

**Thinkers' Lodge Climate Crisis Retreat**  
**May-June 2020**  
**Thinker's Essays**

**Nature's Looking Glass**  
**Design Lens for the Creation of the Resilient Community**

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*"It was the best of times; it was the worst of times."  
Charles Dickens, Tale of Two Cities*

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*The party's over. Climate change and the potential of ensuing crises are telling us in no uncertain terms, we need to change our ways and reinvent how we are inhabiting this warming planet. As an architect and an eternal optimist, I take Dicken's words to heart. It is a time that calls on our most bold selves to reinvent a world that has been overwhelmed by sheer numbers and a penchant for material satisfaction and wasteful consumption. There appear to be no silver bullets available, but rather reconsideration of how we live and the choices we make across the board. There is now a design necessity to direct our values and creativity at the myriad of problems in what has been "business as usual." There are no guarantees here, as we have pushed the limits and patience of our Mother Earth. I offer only a way to consider our next moves and choices. It's about challenging what cows we hold sacred. The time is now to engage in a forward-thinking process if we are to survive – together.*

*"Look for the little things in the big things, and the big things in the little things."  
Charles Eames, original design thinker*

## INVENTORY

*How we move forward in response to the anticipated and yet still unknown effects of a heating planet is the matter of design thinking at multiple scales. Integration at a cascade of scales gives communities the most resilience, because the plan is anticipatory, while also being nimble to adapt to new information. The plan must come from knowing one's place as well as one's culture. Decisions must be contextualized so that every next move is working with nature, and not pulling against Her. This means knowing our climate as it has been and is, while also drawing on the best scientific projections as the climate changes. This must acknowledge complexity, and the patterns that are interacting to change our environment in sometimes unpredictable ways. That said, we must utilize our collective*

*intelligence and our spectacular tools to calculate the carrying capacity of this moving target. How many humans can the land available support in terms of local food, water, habitable terrain, wildlife, and psychological well-being? What can we logically anticipate in terms of commerce outside of our locality? Where will our food come from if the global distribution system breaks down? Where might the pressure points lie in anticipation of immigration in a climate crisis? What are our skillsets, strengths and vulnerabilities if we are to be more self-reliant? In effect, to design for the future we need to update our database to act as an informed anticipatory basis for planning and design decisions.*

## PARTICIPATION

*If we have learned anything from the past shortcomings of developer-driven settlement since the end of the Second World War, it is that we need to design more *with* people than *for* the perceived “market.” What is needed is a democratic, or participatory process, where communities have a voice in their future evolution. What is the local story? What are the local values? What are our fears? What are our dreams? The participatory process must also not get hijacked by rearview mirror thinking or clinging to romantic illusions of a past that is just that – past.*

*The nature of our predicament, with a rapidly changing set of environmental circumstances is that we must be visionary to reinvent the living systems that will ward off catastrophe. We must act now to transition to a carbon-neutral infrastructure that utilizes renewable energy in place of fossil fuels. The new mantra must be efficiency, interconnectedness, doing more with less, and being resilient in the face of an inevitably changing landscape. There is no longer time to go about business as usual.*

*This imperative to rapidly adapt presents a myriad of challenges, risks and the inevitability of continued unintended consequences. It is a daunting task for sure. However, our choice cannot be stasis and inaction out of fear. This passive approach only accelerates and exacerbates the conditions of collapse. Our choice must be an all-in commitment to ACTION. If ever we need to draw on our creativity and inventiveness, it is now! The reinvention of our ways of life are an opportunity to activate our potentials as well as pull ourselves out of the addictions that got us into this mess in the first place. This call to creativity is not just an appeal to our inventors, architects and visionaries – though we will need their best ideas as we invent together the new resilient world to take us home. No, we need to engage the public, business, health care, agriculture, education and political leaders in the development of a new vision. It needs to be “bottom up,” but with full engagement of our best and brightest. We need to look to the exuberance and creative genius of the young, while drawing on the wisdom of our elders. Without a compelling vision of a post-oil, low-carbon world at work, there stands a good chance the negative sense of loss and collapse will infect the enthusiasm needed to move in a new direction that can be seen as a better way of life. The powerful who are currently invested deeply in the way it is will not let go of control until the critical mass demands change. Thus, the need to create exciting new solutions from a value system that is compassionate and communal, to replace the individualistic model that has banked on material success at all costs. With the damaging effects of*

*climate change constantly being in our face, it will be easy for despondency, pessimism and inaction to take over. Creative vision must act as the antidote that inspires hope and action. The choice is ours.*

## COMMUNITY VISIONING

*Localization means there are no such things as templates or “one size fits all” in the future resilient communities we are talking about. Instead, I propose a set of lenses through which to look at our local situation, to help guide us to our unique conclusions or patterns of living. These, too, are not meant to be prescriptive or universal, but rather a helpful framework to begin our local visioning process. These lenses are borrowed from the patterns of any healthy organism. We might think of them as “pattern in nature – lessons in design.”*

## CONTEXT

*Know your place! This might be the most foundational lens in which to establish the basis for the vision of a resilient community in a carbon-neutral world.*

*Listen. Look. Remember. Inventory your resources and limitations. Whatever your ultimate community plan is, it must be contextualized and interconnected to what makes it run. All living things are inherently connected to their environment. Make sure you anticipate, as best you can, the changing nature of context. Now more than ever we see accelerated changes as the result of a warming planet. This is exactly why resilience needs to be a major underpinning of our communities. We need to be nimble!*

## SCALE

*In nature there is always a relationship between scale and function – within context. Size does matter! So, when we think of scale in terms of resilience, we are led to respond to carrying capacity and efficiency in miniaturization – doing more with less. To quote E.F. Schumacher, “Small is beautiful.” Localization will always lead to appropriateness to the size of aggregate parts to be most effective. This challenges the existing models of globalization, corporate behemoths, big box enterprises and central control! It also then might suggest a more human size to the community that we function in. Depending on how the future of our electronic networks and worldwide web plays out, we may need the human scale in personal interactions to balance their vastness and impersonality. We need, as William Nisbet predicted in “High Tech High Tough” human scale, well frankly, to keep our humanness alive. This might be our most important call in the world we inherit and take forward.*

*In community planning to architecture – placemaking must always include appropriateness of scale in how life is lived through experience. Certainly, scale will always be in the conversation of the density we cluster in – how settlements are tied together, and the efficiency and daily joy of “getting there.” Transportation should be scaled and designed to bring people together. The quality of our social and spiritual interactions can be facilitated and even celebrated by smart systems of movement and connection. Again, one size does not fit all. Always look to appropriateness and economy of scale.*

*Smaller homes, denser, mixed-use community cores, more efficiency in all systems and construction, an overall transition to a mentality of “just enough.”*

## COMPLEXITY

*Monocultures are vulnerable and run a great risk of collapse. Complex systems reach out further and form a broader web of interrelationships. They are built on embedded resiliency. They are co-dependents in a good way! They are not isolationists. Complex systems are more social by nature. They invite exchange. They help their neighbors in their struggles and celebrate their success, maybe because in the variations, the variety, the inclusiveness, they synergize through the differences while ultimately express connection. This is community.*

*Our farms, our gardens, and the inter-weaving of each, our population make-up, our pedestrian experiences, our homes, our schools and pedagogy, our renewable energy mix, our skillsets and interests – all seem to be enriched through variety, interconnections and complexity. Instead of building walls that isolate, let’s acknowledge the blessings and vitality of working through what appears as differences. Complexity makes a system healthier.*

## METABOLISM

*Metabolism is the set of life-sustaining chemical reactions in organisms. It is behind the conversion of food to energy, and energy to food. It fuels growth and reproduction as well as the elimination of wastes, while maintaining its structure by responding to its environment, or context.*

*The post fossil fuel, renewable energy future will be driven by new metabolic processes. It is a more complex system of production than the oil-centric energy dependence that we have been blessed with before falling into dependence, to the point of being a myopic addiction.*

*Everything we invent, design, grow and make must be part of the renewable imperative. The sooner we get to this natural energy paradigm, the better chance we have to avert climate disaster. The transition needs to be front and center to all of our decisions in how we live. It can be a poetic call for an age of light!*

## PARTICIPATION / COMMUNICATION

*It seems to be a highly participatory universe we live in. As James Lovelock declared about our own planet, “The whole thing is alive!” The more we uncover, the more we are amazed that a tree is not just a tree, but rather a forest, communicating underground and through the air. We have created an internet with infinite streams of interactions, but more and more the human choice is isolation in real time and place, or selective interactions to wall our minds off from varied points of view. So, it follows that if we are to consciously choose to reinvent communities that are more resilient, we must work at ways to co-create. A participatory democracy insists of opening our minds and placing greater value*

*on how to interact in a civil manner. To do that there needs to be opportunities and values to encourage, educate and illuminate how we are connected, and how we are stronger and more empowered by our active relationships.*

*The model of a resilient community might include more spaces that support learning, ecological literacy, conflict resolution, expanded language skills, mind, body and spirit integration, celebration and play...in effect, a more vital public realm and more open channels of communication.*

## CELEBRATION / BEAUTY

*Nature is ever expressing herself in glorious ways. It is hard to deny, or ignore, the boundless ways that we are gifted with the simple and spectacular beauty of our Mother Earth.*

*We need to place a value on this love of nature, or what might be termed biophilia, to bring our collective effort to the point that drives more of the decisions we make in the shaping of future life. We will not make the changes necessary to right the ship if we have lost our deep connection to the living. We will not do the work we need to do if we are not in love.*

*Our resilient communities must reawaken our citizens if we are going to motivate a transitional movement. Without beauty as a value, we will be blinded by the momentum of the materialistic culture that only looks to self-gratification and pursuit of “more.” The new narrative says that we have a choice. We may have ridden the fossil fuel train as far as it could take us. The renewable future is in fact a renewal of quality over quantity. It is about renewing our humanity by opening to our commonality, rather than putting down and setting apart from what might appear to be outside of self. Renewable is a choice to live – together.*

## UNITY

*All life shares the same basic cosmic information. Humans, frogs, and mushrooms all originated as the stuff of stars, laid down in infinitely different combinations. If we look at the holographic model, the most minute part of the whole is seen to carry all the information of the whole image. Gregory Bateson describes this underlying force, or binding impulse, as the “metapattern,” or the pattern that connects.*

*Architecture and the way we inhabit the planet has always been an expression, or mirror, for the cosmology of the particular period. We have run the limits of the machine as our model of control and dominance of nature. It is time to look to the living interrelationship as the new cosmology. It is a time to remember what we once knew and valued. Only with this sense of interconnectedness can we steer what has come to be “a ship of fools,” to what Bucky Fuller described as “spaceship earth.” This is what future generations will inherit if we choose hope over fear. It’s time to get on with the rigors of good work.*