BFI Gathering 25th August 2023

*The **Buckminster Fuller Institute (BFI)** has been inviting the public to participate in an informal gathering to talk about what is happening in the community, including members of the BFI, participants in the Trimtab Space Camps, and members of the Design Science Studio. This past **Friday, August 25, 2023**, we were delighted to hear an update from Dr. Stuart Cowan, Executive Director, Buckminster Fuller Institute. Below is a transcript of his presentation. Listen to the full audio and follow along with the Otter transcript.*

Dr. Stuart Cowan, Executive Director, Buckminster Fuller Institute

This is our monthly last Friday call, connecting some of the broader BFI community. Really glad that you're here. I'm Stuart Cowan. I'm the Executive Director of the Buckminster Fuller Institute (BFI). I joined last December. And I wanted to just give you an update on BFI. We have a lot of extraordinary things going on: some changes in direction, new possibilities. So let me kind of map where we've been over the last couple of years and then some of the fresh directions that we have at BFI and I'll leave plenty of time for questions.

Regenerosity:

As we think about BFI, a really important focus over the two years before I joined was Regenerosity (BFI: Regenerosity). It's a phenomenal program.

Regenerosity (regenerosity.world) is applying deep, regenerative thinking, design science thinking to rural—largely rural—regeneration projects in Africa, in East Asia and Latin America. And it's developed about ten critical relationships with projects and also working with foundations to help them understand how to do philanthropy differently in a way that involves more trust, long term relationships, less and less reporting. They've been trying to mentor the projects, build their capacity and also help foundations understand that not every project needs to have a perfectly polished annual report and incredibly detailed application, and so forth. It's a phenomenal program. And we all realized it's kind of coherent all by itself. And, in effect, it's operating as its own nonprofit now. So, technically, it's now a fiscally sponsored project of BFI. That means that we're the overall nonprofit umbrella. But it's essentially a completely independent project. It has full autonomy as long as it doesn't do anything outside the bounds of BFI's mission and purpose. So I wanted everyone to know that that's really flourishing. And we realized it's really kind of separate from the other main activities of BFI. So we've given it wings and it's off and running and doing very well on its own. And you can always get updates going to the Regenerosity website. I'll just run through some of the updates and then happy to provide any further details.

Design Science Studio:

The second key piece is the Design Science Studio, run by my good colleague, Roxi. Roxi had some personal issues for a year, so she needed to skip a cohort year, but the amazing news is there will be a fresh cohort of the Design Science Studio starting in October. Applications are open. I highly recommend it. I know some of you have gone through the Design Science Studio before—a several-month-long structured process with incredible artists and designers and scientists working in a cross-disciplinary way. In the two years that

it ran previously, it was a loose partnership between BFI and Roxi's own company, which is called habRitual. Going forward, Design Science Studio will be a fiscally sponsored project of BFI. Just like Regenerosity, it's going to have its own wings. It's totally independent. It makes its own decisions, runs its own accounting, runs its own activities, but we'll have a nice collegial relationship. As I run through what we're doing now in BFI's own Design Lab, there'll be all kinds of projects that we'll want to get Design Science Studio involvement in. And, likewise, we'll be feeding things over to the Studio. And, of course, lots of people participate both in BFI activities and Design Science Studio. So we're pleased to have a nice, loose, collegial relationship going forward.

Fiscal Sponsorship Program:

The third key thing, for many years Buckminster Fuller Institute has offered a fiscal sponsorship program. So that means we just put this service of being an anchor, well run, well organized nonprofit now hitting forty on December 15—which is amazing! Very few nonprofits hit 40, I can tell you that. We're able to offer our track record, our history, our brand. It's a stable context to run funds through, and then we can lend our full 501(c)(3) nonprofit status to a qualified project. So we continue to offer that. And I would say, fairly selectively for new projects, because as we build out the Design Lab—and I'll run through this—many of those projects are a great fit for fiscal sponsorship. And so more and more we really want to focus our fiscal sponsorship on synergetic activities, where these are projects that make a lot of sense for BFI anyway, and further what we're trying to do. And then, of course, that's a great service to offer that can help a new project get off the ground, get that early catalytic donation or grant.

Dymaxion Store:

So, the next piece, Dymaxion Store, same as ever—up and running. And then, of course, all the amazing resources online. We did a lot of work towards the end of last year, getting World Design Science Decade documents online. There's just such a wealth of information. So make sure you go into the BFI website and just really dig around. There's just incredible detailed videos, key documents, links to other websites, around every aspect of Buckminster Fuller's work.

Membership Program:

Now, one thing that we've paused is events, just because we're launching so much. So I'm excited to begin weaving events back in. Primarily, they were interviews, panels, where we could highlight really interesting people who had a real connection to Fuller. In many cases, we were able to do interviews with people, like Michael Ben-Eli, key collaborator of Bucky's. So we'll bring those back. We'll have some themes. We might try to do some things around World Game, World Design Science Decade, and so forth. And we'll make those available.

And, of course, we have our ongoing membership program as well. So lots of continuity. And we've decided with the Trimtab Space Camp, that's an incredibly intensive offering. So we're not going to do it in that form, for the time being—especially now that Design Science Studio is kicking back in. That's an amazing alternative way to engage with these ideas. But

we'll be exploring ways to reach many, many more people through design science education offerings. So not the Space Camp as it was, but some things that that we'll talk about now.

Massive Action:

So instead of one very intensive cohort, over a few months with the Space Camp, we're really excited to announce that we are partnering with a project called Massive Action. So Massive Action is being spun out of globally recognized design agency called the Massive Change Network. This was started by Bruce Mau and Bisi Williams. Bruce Mau is a globally recognized designer. Check out the documentary, it's just M-A-U. I'll put it in the chat. You can get it on Amazon Prime. Amazing documentary about Bruce's life is a whole systems designer. And the goal of Massive Action is to reach 100 million life-centered designers—holistic regenerative designers who will take action in their communities. There'll be 20 different cities.

There'll be a physical exhibit space. There'll be digital platforms. There'll be ways to get a certification after engaging with the material long enough. And the goal is to really connect people to action in their regions. So it's incredible. It's epic. It's amazing. And BFI will be very, very core to this effort. We'll be designing educational modules. We'll be providing case studies. We're helping to shape the whole initiative. And so the 100 million life-centered designers, we hope, will also be exposed to design science—comprehensive anticipatory design science—and have lively case studies on how it's been applied in the past and the present. And people will then connect to opportunities to work on these projects with amazing impacts. It's an audacious project. But we're excited because it's a channel where we could literally begin to reach certainly hundreds of thousands of people and, over time, well into the millions. And while it's a lot of work, it also means we can reach a scale, more than trying to run very detailed program for 100 people or so at a time. So we're going to focus our resources more on this broader community with other amazing organizations that are co-designing Massive Action.

The BFI Design Lab is carefully curating a cohort of projects. Some projects are being strategically developed by BFI while others are crowdsourced, with the aim of generating cascading benefits for the entire cohort and the planet.

BFI Design Lab:

So that's the first project within what we're calling the BFI Design Lab. This was launched a couple of months ago. And the idea of the Design Lab is to support what we call open innovation (OI) ecosystems. This is an important emerging idea. Over the last 10 years or so, we've heard a lot of talk around open source, Creative Commons—really interesting ideas about how we think about intellectual property, creativity, how to work in community in broader ecosystems, to co-create things and then accelerate their deployment in the world. With the BFI Design Lab, we're totally focused on these open innovation ecosystems. And interestingly, even the National Science Foundation has a major grant solicitation right now to stand up these open innovation, open source ecosystems. So very exciting. We feel like it's something that's been emerging in different ways and different places around the world. And we feel that it's very true to the spirit of Buckminster Fuller, who was always trying to think about reimagining entire industries, like transportation with the Dymaxion Car, like

cartography with the Dymaxion Map, shelter with the geodesic dome. And I think he always had the sense that entire industries needed to transform and that would take huge collaborative efforts. He spoke about the world grid, for instance, which would be a way to collaboratively move electrons—fossil-free electrons—around the world following the availability of wind and solar as the Earth spun around its axis. Parts of that are being built out. But it's a great example of that kind of audacious thinking to say, well, let's focus on meeting a fundamental need for abundant fossil-fuel-free energy. And let's not get too caught up in which company gets to grab and control that first. Let's focus on what we would now call a commons to enable that transformation.

So each of the Design Lab projects is not just one company or one nonprofit. It's actually an ecosystem in its own right. It's a creative ecosystem connecting together to achieve a shared set of themes. The first ecosystem, the first project within the BFI Design Lab is Massive Action, a huge educational collaboration—but education leading not just to reflection, but to ways to then connect out to projects, begin to do things, learn with each other, learn regionally, share globally, and get to work. So that's number one.

Also know as the "Dymaxion Map," the Fuller Projection Map is the only flat map of the entire surface of the Earth which reveals our planet as one island in one ocean, without any visually obvious distortion of the relative shapes and sizes of the land areas, and without splitting any continents.

Architecture for Planetary Regeneration:

The second one is Architecture for Planetary Regeneration. So, equally audacious as Massive Action. And, by the way, all of this is on the website. So if you go to the BFI Design Lab on the homepage or the tab up top, you'll see all of these updated—and a little bit of this is breaking news, so you're getting a first hit of it now. But the website will get updated in the next couple of weeks. So you can always go there. Because these projects they're going to keep evolving, there'll be new partners. Some will have a natural lifespan. You do a sprint for a year. Done. Let it go. Some will go for many, many years. So you'll always be able to see kind of this amazing ebb and flow, this matrix of Design Lab activity. So the Architecture for Planetary Regeneration includes a consortium of extraordinary organizations working on restoration and regeneration.

With the Architecture for Planetary Regeneration, we have One Earth, which is a fantastic environmental NGO that has mapped a global safety net for the planet, core areas that we need for biodiversity conservation. They've looked at a systemic transition from conventional agriculture to regenerative agriculture, as well as a systemic transition from fossil fuel to a completely clean-energy-based economy. Another key partner, Open Future Coalition, some of you may know. They're doing amazing work on civic innovation, on mapping solutions inventories, and so forth. The goal of the Architecture for Planetary Regeneration project is a lot like the goal of the World Game, for those of you that know about the World Game. It's a way to work at multiple levels of scale. So zoom in on a particular watershed by a region out to an island, mountain range—whatever that next unit is—out to a continental scale, to planetary scale and move very fluently between these scales that are all entangled. They're all interconnected. No region is isolated, as Bucky recognized. Of course, there's going to be critical trade in things like minerals, which are extremely hard

to find in most regions. They have an incredible differentiation around the world, where they're located and plentiful. So you have to figure out, Okay, how are we going to trade in minerals? But you need a way to take amazing geospatial data, understand what's going on in a regional-to-global context, take that solutions inventory that One Earth is developing—Open Future Coalition, Drawdown developed in the past—take that solutions inventory, and play that World Game process. So have stakeholders, have representatives from the community designed together, different winning scenarios for their region that feed into how their neighboring regions, up to planetary scale, might work. So literally, comprehensive anticipatory design science capacity—being able to apply that design science, at any scale, in cooperation with other efforts, working at whatever scale they want to, having the rigorous geospatial data, rigorous solutions inventory, to be able to design scenarios and then bring them to the table as an investment portfolio. So make this very real. So one step beyond the World Game, take the scenario and say, if enough people are voting for it and like this, there may be a set of projects that really should be proposed that have teams behind them, that need financing, and take those to suitable investors and get them funded and make them happen. So we have key partners working on global financial transition partners that have worked with the World Bank and huge financial entities. So we're connecting this all the way from the grassroots of the grassroots and individual farmer just trying to regenerate their land all the way out to How would you connect that with global capital sources that start to have a more regenerative lens? And BFI's role is really around design science to say, Wow. How can we take this data landscape, the solutions to the story, and build transition scenarios. And build those scenarios, get them funded, make them happen. So that's the second project. Again, it's audacious.

These are the kinds of massive things that Bucky always tried throughout his career. Just to raise the effort, create some energy around it. It doesn't mean suddenly we staff this up year after year. We're just part of the mesh, right. We're working with others to create inspiration. We're trying to get parts of this consortium resource to get the work to happen. It doesn't all have to happen internally at BFI, and we've always been like that. The Buckminster Fuller Challenge was all about shining a spotlight on amazing projects and connecting them up and letting them learn from each other. So in that spirit, we're trying to support these open innovation ecosystems and establish these open knowledge artifacts, design artifacts, iterate really quickly.

As Bucky recognized starting in the 1920s—let's be clear, this is pretty extraordinary: in the 1920s—he was recognizing what we now call the polycrisis or the metacrisis. He believed that we were going to run out of fossil fuels, we were going to run out of minerals, we're going to run out of land. And we had to ephemeralize, right. We had to do much, much more with much, much less, and he thought systemically about that in many different sectors. And for the next 50 years, he worked nonstop to try to awaken the world to the sense that we're on this fragile Spaceship Earth, right, this fragile biosphere. There's no operating manual. We've got to figure this out. Time is running out. Time is of the essence. And we're a little bit late, because, you know, Bucky proposed the World Design Science decade from 1965 to 1975. And it would have been great to run all of this back then. But we'll just do it now. So in a sense, we're trying to kind of play with the World Design Science Decade, which was an effort to engage architectural schools around the world to say, We need to think very systematically about water, energy, food, shelter, and how we can thrive within what we now call planetary boundaries.

Gaia Consortium:

So Massive Action, Architecture for Planetary Regeneration. Third project: Gaia Consortium. This was actually formally launched this week. This is an effort to apply a new kind of artificial intelligence called Active Inference to planetary regeneration. And I think we're all somewhat terrified at how quickly AI is evolving. There are—let's be clear—there are bad actors. There are nefarious actors right now, that will try to do very, very terrifying things with AI there are others that are happy to let AI help us sort of buy more things we don't need even more quickly or just kind of drift along. There are a handful of efforts to try to apply AI as a guide and a support for the incredibly tough decisions that we're going to have to make to make Spaceship Earth work. So we're betting on this particular effort to apply AI with really, really strong ethical guardrails in a way that just only will ever offer decision support. So it will always be incredibly transparent.
Let's offer decision support, so that local communities, regional actors, existing governance systems, can transparently understand the basis for that recommendation at any time. It's not a blackbox AI with some neural net with a million parameters no one can understand. It's AI that is co-created between people on the ground, human experts and the modeling system itself. And it can be one very important assistant co-pilot, as we make these really tough decisions at different levels of scale. So the Gaia Consortium has some extraordinary players. We're one of the four co-founding organizations. We hope to get this resourced quickly. And, again, to me, it's very much what Bucky always imagined would be possible: the Geoscope—this vision for a dome that could flash up regional situations, global situations, help decision makers in real time interact with the information, and Bucky knew there would be a wired internet, there'd be a global basis for distributed intelligence. And it would be very visual. It would be computational. It would involve simulation, gamification, all of these things. So Gaia Consortium is very much in that spirit, and I don't take lightly the risks—lately the risks of engaging with AI. But we can't not engage because they're extremely dangerous things already happening and set loose on the world. So I think it's important to have countervailing, ethically constrained AI. Do battle, honestly, do battle with the other digital beings out there. So that's number three.

The Weather Makers:

Number four, is an extraordinary effort led by The Weather Makers. This is a company based in the Netherlands, for profit, out of a variety of engineering disciplines. They have a vision to work with the Sinai Peninsula in northern Egypt: Green the Sinai. It's now desertified. Three thousand years ago, it was well vegetated, had plenty of rainfall. And they have determined there are ways to begin to rehydrate, revegetate, bring back more local water cycles. And this would have enormous benefit for the entire Mediterranean Basin, which is drying out. So the the part of the Mediterranean next to the ocean is all drying out. Keeping more precipitation in that basin would be a very good thing. So what they figured out with many colleagues around the world, is that there are these sort of acupuncture points for weather, where if you do the right kinds of ecological restoration, you do the right kinds of efforts to rehydrate the ground, you can actually create regional weather benefits that even start to spring across the planet and help other areas as well. So we're setting up an open innovation ecosystem around large scale ecological restoration, particularly with the lens of water functionality, rehydration, if you will, and The Weather Makers will be a key part of that effort.

Ecosystem Restoration Communities:

The next project, closely related, is working with John Liu. He's a wonderful environmental filmmaker, who started a global network called the Ecosystem Restoration Communities network. It's a little bit of the twin to The Weather Makers work. This is working at very, very small grassroots scales, but then sparking out into a region, going up in scale. So it's all a fractal. The Weather Makers are taking a big region and trying to project-finance that at scale, you know, with hundreds of millions of dollars. The ecosystem restoration communities effort is starting with ten thousand acres of heavily strip-mined land in coal country next to lovely Kentucky and using that as a place to imagine a regenerative economy that will spring out to regenerate a million acres in Appalachia. And the incredible thing there is the very first Buckminster Fuller Challenge prize went to John Todd, a mentor of mine, and John Todd's proposal was to regenerate the Appalachian Mountains in a not dissimilar way to what Clifford Smith is now doing. So it's beautiful to see these cycles.

So we're working with the global network. There's a beautiful project in Somalia, efforts to do earthquake zone recovery in Turkey. John wanted this network to support work in some of the most complex places in the world, war-torn places recovering from civil conflict, places that have become heavily desertified that are going to take enormous effort to bring back, working with people that have been marginalized for all kinds of reasons, and giving a chance at hope and potential by restoring land, water, growing food, rebuilding culture, and sparking out to the broader region. This whole network is very fragile. We're helping them think about getting resource, like fundraising, helping them with governance, helping them with systems that will help each of these communities thrive within their separate networks.

Bioregional Digital Twin:

And then, just quickly, so many more in the queue. We've reached capacity for the moment with eight projects. We would love to grow our staff, grow our team, and engage with more. But briefly, we are working closely with a project called Bioregional Digital Twin to create immersive visualizations, starting with the Gulf of Maine and in support of understanding, restoration of that region. So kind of a sister to the Gaia Consortium efforts and the Architecture for Planetary Regeneration: visualization, immersive visualization is really important. The strength of the Bioregional Digital Twin project is gamification. It's built on a game platform, literally. So people can really feel what it's like swimming around with seagrass and swim over to a patch that needs help, and then the next day they can go out in real life, literally, and say, Okay, I swam over there virtually, and, Okay, I'm going to get my boat. I'm going to dive down and do some planning the next day.

Indigenous Knowledge Systems Lab:

And then the last piece I'll mention is our work with what's called the Indigenous Knowledge Systems Lab. This is based in Australia. It was co-founded by five Australian Aboriginal custodians of land, who are very tied to their traditional life ways who are also bridge academics. So they all have advanced degrees from "Western" universities, and they are bridging between Indigenous and non-Indigenous ways of knowing, and they're offering their profound perspectives, not just on land management in Australia, of course, but their whole point, the whole point of that lab is an indigenous knowledge perspective allows you

to think in a completely different way about ethics, and governance, and relationality, and connection. And we need this to figure out how we work with AI. We need this to know where and how to build and what our energy transition [might look like]. We need it for all of it. So we're in profound conversations with them about sparking many, many of these labs around the world and connecting design science—non-Indigenous ways of thinking about design planning, engineering, economics, finance—bridging that with Indigenous ways and finding a shared path forward. So I think this is very profound and will inform all of our work.

Design Science Consulting:

And then outside the Design Lab itself, we are setting up a new area of work that is design science consulting. So BFI itself, as a nonprofit, we can offer fee-for-service work, and so we're beginning to talk to potential clients around applying design science for things like a family investment office that wants to do something about climate, and they just get pitched all day, "There's going to be some magic solution." The company thinks, "Okay, this will solve everything." And we're talking about, "That's great. But we're talking about systemic solutions." So we would offer design science approaches to a family office that wanted to invest systemically in a region or around a theme. And we'd like to offer this to other kinds of entities. Help insurance companies think about risk in different ways from a comprehensive anticipatory design science perspective—pension funds, other kinds of large institutional players. So that'll take some time to build credibility and stand up, but we're beginning those conversations and I think we have something really powerful to offer within the design science tradition of really working holistically, working with long timescales. And then the anticipatory piece is really important, too. How do we begin to understand possible negative side effects and design for that?

So I will leave you with a big set of opportunities. There's so many ways that I could really use your help with this work. You know, one is, you know, potential clients. If, as you go out into the world, you can think of a company that could benefit from an innovation lab that we could run for them or a family office that wants to think about investment in a different way—anything that might connect with everything I've been talking about with the Design Lab project, that could join the Design Lab. Is there something audacious that sounds like these things I've been talking about that would be a great next one, and I'll put it in the queue. It's hard to add right now, but we're already building the next 20 amazing potential projects that we'll begin to work with over time. So I'm always open to potential nominations for extraordinary projects.

It would be great if you want to connect with any of the projects that I mentioned. Many of them have volunteer opportunities, all kinds of things they could use, from communications, marketing support, helping with fundraising, diving in and doing technical work together, setting up the tech stack to enable this amazing open design and knowledge creation that they're doing. So we'd love that and I can help connect you to those projects. If you're not a member of BFI, please consider joining and please consider upping your membership level. I'll just say this once. Love to have you and tell your friends to join. Tell people about BFI. Tell people we're doing extraordinary work. If you can think of someone who could make a meaningful donation, or you can think of a foundation. This is the number one thing that we

could use right now. We're really trying to jump to a whole other level. This work is holistic. It's about resilience. It's systemic. And we need we need support to do this effectively.

So any ideas that any of you have, please just reach out to me. I'll put my email in the chat right now. That's a great way to reach out. So it's just stuart at bfi.org. Who should I be talking to? What foundation actually would get this? What corporation would love to connect with this work? I would be eternally grateful. This is the moment that we really can have this huge inflection point in our work in the world. Get others to donate. Get others to join. Just let me know who might be interested in making a catalytic contribution to BFI.

There's a lot has been happening all year. It's been a sprint from the moment I joined BFI. I couldn't be more excited at the potential that we have in the world right now. People love to talk to BFI. People hear the name Buckminster Fuller—you'd be amazed. People all over the world, they just light up and they'll have their favorite quote, and more people than I could ever have imagined will tell me, "When I was in high school, Bucky gave this talk in this tiny town in Kansas." He went everywhere. Year after year he would travel the world, especially to reach young people. And those young people ended up devoting their lives to this incredible systems changing work. And it's incredible to have that kind of identity in the world. To be the Buckminster Fuller Institute means virtually anybody would be excited to talk to us. And so it's opening doors and opening collaborations.