prac-

[4] I am not able to go into any great detail here, but please refer to the chapter on Yogācāra in Adamek, *Practicescapes*, for a survey of selected relevant sources.

[5] On a technical note, one must distinguish 1) *rendi* 忍地, the first *bhūmi* (ground, stage) of the ten-stage bodhisattva path, the ground of endurance or forbearance, also called

tice of *ren* 仁, human-heartedness. In terms of Buddhist values, this means (freely interpreted) that the ability to recognize ourselves in others (and vice-versa) and forebear is essential to the bodhisattva path. Or, as Confucian values would have it, we should not treat others as we ourselves would not want to be treated. The *Daxue* 大學 (Great Learning) posits rectification of the mind and the household as epicenters of an expanding sphere through which the world may find order, peace and prosperity. Blending these Buddhist and Confucian values is integral to *renjian fojiao* 人間佛教 "Buddhism for the Human World," the twentieth-century reformist movement spearheaded by Master Taixu 太虛 (1890-1947) and implemented by Master Shengyan 聖嚴 (1931-2009), among others. And it was Master Shengyan's heirs in the Dharma Drum Vancouver Center who hosted the workshop from which the papers in this volume were drawn.

In the next section, I first introduce Kate Raworth's "Donut Economics" and then discuss her use of "systems thinking" to propose new models of economic activity. In the second part of the paper, I relate my own limited experience of permaculture principles as an example of systems thinking, with a focus on the notion of life as "anti-entropic."

Why is this "Buddhist?" Integral to systems or process-oriented approaches is critique of conceptual construction of individual "subjects" as independent agents, able to manipulate "objects" that are correspondingly projected as wholly separate and external. Such conceptual separation is increasingly recognized as delusional with harmful effects. Counteractive methods of intersubjective reorientation in various fields have been noted, by Joanna Macy among others, as comparable to Bud-

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the ground of joy (*pramuditā*); and 2) acceptance of the non-production of dharmas (*wusheng ren* 無生忍), the non-retrogressive stage usually associated with the eighth *bhūmi* and above.

dhist practices to break down attachment to a conceptually constructed separate self.[6] I close with some reflections on the challenges involved in rethinking our household economies in terms of co-constitution and complex processes that deconstruct the conceptual dominance of "rational economic man."

Donut Economics

Overview

"Rational economic man" or *Homo economicus* is a conceit that Raworth targets throughout her work. Raworth was educated at Oxford, with a Master of Science in Economics for Development. Her career has included direct involvement in practical approaches to economic development. She worked with micro-entrepreneurs in rural Zanzibar, co-authored the Human Development Report for the U.N. Development Program, and worked as a Senior Researcher for Oxfam. She is currently a senior research associate at the Cambridge Institute for Sustainability Leadership.

Her key point is that "economics" as it is practiced today is based on illusions, and very damaging ones. These illusions, she argues, are perpetuated in the ways that economics is taught. Summarizing and critiquing the history of the notion of *Homo economicus*, an iconic and even cartoonish portrait of humans as fundamentally individualistic, self-interested, and rationally calculating, she concludes: "There are, most

[6] Among the many relevant authors whose work I do not have space to detail here, please see Daniels, "Buddhist Economics;" Hershock, *Valuing Diversity*; Ingold, *Being Alive*; Kaza, *Hooked!*; Latour, *Down to Earth*; Loy, *Lack and Transcendence*; Macy, *The Dharma of Natural Systems*; Magnuson, *From Greed to Wellbeing*; Zsolnai, *Ethical Principles* (see also the Bibliography of Buddhist Economics included in the last-listed work).

likely, going to be more than 10 billion of us by 2100. If we head towards that future continuing to imagine, conduct and justify ourselves as *Homo economicus*—solitary, calculating, competing and insatiable—then we stand little chance of meeting the human rights of all within the means of our living planet."[7] The problem is that the successful marketing of this illusion has real, deleterious effects on human behavior: "Beyond attracting self-interested people, however, studying *Homo economicus* can alter us too, reshaping who we think we are and how we should behave."[8]

Raworth identifies one of the major architects of this hubristic illusion: Paul Samuelson (1925-2009), the MIT economist who "drew economics" and simplified the dismal science in such a way that social and environmental costs did not enter into the picture. Raworth analyzes the work (and damage) done by Samuelson's famous "Circular Flow Diagram," which depicts technology and innovation creating pure "input" that pumps through the plumbing system of the economy, generating investment that pushes along wages and interest, savings by the public that stimulates consumption and pumps up businesses, all neatly circulating back into technology and investment.[9] She comments:

> The trouble, however, lies in what it leaves invisible. . . . It makes no mention of the energy and materials on which economic activity depends, nor of the society within which those activities take place: they are simply missing from its cast of characters. Did Samuelson omit them on

[7] Raworth, *Doughnut Economics*, 82.

[8] Raworth, *Doughnut Economics*, 86.

[9] Raworth, *Doughnut Economics*, 17. A diagram is included in Raworth's work, but due to copyright restrictions I cannot reproduce it here. An interactive diagram is accessible through the following link to her Web site: "Kate Raworth: exploring doughnut economics" at https://www.kateraworth.com/doughnut/

> purpose? Unlikely: he was, after all, merely intent on illustrating the flow of income, and so they literally didn't come into the picture. But with that, the stage was set.[10]

Thus, Samuelson's tidy image conveniently leaves out "externalities" like environmental degradation that is left for governments/taxpayers to clean up (or not), and taxpayer support for the infrastructure and employee education upon which businesses depend. Moreover, Raworth highlights a major non-wage invisible input into any functioning economy: women's work. She characterizes it as the unacknowledged core of our economies:

> That work is known by many names: unpaid caring work, the reproductive economy, the love economy, the second economy. However, as economist Neva Goodwin has pointed out, far from being secondary, it is actually the 'core economy', and it comes first every day, sustaining the essentials of family and social life with the universal human resources of time, knowledge, skill, care, empathy, teaching and reciprocity.[11]

Raworth's contrasting inclusive "Donut" model is also circular,[12] but unlike Samuelson's Circular Flow Diagram it is human-hearted (*ren* 仁), not mechanistic. As indicated in her title, the "Donut" is an image of a ring that is the "safe and just space for humanity," in between the limit-conditions of critical human deprivation and critical planetary degradation. Raworth's training and her practical work on developing economies enables her to provide much concrete detail and many compelling case studies. However, her experience with economic realities also

[10] Raworth, *Doughnut Economics*, 58.

[11] Raworth, *Doughnut Economics*, 68.

[12] Raworth, *Doughnut Economics*, 9.

grounds her suggestions for reform in a sobering recognition of the steep learning-curve ahead. For this is Raworth's stark assessment: "Here's the conundrum: No country has ever ended human deprivation without a growing economy. And no country has ever ended ecological degradation with one."[13]

In other words, a "safe and just space" or new field of practice in which humanity cares for its living matrix may never be realized. Human comfort-zones have always depended on non-renewable resources and unsustainable growth, but the magnitude and pace of that destructive feedback loop has accelerated beyond anything previously imagined. Turning it around will entail collective effort on a scale never before attempted.

The backbone of Raworth's prescription for turning things around is alluded to in her subtitle "seven ways to think like a twenty-first century economist." These seven ways structure her detail-packed core chapters. Illustrated by an overview and chart at the end of her introductory chapter, they may be summarized as follows:[14]

> 1. "Change the goal" from expanding GDP/national output to "meeting the human rights of every person within the means of our life-giving planet."
>
> 2. "See the big picture" by embedding economics within society and nature.
>
> 3. "Nurture human nature" by moving past the control-oriented concept of "rational economic man" to recognition of humans as interdependently embedded in responsive systems.

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[13] Raworth, *Doughnut Economics*, 208.

[14] See Raworth, *Doughnut Economics*, 22-26.

> 4. "Get savvy with systems" by moving away from failed economic models of mechanistic control and integrating instead the systems thinking that would enable humans to become successful stewards of ever-evolving dynamic complexity.
>
> 5. "Design to distribute" by recognizing economic inequality as a design failure, not an economic necessity. Better economic designs would be better at distributing value throughout the system that generates it.
>
> 6. "Create to regenerate" by recognizing that ecological degradation is the result of degenerative industrial design. Economic systems can be designed to be regenerative and circular, rather than linear (and, I would add, entropic).
>
> 7. "Be agnostic about growth," because the current mainstream addiction to a fantasy of unlimited growth is unsustainable.

While "rational economic man" is a creature of the Circular Flow Diagram, Raworth proposes a new image of humanity within a new model, the "Embedded Economy." This model is based on a more accurate portrait of humans as social and reciprocating, fluid in values, interdependent, approximating rather than calculating, and embedded in a web of life.[15]

Systems Savvy and Dynamic Complexity

Raworth formulates her arguments, critiques, and practical approaches on the basis of systems thinking, a general term for multidisciplinary approaches to complex, interdependent and regenerative systems. She

[15] Raworth, *Doughnut Economics*, 88-100.

summarizes the arguments of Warren Weaver, Natural Sciences Director at the Rockefeller Foundation and an early adopter (1948) of complexity awareness:

> At one extreme lie problems of simplicity, involving just one or two variables in linear causality—a rolling billiard ball, a falling apple, an orbiting planet—and Newton's laws of classical mechanics do a great job of explaining these. At the other extreme, he wrote, are problems of disordered complexity involving the random movement of billions of variables—such as the motion of molecules in a gas—and these are best analysed using statistics and probability theory.
>
> In between these two branches of science, however, lies a vast and fascinating realm: problems of organised complexity, which involve a sizeable number of variables that are 'interrelated in an organic whole' to create a complex but organised system. Weaver's examples came close to asking the very questions that Newton's apple failed to prompt.[16]

Raworth identifies three key elements of systems thinking: stocks and flows, feedback loops, and delay. She characterizes stocks and flows as the "stuff" of any system, feedback loops as their connections, and delay as the key characteristic of expression of feedback in stocks and flows.[17] Understanding delayed effects in multilevel complex systems is critical to human potential to work effectively within the ultimately closed system of the Earth:

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[16] Raworth, *Doughnut Economics*, 117.

[17] Raworth, *Doughnut Economics*, 118-120.

> Delays such as this—between inflows and outflows—are common in systems and can have big effects. Sometimes they bring useful stability to a system, allowing stocks to build up and act as buffers or shock absorbers: think energy stored in a battery, food in the cupboard or savings in the bank. But stock–flow delays can produce system stubbornness too: no matter how much effort gets put in, it takes time to, say, reforest a hillside, build trust in a community, or improve a school's exam grades. And delay can generate big oscillations when systems are slow to respond.[18]

Thus, many effects that appear to be sudden are better understood as manifestations of change that has already happened, eruptions from long-developing underlying causes and conditions. As the effects of human actions become ever more globally entangled, reaching from the subarctic world of plankton into the digital realm of derivatives, dynamic feedback loops become ever more unstable, and the amplitude of surges and crashes increases. Raworth quotes systems theorist Donella Meadows:

> Let's face it, the universe is messy. It is nonlinear, turbulent, and chaotic. It is dynamic. It spends its time in transient behaviour on its way to somewhere else, not in mathematically neat equilibria. It self-organises and evolves. It creates diversity, not uniformity. That's what makes the world interesting, that's what makes it beautiful, and that's what makes it work.[19]

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[18] Raworth, *Doughnut Economics*, 121.

[19] Raworth, *Doughnut Economics*, 181 (quoting Meadows, *Thinking in Systems*).

Human agency in this closed system has evolved to the point where our preference for uniformity and control has short-circuited its self-organizing relationships, leading to multiple-systems collapse. Yet Raworth highlights the work of those who argue that human agency can also lead us out of the mess:

> In their book *The Gardens of Democracy*, Eric Lui and Nick Hanauer argue that moving from 'machinebrain' to 'gardenbrain' thinking calls for a simultaneous shift away from believing that things will self-regulate to realising that things need stewarding. 'To be a gardener is not to let nature take its course; it is to tend,' they write. 'Gardeners don't make plants grow but they do create conditions where plants can thrive and they do make judgments about what should and shouldn't be in the garden.' That is why economic gardeners must throw themselves in, nurturing, selecting, repotting, grafting, pruning and weeding the plants as they grow and mature.[20]

As we head into the next section on permaculture principles, the "economic gardeners" metaphor becomes more concrete. Moreover, permaculture is based on a principle Raworth quotes from Donella Meadows: "pay attention to the value of what's already there."[21] In this vein, Raworth proposes a kind of Hippocratic Oath for would-be gardeners (or householders) of complex systems:

> First, act in service to human prosperity in a flourishing web of life, recognising all that it depends upon. Second, respect autonomy in the communities that you serve by ensuring their engagement and consent, while ever aware

[20] Raworth, *Doughnut Economics*, 135.

[21] Raworth, *Doughnut Economics*, 136.

> of the inequalities and differences that may lie within them. Third, be prudential in policymaking, seeking to minimise the risk of harm—especially to the most vulnerable—in the face of uncertainty. Lastly, work with humility, by making transparent the assumptions and shortcomings of your models, and by recognising alternative economic perspectives and tools. Principles such as these may one day be included in an Economist's Oath, to be recited by aspiring professionals upon graduation.[22]

Permaculture

Principles

Permaculture is an ideal of stewardship of complex regenerative systems in order to produce food, and many of the methods for twenty-first century economists as proposed by Raworth could also apply to permaculturists. For example, Raworth discusses the contrast between "extraction" versus "layering" in systems design. "Extraction" refers to the classic reductionist mode of economic design (like clear-cut logging) focussed on "creating just one form of value— financial— for just one interest group: shareholders."[23] Regenerative "layering" economic design instead recognizes the value of what is already there (like the carbon-sequestering capacity of forests) and is analogous to the permaculture principle of multiple interlocking systems design.

My engagement with layered-systems design is still largely theoretical. I have a permaculture design certificate from the Permaculture

[22] Raworth, *Doughnut Economics*, 138.

[23] Raworth, *Doughnut Economics*, 193.

Research Institute run by Geoff Lawton and his team at Zaytuna farm in Australia. This required a year of study involving over seven hundred textual and visual course materials. I am trying to work on my own small piece of land using what I learned, and it is extremely difficult. I am not yet able to do it, in part because the infrastructure is expensive. In an "embedded economy," it would make sense to share infrastructure costs with a community. However, even if there were such a community in Calgary, investing the necessary resources of my time into it would probably make it impossible for me to do my university job well. This points to the fact that our current systems are not well-layered, they tend toward compartmentalization and linear flowcharts of time and money.

Nevertheless, I venture to summarize a few rules-of-thumb I am using and discovering that could pertain to the practice of the hypothetical Earthstore-Householder Bodhisattva evoked in my introduction. I illustrate these with simple examples drawn from the regenerative systems-design experiences of myself and like-minded friends.

1) Commit attention to energy flows

One must pay sustained, daily attention to flows of energy in the system, so as to help things circulate in such a way as to produce enough food for the entire community. "The community" includes the plants and animals (including hybrids like soil fungal colonies) that provide diverse benefits to the system. This takes a lot of time. Learning curves shorten, but things always change. For example, deer that didn't eat fruit-tree bark last year might do it this year. You have to keep paying attention. This involves determined cultivation of important bodhisattva virtues: mindfulness (bare attention to bare trees in winter); forbearance (in the midst of spontaneous arising of desire to yell at any deer who wanders

by); compassion (deer are out there in the snow with nothing to eat but tree-bark while I am in here writing things about them with imported tea and chocolate at hand); and wisdom, awareness of the utter mystery of interdependence. (Why did the deer have to eat a full ring around one tree and kill it, rather than just nibbling a bit here and there from many trees and allowing them to regenerate?) (Could this be a kōan?)

2) Take birth, decay, and death as the basic media of your art/work

In this mode, entanglements with/as smelly biological life are not detached from, they are cultivated. One elementary example is that "waste" cannot be wasted; it must go back into the cycle. So learning about the safe use of humanure as fertilizer is essential. This is certainly opportunity for deep experience of nonduality: why would one conceptually project oneself as subject versus one's excrement as object? This is a question with Freudian undertones, but let's just leave it at that.

3) Be symbiotic, not parasitic

If products are taken as the only measure of value for work, then the human condition is to be a parasite, a consumer and thereby the host of parasites—fodder for "the market." However, if you consent to symbiosis, then you pay into the system with the life you receive from it. Complex and aesthetically compelling patterns of entanglement emerge, but it is not enough to simply "appreciate" the art, you have to consent to be enthralled.

For example, one autumn as the temperature dropped I began to turn over my compost pile and discovered a large pearly-gray spotted salamander. He or she was presumably enjoying the warmth of decomposition and I had inadvertently removed a lovely blanket of rotting ma-

terial. I quickly restored the compost and refrained from disturbing it again until spring. I will never be able to calculate or even approximate the distribution or diminution of benefits—did the decrease in compost-aerobics increase anything that increases salamanders? It doesn't matter. I will never forget the salamander, unique among the many beings because of our moment of mutual awareness.

4) Slow down and let yourself get entangled

Slow processes enable more entanglement, which enable more edges and "boundary conditions," which foster diversity of life, which tends to be messy. Our urge to destroy life-support systems that took many millennia to reach self-sustaining maturity ranges from burning the Amazon rainforest to our fondness for smooth lawns and neat border-walls.

I have had to learn to become fond of dandelions. As any gardener knows, they seem to want to take over everything. However, over the past three years I have observed that their enthusiasm, if left relatively unchecked, naturally gives way to greater diversity, including more nitrogen-fixers like clover and wild peas. I have learned that this is because the dandelion roots are de-acidifying and breaking up hard-packed soil.

Buddhist practices (take your pick—meditation, loving-kindness, vows, virtues, rituals), similarly slow, de-acidify one's mental habits, and break up hard-packed concepts. If only our Buddhist practice could be as prolific and determined as dandelions . . .

Anti-Entropics

Approaches like attending to flows, extending the pathways of birth and death, consenting to be part of symbiotic enthrallment, and cultivating slowness and messiness can be linked to the general proposition that living beings are exceptions to the laws of entropy. "Entropy" is the degree of disorder or randomness of interactions in a system. The second law of thermodynamics states that energy exchanges or transformations always involve loss of energy, and thus energy-interactions in a closed system tend toward entropy. Patterned energy-dynamics are integral to life, yet living beings appear to be unique in their lack of conformity to the second law. Jimena Canales, in an article on the role of cinematography in destabilizing the divide between physics and biology, recounts a key point in the history of that epistemological divide:

> Only living beings seemed to have the potential to go on and on against the second law of thermodynamics that accounted for entropy, energy loss and friction. William Thomson, known as Lord Kelvin, at first excluded vegetative action and chemical action from the laws of thermodynamics, but he eventually agreed that these could be explained in solely physical terms. The only thing he continued to exclude from those laws were living beings.[24]

The permaculture perspective is that regenerative systems behave more like living beings than closed, mechanistic systems. Like living beings, regenerative systems also defy the "law" of entropy—they recycle patterns of energy rather than running down toward random interaction or demanding non-renewable inputs in order to continue. "Ordering" principles such as modern humans have tended to conceive them—grids, bullet-points, clear boundaries, and blank spaces —are actually entropic,

[24] Canales, "Dead and Alive," 242.

because they separate things rather than cultivating circulation, entanglement, and slow process.

Attention to "anti-entropic" dynamics was part of Geoff Lawton's introduction to the permaculture design course. He emphasized that one of the crucial design principles is slowing down energy that flows through the system. He illustrated this by the flow of water, which manifests low life-form diversity and high energy at its alpine source. Water is "high energy" as it moves quickly through many small channels, but there is little life because this energy is not easily captured by life-forms.

Flow-speed decreases as water consolidates and develops the winding patterns of rivers and the collection points of pools and lakes. A low-energy pattern corresponds with increases in organic life and decay inputs, as flows converge and slow into deltas, wetlands, and reefs of immense life-diversity. Diversity is a feature of "edge conditions," the zones in between elements like forest and grassland or land and water. Energy leaves the relevant system by merging with the open ocean. This is "entropy" from the perspective of the permaculturist, who can no longer capture its flow or cultivate the life-forms that flourish along the edges of its pathways.

In the book I'm currently working on, I track this principle—that the dynamics of relationality slow energy through systems and create conditions that support diversity-rich patterns of circulation. Part of this work-in-progress involves drawing more concrete analogies between Raworth's "Donut Economics" and permaculture principles. From the foregoing discussion, I hope it is apparent that these proposed revolutions in the "household" practices of agriculture and economics share enthusiasm for cycles, cultivation of complexity, layering of values, and the embeddedness of human transactions within natural systems.

In this and previous work I also probe and critique a human tendency, whether in economics or religions, to yearn toward transcendence of such entanglements.[25] I argue that our drive toward self-projected trans-humanity is yoked to our existential ambivalence, expressed in our tendency to try to reduce complexity in organic life. Pursuit of reductionist, sanitized transcendence is a recurring theme in many religious movements, from the Daoist Celestial Masters, to Buddhist Pure Land cults, to "Rapture" eschatologies. In writings on the spiritual life, humans have repeatedly expressed ascetic/aesthetic preferences for high energy, low organic-life conditions, associating escape from physical limitations with mountain peaks, deserts, oceans, and adamantine (or now virtual) dwelling places.[26]

In contrast, anti-entropic living beings and systems indisputably involve the suffering of birth, decay, and death, not getting what we think we want when we want it, and finding that things are not as we think. There is no question—if the universe had gone from the Big Bang[27]

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[25] Adamek, *Practicescapes*.

[26] Certain Buddhist scriptures were popular for their evocation of durable heavens and Pure Lands -- one might recall the descriptions of jeweled trees and palaces in Amitābha's Pure Land, and the gold-paved streets in Maitreya's Tuṣita Heaven. Now, computer-generated virtual landscapes and cities offer similar forms of escape for many.

[27] In an earlier version of this paper I made the somewhat flippant comment that "we could be more like a Big Sourdough Bread-Loaf in a multiverse oven." A reader challenged me on that, fair enough, so let me unpack it. Some scientists now doubt that the something-from-nothing "Big Bang" scenario is an accurate metaphor—in a lecture I attended on November 6, 2015 at the Institute for Advanced Study at Princeton, Matias Zaldarriaga speculated that perturbations in the dynamics of cosmic background microwave radiation could be accounted for if they were tracked as if they had crossed the "horizon"—i.e. came from somewhere/when before the so-called Big Bang. The "multiverse" part admittedly stems from my own idiosyncratic extrapolation—string theory, contested by physicists but beloved by science-fiction writers, includes the speculation that determinable states "collapsing" from multiple quantum possibilities

to entropy in a nano-second, there would be no suffering and no need for bodhisattvas. But would we prefer that?

Provisional Conclusions

However we got here, here we are. And since "here" involves incredible diversity of mysterious forms and forces—cosmic background microwave radiation, gravitational waves, photosynthesis, mycelium colonies, black holes, giraffes, humans, and so on—it behooves us to get seriously involved in cultivating diversity. Not just as a matter of survival, but as practitioners of skillful arts that imitate the way the universe appears to be working. Yes, the ways of the world are painful and messy. Yes, it produced us, so it's not perfect by any measure. But who is measuring?

To practice skillful arts as "Earthstore-Householder Bodhisattvas" we would need to pay close attention to the world that captivates us. And in order to work together, I think it would be helpful to bracket visions of future escape, whether to a technological utopia, Heaven, Sukhāvatī, *nirvāṇa*, or Mars. Although many of us (myself included) may have views about afterlife, otherlife, or transcendence of the current conditions of humanity, any effective discussion about what to do next in the Anthropocene will require us to focus exclusively on wherever we are now. We are going to have enough difficulty agreeing on immediate small steps, let alone agreeing on ultimate contexts or goals, but the scope of disagreement is so vast that it is quite likely that we will simply continue to fight as we fall over the edge.

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create branching universes. Why not speculate, then, that one branch could pollinate another? —or, in my initial metaphor, provide the yeast-spores of expansion across the "horizon" of another's collapse into a particular state?

The ox-cart of the Buddha Vehicle may indeed be available to remove us from the confines of our vain desires, as the *Lotus Sutra* claims. Yet Chan Buddhists have often reminded us that this should not mean our immediate home is left behind.[28] As many have pointed out, realizing the truth of the lack of any independent agent does not mean evading responsibility for individual action. Skillful individual action means acting collectively now, as Greta Thunberg passionately reminds us.

Our human ingenuity created the Burning House that we now occupy along with the many beings of this planet.[29] And our sciences have shown us more and more clearly that all beings are works of art beyond our skills to reproduce, even the scorpions and serpents so vividly described in the *Lotus Sutra*. Rather than escape-artists, I would wish us to be regenerative-system artists and caretakers of the arts of others. And that, as Zhuangzi said, involves the shit and the ants.

As our House whose worth is calculated in terms of GDP-growth, product-flows and "deliverables" goes up in smoke, my hope is that we will have a chance to regroup and become what we are capable of be-

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[28] The *Lotus Sutra* parable is perennially relevant, but Chan/Zen Buddhists are known for bringing down to earth the Madhyamaka notion that "*saṃsāra* is *nirvāṇa*." Reinventing this tradition for the Beat generation, in *Earth House Hold* the Zen practitioner-poet Gary Snyder evoked both the exaltation and gritty minutiae of living close to nature. In a talk in 1961 he idealized our House as it was before we started burning it:

> As a poet I hold the most archaic values on earth. They go back to the upper Paleolithic: the fertility of the soil, the magic of animals, the power-vision in solitude, the terrifying initiation and rebirth, the love and ecstasy of the dance, the common work of the tribe. I try to hold both history and wilderness in mind, that my poems may approach the true measure of things and stand against the unbalance and ignorance of our times.

From "Statement for the Paterson Society" (1961), as quoted in Kherdian, *Six Poets*, 52.

[29] Diamond Sangha Rōshi Nelson Foster recently used the Burning House metaphor to comment on what we can do in the midst of our current crisis conditions. See Foster, "Children at Play."

coming. For me, the take-home message from our difficult human road to this turning point is that we will never be masters of the universe, the planet, or even our own bodies. But we are able to master the skillful means at play all around us and within us, all the time, if we would try.

And I would like to end on this note: we are trying. In the fall of 2019, large-scale Global Climate Strike actions were mobilized by Greta Thunberg. Extinction Rebellion movements have spread rapidly. As I write now, in the midst of COVID-19-related economic and social fallout, anti-racism and anti-fascism protest movements have gone viral. The call for collective recognition of a state of economic, social, and environmental emergency grows louder every hour. Coordinated governmental and grassroots actions to end systemic inequity, injustice, and the dominance of linear extraction-based economics could not only save the lives of many beings, it could create new imagined self-understanding of what it means to be human. Earthstore-Householder Bodhisattvas, or their cousins from other imaginations, would not resemble the *Homo Economicus* we have been led to believe in. It is our choice whether to develop self-understanding that enables skillful participation in dynamic, co-constituting complex systems. In Buddhist terms, self-perception is imaginary, and that is the basis of its efficacy.

Bibliography

Adamek, Wendi L. *Practicescapes and the Buddhists of Baoshan.* Hamburg: University of Hamburg Press, 2020.

———. "Midnight and the Black Box." *Interdisciplinary Studies in Literature and Environment* 21.2 (2014): 459-476.

Canales, Jimena. "Dead and Alive: Micro-Cinematography between Physics and Biology." *Configurations* 23. 2 (2015): 235-251.

Daniels, Peter L. "Buddhist economics and the environment: Material flow analysis and the moderation of society's metabolism." *International Journal of Social Economics* 30.1/2 (2003): 8-30.

Foster, Nelson. "Children at Play in a Burning House." *Ring of Bone Newsletter* (Fall 2018): 1-2.

Hershock, Peter. *Valuing Diversity: Buddhist Reflection on Realizing a More Equitable Global Future*. Albany, New York: SUNY Press, 2012.

Ingold, Timothy. *Being Alive: Essays on Movement, Knowledge and Description*. London: Routledge, 2011.

Kaza, Stephanie, ed. *Hooked! Buddhist Writings on Greed, Desire, and the Urge to Consume*. Boston and London: Shambhala, 2005.

Kherdian, David. *Six Poets of the San Francisco Renaissance: Portraits and Checklists*. Fresno, CA: Giligia Press, 1967.

Latour, Bruno. *Down to Earth: Politics in the New Climatic Regime*. Hoboken, New Jersey: Wiley, 2018.

Loy, David. *Lack and Transcendence: The Problem of Death and Life in Psychotherapy, Existentialism, and Buddhism*. Somerville, MA: Wisdom Publications, 2018.

Macy, Joanna. *The Dharma of Natural Systems: Mutual Causality in Buddhism and General Systems Theory*. Albany, New York: State University of New York Press, 1991.

Magnuson, Joel C. *From Greed to Wellbeing: A Buddhist Approach to Resolving Our Economic and Financial Crises*. Bristol: Policy Press, 2017.

Meadows, Donella. *Thinking in Systems: A Primer*. White River Junction, Vermont: Chelsea Green Publishing, 2008.

Raworth, Kate. *Doughnut Economics: Seven Ways to Think Like a 21st-Century Economist*. White River Junction, Vermont: Chelsea Green Publishing, 2017.

———. "Doughnut." Kate Raworth: exploring doughnut economics. Accessed August 31, 2020. https://www.kateraworth.com/doughnut/.

Zsolnai, László, ed. *Ethical Principles and Economic Transformation – A Buddhist Approach*. New York: Springer Science+Business Media, 2011.