Evolutionary Design Patterns

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Evolutionary design describes a generalized process for creating positive change in the world. Unlike more specialized design disciplines like architecture, evolutionary design considers any human-designed artifact to be within its scope. In that way, it encompasses all forms of design and all forms of creative expression. Its purpose is to guide our creative energy toward realizing a more just, equitable, efficient, life-sustaining world that can help humanity survive and thrive far into the future. This paper outlines the core patterns of thought and behavior that constitute evolutionary design with the hope that it will be clear to the reader how they might use these principles and tools in support of their own endeavors.

1. INTRODUCTION

In 1927, R. Buckminster Fuller embarked on a lifelong journey to discover what practical steps someone like him—an average person with no money and a dependent family—could take to improve the world. He treated his life as an experiment in which he was the guinea pig, not only to find answers for himself, but to communicate what he learned to future generations. His hypothesis was that individual humans have a role to play in the success of humanity, one that cannot be fulfilled by giant corporations or governments, even with all the resources available to them. The role that he identified and developed over 50 years is that of the "comprehensive anticipatory design scientist," a mouthful that is commonly shortened to "design scientist," a practitioner of "design science."

As is suggested by the name, Fuller's primary mechanism for creating change was through design, which he defined as being the deliberate arrangement of parts so that they are "interaccommodatively ordered in respect to one another" (Fuller, 1973). In that definition, he alludes to principles of systems theory and the phenomenon of "emergence" that occurs when parts are combined—either by nature or humans—in such a way that they interact synergistically as a new whole, with new behaviors that are not predicted by the behaviors of the parts.

Fuller's design science is a synthesis of complexity theory, systems thinking, design, and both the scientific method and the products of science such as the theory of evolution. It sees humans as both part of nature and having a special function in nature, as thinkers and designers. He described a version of the OODA loop (Observe, Orient, Decide and Act) where we observe the world around us, work to understand it, imagine a way to change it, then take action to change the world to match our vision. He called this process "teleology" which suggests that he considered it fundamental to humanity's purpose in Universe.

Design science builds on the idea that humans are the only form of life that we know with the ability to reflect upon existence. We are Universe pondering itself, and design science suggests that as part of that ability, we can work in line with evolution as co-creators of Universe. Through design, we have the capacity to create a diversity of solutions for ourselves and select for our own success as a species and a society. Our current human-designed world is the result of our ancestors using this capacity at an almost unconscious level. Design science seeks to make the process conscious and intentional.

Fuller spent 50 years exploring ways that he could maximize his capacity as co-creator with Universe and participate in this process of evolving human society toward greater wholeness. He worked to be a catalyst for realizing individual and societal potential. He wrote books, designed houses and cars, invented the geodesic dome, the Dymaxion Map and a branch of mathematics among many other things. Many of the disciplines that he developed are encoded in the patterns described in this paper. They include taking the design initiative, basing our knowledge on direct experience, trying to identify and work in line with evolutionary trends, and improving the world by changing the environment rather than trying to socially engineer people.

1.1 EVOLUTIONARY DESIGN

The use of the term *evolutionary design* to describe this specific approach to improving the world is our own designation, and it comes from a desire to expand on the tools of design science and make it more accessible to everyday people.

Fuller's design science promises rapid social progress, but it has historically required a level of self-discipline and dedication that few have achieved since Fuller's death over 40 years ago. While the promise has yet to be realized, in the last 40 years the tools of the digital age have brought creative power to everyday people in many forms, including blogging, social media, crowd sourcing, and open source software. Computers and the internet have given us the tools we need to reinvent design science and make it something that everyone can participate in. That's what evolutionary design does: it takes Fuller's design science and wraps it in a system that allows us to improve the world at scale. It's a system of perspectives, processes, and practical tools that make it possible for design science to be widely practiced and shared.

In summary, evolutionary design is an accessible way of creating change that tries to maximize the chances that the changes we make will improve the world rather than make it worse. Trying to change any kind of stable system is hard, and we're trying to move a very big system of systems toward a better future.

The tool set that evolutionary design provides includes new ways to both look at and engage with the world. Here are some of the key principles that are implemented by the patterns in the pattern language:

- **Co-create with Evolution** - Evolutionary design tries to work in line with the principles of evolution. In this sense, we are trying to steer evolution toward our vision of a BETTER WORLD.

- **Evolve human cultures** - Our focus with evolutionary design is with improving the human-created world so it can exist in balance with nature. Redesigning human biology is not our goal.

- **Replace rather than destroy** - Evolution works by creating a diversity of options and letting bad ideas become obsolete. It is inherently a creative process.

- **Create with Intention** - Help build a world that works for all humanity and the planet by working in line with (or co-creating with) evolution to move humanity, our human-created world, and Earth's natural systems toward greater wholeness. This is distinct from many other common intentions such as gaining power, controlling people or realizing a profit.

- **Success for All** - Evolution can be seen as selecting for success (i.e. survival). By co-creating with evolution, we are working for the success of all life on our planet.

- **Scope** - Evolutionary design embodies the phrase "Think Globally, Act Locally".

- **Initiative** - All humans can participate in evolutionary design. We encourage this by encouraging individuals to engage in their CREATIVE PRACTICE.

- **Collaboration** - The internet provides the means to collaborate across time and space. OPEN ARTIFACTS are the formalization of that goal.

- **Adaptation & Scaling** - EVOLUTIONARY DESIGN GROUPS are a mechanism for adapting open artifacts to local conditions and improving communities. Groups working all over the world, are how we scale.

These principles and tools are designed to embody principles of evolution and enable individuals and small groups to participate in humanity's evolution. They form a broad framework that is additive, meaning that regardless of your experience, knowledge and skills, regardless of the design approach that you take, you can practice evolutionary design. So, you can be an architect that practices evolutionary design. You can approach human-centered design, permaculture, regenerative design, engineering, carpentry, finance, public policy, accounting, crafting, teaching, computer science, art, graphic design, writing, and any other human activity through the lens of evolutionary design.

1.2 AN OVERVIEW OF THE PATTERNS

Pattern languages are not inherently sequential; their structure is more pseudo-hierarchical, but to clearly present a pattern language, we must choose a sequence for the patterns. The following sequence was chosen because we felt it guides the reader through a series of connected patterns in a logical way, but you may feel free to create your own path through the language.

Table 1 An overview of the evolutionary design patterns

PATTERN NAME	SOLUTION
BETTER WORLD	Explore what a better world means to you. Document your vision so you can use it as a benchmark for whether a particular idea is likely to move us toward greater wholeness.
HUMANITY'S CANVAS	The world is a big place and it's difficult for us to consider all of it at once. Use the concept of humanity's canvas to help you narrow your focus. Consider whether you want to start with people, the human-designed world, or Earth's natural systems.
DESIGN INITIATIVE	Exercise your personal sovereignty by operating outside of traditional institutions like corporations, political states and nonprofits. Decide for yourself how you will use your best experience, knowledge and skills to build a better world.
INFINITE PATH	Use the concept of the infinite game as a guide to help you stay on the right path. Look at the choices you make in terms of whether it helps ensure that the game of "humans thriving on Earth" keeps playing.
ARTIFACTS	Create a BETTER WORLD by designing and building artifacts rather than trying to directly change people's minds or behaviors. Use artifacts to change the dynamics of systems in preferred ways.
PERSONAL UNIVERSE	To grow as a cultural creator, be curious! Attend to your unfolding self by challenging your personal universe, making it stronger and more whole. Examine your experiences and what you think you know, questioning and making corrections where you can.
CREATIVE PRACTICE	Establish and engage in a cyclical creative practice where you find WORK THAT NEEDS DOING, decide what work is YOURS TO DO and then DO THE WORK. Use your practice to improve both the world and yourself in a virtuous cycle.
OPEN ARTIFACTS	Center your CREATIVE PRACTICE around creating, contributing to and adapting open artifacts projects. Collaborate with other creators across time and space to design and build ARTIFACTS that move us toward a BETTER WORLD.
WORK THAT NEEDS DOING	Find or create OPEN ARTIFACTS projects that are meaningful to both you and the world. Look for work that is in line with your vision of a BETTER WORLD.
YOURS TO DO	Choose work from your list of WORK THAT NEEDS DOING based on your interests and capabilities. Ideally it will challenge you enough that you will strengthen your PERSONAL UNIVERSE, and you will be capable of a greater challenge on the next cycle.
DO THE WORK	Follow through with the work that you chose and learn what you can from it, even if what you learn is that you made a bad choice. Act even if that action is to take a step back and choose something else that is YOURS TO DO.
A SYSTEMS APPROACH	Take an informal systems approach to understanding yourself and the world. Use your Sense of Livingness to determine whether you're moving toward a BETTER WORLD.
TENSEGRITY OF CREATORS	Nurture your individuality and independence but also practice interdependence as a member of the community of cultural creators. Do what you can to establish and strengthen the community by actively collaborating in OPEN ARTIFACTS projects.
EVOLUTIONARY DESIGN GROUPS	Work closely with your neighbors to identify your local needs and look for existing OPEN ARTIFACTS projects that you can adapt as solutions. If no appropriate projects exist, create one. Use the creative energy of the TENSEGRITY OF CREATORS to move your community toward your vision of a BETTER WORLD.

2. **HOW THE PATTERNS WORK TOGETHER**

For evolutionary design to be widely practiced and shared, we need a minimum viable system of tools and processes to support it. These are the core patterns that make evolutionary design work as a system.

- First, we need people to take the DESIGN INITIATIVE and share their good ideas with the rest of us. People are already doing this on social media, but those ideas rarely go anywhere, and they often disappear when their promotors lose interest. We need a way to give our ideas a life of their own so they can continue when we move on to other things.
- To give life to these ideas such that everyday people can help develop and test them, we need collaborative spaces, and that's where OPEN ARTIFACTS projects come in. Using tools developed for the Open Source Software movement, open artifacts provide a place where ideas can be transparently developed by teams of people spread throughout the world.
- To incentivize everyday people to contribute to open artifacts projects, we need to make the process simple and meaningful. By inviting people to engage in their CREATIVE PRACTICE, we're providing an easy, low-barrier way for them to use their best experience, knowledge and skills to start making a difference right away.
- Additional incentives built into a CREATIVE PRACTICE include having complete control over what projects we contribute to—WORK THAT NEEDS DOING—as well as control over what and when we contribute—YOURS TO DO. Plus contributing helps us grow as humans by strengthening our PERSONAL UNIVERSE, increasing our individual capacities as designers and humans, and making us more effective cultural creators.
- Lest this all become an exercise in creating cool things that never get used, we need to form local EVOLUTIONARY DESIGN GROUPS. These groups use a portion of their creative practice to understand the needs of their community, find artifacts that can help meet those needs, adapt them to local real-world conditions, and make them a reality.

2.1 EVOLUTIONARY DESIGN IN PRACTICE

What does this look like in the real world? The examples below describe real-world examples of evolutionary design, though few of them use that terminology to describe themselves.

HeaterBloc: A collective of activists in Oregon developed a tent-safe "copper coil alcohol heater" in response to a need they saw in the unhoused community. The early development took several years of trial and error, but in 2021 they felt like they had a practical design and posted a 20-page Google Doc with instructions on how to make them. To get the word out and create a community, they set up a Twitter account called HeaterBloc. Since then, their instructions have been translated into several languages and local groups that build and distribute the heaters have popped up all over the U.S.

Hovalin: The Hovas family, a couple that describe themselves as "two Nebraska nerds living in the SF Bay Area" developed a 3-D printable violin and posted detailed instructions and the digital files on their website. Anyone with a 3-D printer at home can print a violin, in several sizes, for about $70, or you can buy one from their store for $600. They set up a Reddit account to create a collaborative space for Makers building the violin and have evolved the design over time based on their feedback.

Bal Swan Preschool: This is still a thought experiment, but it shows evolutionary design's potential. Bal Swan is an innovative and inclusive preschool that has become an integral part of my community, but it can serve only a few hundred local kids each year. To expand their reach, I propose to create an open artifacts project that would be a kind of "how-to" manual for building a similar school in your local community. I would work with the school director and teachers to establish an online community and a website containing materials like administrative processes, fundraising events plans, classroom materials, and so on. Creative people from anywhere could contribute their experience and skills to improve the site, some of which might go into improving Bal Swan itself.

Evolutionary Design Factory: In computer programming, a factory object is one that generates other objects. This year, I created an open artifacts project intended to bootstrap a thriving evolutionary design movement by encourage the creation of more open artifacts projects as well as the infrastructure needed to realize a thriving community of cultural creators. You can find out more about it at EvolveTheWorld.org.

3. **WHAT MAKES EVOLUTIONARY DESIGN DIFFERENT?**

These patterns developed out of my personal desire to find a way to contribute meaningfully to creating a better world. In my research I looked at many ways that humans try to improve the world, including political action, monkey-wrenching and other violent actions, humanitarian aid, and philanthropy. Below are some of the advantages this approach has over other approaches.

Evolutionary design is...

- **Collaborative:** It does not rely on a single person, group or nation to solve everything; it depends on a diversity of everyday people taking the design initiative and working together as a great, global collaboration of creators. [CREATIVE PRACTICE, TENSEGRITY OF CREATORS, OPEN ARTIFACTS]

- **Transitional:** Open Source Software has shown that open projects can be both free and profitable, so evolutionary design can operate within the current economy to create transformative change. [BETTER WORLD, OPEN ARTIFACTS, EVOLUTIONARY DESIGN GROUPS]

- **Peaceful:** It recognizes that progress is often limited by the fears that come with uncertainty and change; to assuage that fear it changes the world by designing artifacts rather than trying to coerce people. This approach fuels the design revolution, bringing about change peacefully. [ARTIFACTS]

- **Creative:** It is based on working to replace existing systems, at all levels, with better alternatives. It is inherently creative, not destructive. [DESIGN INITIATIVE, CREATIVE PRACTICE, ARTIFACTS]

- **Additive:** Except for violence, it doesn't seek to replace other approaches to creating change. It makes other approaches more effective by shoring up their weaknesses. [BETTER WORLD, OPEN ARTIFACTS, INFINITE PATH, A SYSTEMS APPROACH, WORK THAT NEEDS DOING]

- **Transparent:** It defines what we mean by a better world: a high quality of life for all life, made possible through life-sustaining world systems, so that we can survive and thrive far into the future. [BETTER WORLD, OPEN ARTIFACTS]

- **Global:** It has the global scope necessary to truly change the world rather than working to create advantage for just a subset of humanity. [HUMANIY'S CANVAS, INFINITE PATH, A SYSTEMS APPROACH, TENSEGRITY OF CREATORS, EVOLUTIONARY DESIGN GROUPS]

- **Open:** Collaborative work is done transparently through the creation of open artifacts projects, similar in concept to open source software projects, but for any human-designed artifact. [OPEN ARTIFACTS]

- **Decentralized:** Open artifacts projects are controlled by their maintainers, not a central organization; they are loosely connected as a distributed platform of independent projects. [OPEN ARTIFACTS, TENSEGRITY OF CREATORS]

- **Accessible:** It's driven by a simple cyclical creative practice in which individuals create, contribute to or adapt open artifacts projects. There are no restrictions regarding who can participate. [DESIGN INITIATIVE, CREATIVE PRACTICE]

- **Self-Actualizing:** The creative practice is designed to set up a virtuous cycle where you help build a better world while also improving yourself and your circumstances. [DESIGN INITIATIVE, CREATIVE PRACTICE, PERSONAL UNIVERSE, YOURS TO DO, DO THE WORK]

- **Empowering:** Individuals decide which projects they contribute to, how they contribute, and how much they want to participate. Anyone can create new projects based on their ideas. [DESIGN INITIATIVE, CREATIVE PRACTICE, OPEN ARTIFACTS, YOURS TO DO, DO THE WORK]

- **Scalable:** Ideas can be scaled globally by encouraging the adaptation of open artifacts projects to local situations all over the world through locally organized evolutionary design groups. [OPEN ARTIFACTS, EVOLUTIONARY DESIGN GROUPS]

These qualities make evolutionary design a powerful force in creating positive change and if adopted by enough individuals, it has the power to spread that positive change to people all over the world.

4.   **PATTERNS**

What follows are brief sketches of some of the patterns to give the reader a more in-depth understanding of how the patterns work.

4.1   Design Initiative

Design Initiative

As cultural creators, we know in our hearts and minds that humanity has the potential to create a world that works for all life. We want to help make that happen, and we're looking for ways to be of use.

▼ In this context

There are a lot of strategies and tactics that people use to try and make the world a better place; most of them are tethered to the current power structure which limits them severely; and none of the strategies can really value what you have to offer because you're the only one who knows what you can do, what's important to you, and what you're ready to give.

- When we try to create change from within the current power structures, say by working for a corporation making "green" products, we are automatically limited in the same ways those institutions are limited. These limitations prevent us from creating real change. Instead, we're given "solutions" that spackle over the huge cracks in the existing systems.
- An example of a spackle solution is supporting the neighborhood bake sale so our schools can buy needed supplies. Spackle solutions are a sign that the world systems we depend on are not working very well, but they do nothing to fix those systems.
- As humans, we each can consciously affect the future of humanity, but we must take the initiative. We must believe that our hard-won experience, knowledge and skills have real value. We must have the courage to question the wisdom of others and to entertain the idea that our own wisdom might be better.
- We inherited a great gift from our ancestors. The world we live in today is a remarkable achievement. It represents our ancestors' collective creative response to the most important and persistent problems that they faced, but it's not perfect. It's a work in progress: a living, growing system of cultures that needs to be nurtured and sustained. It's passed to us with the expectation that we will care for it and strengthen it as stewards. It's now our turn to move humanity forward.

▼ Therefore

Take the design initiative and free yourself from the limitations that prevent the massive corporations, political states and non-profit organizations from creating real change: decide for yourself how you will spend your precious time and creative energy, committing to giving your best experience, knowledge and skills toward projects that you truly care about and believe will have a meaningful impact.

▼ Consequently

This work is best done with others. Start by turning your ideas into OPEN ARTIFACTS projects so you can learn from and collaborate with other cultural creators and help build a strong global community—TENSEGRITY OF CREATORS—as well as vibrant local EVOLUTIONARY DESIGN GROUPS. If you feel that you don't yet have useful ideas of your own, you can build OPEN ARTIFACTS projects in support of others. Look for individuals or organizations that are doing things that move us along the INFINITE PATH and offer to connect them to the network of cultural creators. Every new project creates opportunities for others to engage in their CREATIVE PRACTICE and makes the global cultural creator community stronger.

4.2 Personal Universe

Personal Universe

To take effective action that moves humanity along the INFINITE PATH, we need to have a clear sense of how the world really works. This pattern describes how we can move toward a more comprehensive, accurate, interconnected and flexible understanding of reality.

▼ In this context

We are born cultural creators, but many of us learn from an early age that aspects of ourselves like curiosity, creativity and interest in big ideas should be hidden rather than celebrated. As a result, our understanding of the world is limited and that limits our effectiveness in changing it.

- The work of evolutionary design requires independent thought, humility and personal integrity, so we must continually question everything we think we know about the world and how it works. The assumption is that the more comprehensive, accurate, integrated and flexible our understanding of Universe is, the more effective we'll be at creating the change that we want to see.
- Talking in terms of "everything we know about the world and how it works" seems overwhelming, so it's useful to give this body of personal knowledge an identity. We call it our "personal universe".
- Our personal universe is created through our experiences and our interpretation of those experiences. Much of our "experience" is learning about the experiences of others, through school, family stories and now, social media. We also learn a lot through conditioning, by watching others around us.
- It's good to be aware of our personal universe and what it contains because any experience, whether direct or indirect can lead to an inaccurate understanding of our world: we might misinterpret the meaning of our experience; we might overgeneralize; the second-hand information we receive might be inaccurate, misinterpreted, overgeneralized or intentionally misleading. We must consciously work to maintain a right relationship with reality.
- All of this is about improving your most important tool for making the world better, your mind. The world is complex, and for the most part, our educational systems and social structures are not designed to develop humans into powerfully aware, deeply caring, comprehensively intelligent cultural creators.
- Think about it as a process of strengthening your personal universe like you would strengthen a muscle. Challenge your personal universe by questioning what you think you know. A challenge to your personal universe should transform you in some way, presumably toward a greater wholeness. Sometimes that will be a small correction in your knowledge, but other times, it might result in a paradigm shift. Being open to these changes is perhaps the biggest challenge of all. Our default programming wants us to believe that what we know is Truth, so it takes real effort and humility to admit that what you think you know might be wrong.

▼ Therefore

Be curious! Attend to your unfolding as a whole being by challenging your personal universe and making it stronger. Examine your collection of experiences and what you think you know about them, questioning them and correcting them where you can. Take on the challenge of making yourself a sovereign human being.

▼ Consequently

Strengthen your personal universe and pursue your CREATIVE PRACTICE to increase your personal sovereignty. You don't have to perfect your personal universe before you take action. Your CREATIVE PRACTICE is the perfect vehicle for testing what you think you know. If you approach the process with humility, you'll have plenty of opportunity to test your assumptions. Take the opportunity and you will strengthen your personal universe for the next cycle.

Open Artifacts

You want to develop and idea with the help of others—TENSEGRITY OF CREATORS—but you're not sure how to collaborate with them.

▼ In this context

Ideas are everywhere, but while they start in the mind of a single person, they require a village to truly mature. A person or a small group might take an idea as far as they can, but if it doesn't show commercial promise, or if the creators don't know how to develop it further, it's often set aside. Many promising ideas have been lost this way.

- It seems clear that for us to develop ARTIFACTS as part of evolutionary design, we need some kind of collaborative platform that will allow us to work together across space and time.
- Fortunately, we have a successful model for long-term collaboration over time and space: the open source software movement. Open source software has revolutionized how software is created, shared and sold. The same principles and tools can be applied to other artifacts, and we can revolutionize how we develop and share new ways of operating our planet for the benefit of all.
- Open artifacts can include any project that is free (in the sense of free speech, not free beer, as the software folks like to say), and there are a lot of different groups creating them under a bunch of different names: open data, open science, open education, open source appropriate technology, and websites that allow for sharing work among Makers, like Thingiverse, Instructibles, and more.
- Different projects have different amounts of openness. There is a grid that is published by SPARC that tries to detail the many ways that openness can be limited. It's a complicated situation involving whether the resource can be read free of charge and if so, after how much time, whether the resource can be reused, remixed and shared with others, what copyrights and other rights are retained for the work, and more. For this kind of project, I think the most important things are:
    - o Individuals must have the ability to contribute to the project. It's great if something like a textbook is made freely available, but there should be a way to send feedback that can be integrated into future editions.
    - o A project can be forked, to use the language of version control software. That means that if you want to start with an existing project but take it in a different direction, you're free to do so. In terms of licenses, that is the ability to reuse and remix a project.
- Open artifacts projects can be designed to be flexible. A solution that works in one part of the world, with a specific culture, climate, educational system and so on, may not work very well in another part of the world where those things are different. Like an open software project, open artifacts can be forked and adapted to local conditions. In addition, they could be designed with flexibility built in. For example, instead of defining exactly how a community garden should be arranged, a pattern language could be provided that allows to the local community to design the garden together themselves.
- The goal of an open artifacts project is to facilitate and document the design of ARTIFACTS, making it possible for people from all over the world to contribute to a single goal, for the benefit of everyone.

▼ Therefore

Create and participate in open artifacts projects so you can collaborate with others across time and space. Center your creative practice around creating, contributing to, or adapting open artifacts projects.

▼ Consequently

Building open artifacts projects will help build a distributed platform of life-sustaining world systems and your ideas will be given a life of their own, so they won't be lost if you move on the other things. You will also connect with members of the TENSEGRITY OF CREATORS community each of whom can lend their expertise as part of their own CREATIVE PRACTICE. If you're creating a new open artifacts project, make sure to register it with the Open Artifacts Hub (OpenArtifacts.com) or similar service so that other cultural creators can find it.

4.4 Creative Practice

Creative Practice

When we choose to take the DESIGN INITIATIVE and walk the INFINITE PATH, we're inspired to achieve great things, but these powerful ideas leave one important question unanswered: "how do I do it?"

▼ In this context

We are born artists, comprehensivists and creators, but somewhere along the line— perhaps though education or watching the people around us—those capabilities are set aside, and we stop developing them. If we want to reclaim our ability to create a better world, we need useful instructions on how to move forward.

- Most disciplines, especially ones based in the dominant finite games of our culture, require that you earn a degree, obtain a certificate or pass an exam to be allowed to practice. We don't need permission to walk the INFINITE PATH, so once we've decided to take the DESIGN INITIATIVE, we don't need to wait for someone to tell us what to do.
- On the flip side, we don't have anyone telling us what to do, what steps to take, whether we're doing a good job, or if we're wasting our time.
- In a very real way, we are like entrepreneurs. Seth Godin tells us this about being an entrepreneur: "You don't apply. You don't get a salary. No one picks you. [...] Entrepreneurship is a chance to trade a solution to someone who has a problem that needs solving. Solve more problems, solve bigger problems, solve problems more widely and you're an entrepreneur."
- The same is true for cultural creators. To truly be cultural creators, we need to start solving problems by creating ARTIFACTS. You have important life experience and knowledge that no one else has. You can use that knowledge to start making a difference right away. In the process, you'll learn more and become stronger, more resilient, and capable so you can make an even bigger difference. This is how we grow as cultural creatives. This is how we practice evolutionary design.
- Like a doctor has a medical practice, a cultural creator has a creative practice. Your creative practice is personal to you and can be a full-time job or a hobby, but it's essential work. The practice is simple, but the work you choose can be as complex as you want it to be, providing a potential lifetime of meaningful work. The practice takes the form of a repeating cycle, meaning you follow the same simple steps over and over. Each cycle may be as short as an hour or as long as weeks or months depending on the work you choose to do.
- Here are the steps: 1. Compile a list of meaningful WORK THAT NEEDS DOING. 2. Choose what work is YOURS TO DO, right now. 3. Do the work. You have total control over what you decide is work that needs doing and what you choose to do.
- Your creative practice is what moves you forward. It makes it possible for you to contribute the best of your hard-won experience, knowledge and skills to creating a better world, while leaving you in control of what you contribute and how you contribute it.

▼ Therefore

Establish a creative practice and grow as an individual as well as a member of your community; engage in a cyclical process in which you 1. find work that needs doing, 2. choose the work that's yours to do, 3. do the work, and start over. Use your creative practice to improve both the world and yourself by creatively tackling problems in your area and globally; challenge yourself each cycle to become stronger, more resilient, and capable so you can tackle more complex challenges during future cycles.

▼ Consequently

Start by compiling a list of meaningful WORK THAT NEEDS DOING, then from that list, choose work that's YOURS TO DO. Engage in your creative practice with your PERSONAL UNIVERSE in mind, choosing work that will help you grow as an individual. And extend the reach of your creative practice by participating in local EVOLUTIONARY DESIGN GROUPS.

Work That Needs Doing

You're ready to point your CREATIVE PRACTICE toward meaningful work, but you don't have anything in mind, and you're reluctant to choose the first opportunity you encounter.

▼ In this context

There are many, many ideas out there about what we should do to make the world a better place; some of them are on track with what we want to do, and some are truly bad ideas based on hatred and fear.

- To sort through the many ideas out in the world, each cycle of your CREATIVE PRACTICE starts with looking for work that needs doing. The phrase seems simple enough but deciding what needs doing is not easy. To be clear, work that moves us toward a world that works for all humanity is the work that needs doing. Look to HUMANITY'S CANVAS and the three major movements—collective actualization, design revolution, and global regeneration—for guidance.
- Look for people or organizations that are working on solutions to the problems you're interested in. Do they have a list of things they need? Are they looking for volunteers? You can also brainstorm your own ideas for ways you can help people directly.
- Try to make your list as specific as possible. For example, instead of "volunteer at the Red Cross," write the details: "sign up at redcross.org and apply as a volunteer helping reconnect families separated internationally."
- The idea isn't to choose something yet but simply come up with a list of opportunities and make you aware of the constellation of opportunities that are around you.
- Looking for work like this can be both inspiring and discouraging. You'll find that there are a lot of people out in the world actively looking for ways to solve the problems we face in a way that benefits all of us. At the same time, it will seem like they don't really want your help. Most of the existing non-profit and charity organizations have not embraced collaboration in the way that OPEN ARTIFACTS projects do. They are still largely closed systems that don't know how to accept the work that you want to provide.
- So, consider ways that you might be able to move them toward a more collaborative model. You might find that you need to start with their ideas and create an OPEN ARTIFACTS project that rethinks how we can create the change they want. You might be able to get them to collaborate with you rather than you trying to work within the limits of their model.
- If someone else is doing the work, then, it's being done and does not need doing. This is important because it challenges the role of competition in this kind of work. If you look around and see that someone is doing the work you want to do, it's better to join with them and support them rather than compete against them. It's cooperation and collaboration over competition. If we're intentionally working to make the world better, we find that we don't need competition to keep costs as low as possible or to innovate. Our motivation isn't to outcompete, but to serve people.

▼ Therefore

Pick a problem that you're interested in solving and compile a list of work that needs doing including tasks that someone like you could pick up today and start working on. Don't choose yet what you'll work on, just write a list so you're aware of the opportunities you have available. Your sense of livingness—A SYSTEMS APPROACH—can help you distinguish between work that needs doing and work that doesn't.

▼ Consequently

Look to the TENSEGRITY OF CREATORS as a built-in resource you can trust; you can trust other people's thinking and learn from them. That's why existing OPEN ARTIFACTS projects are a good place to look for this kind of work. As you become more aware of how you can get involved, look at what opportunities are a good match for your interests, your development needs, and your current skills—YOURS TO DO

4.6 Yours To Do

Yours To Do

You've compiled a list of WORK THAT NEEDS DOING and you need to choose something. In a cyclical process like a CREATIVE PRACTICE, it's important that you're challenged enough that you grow during each cycle, but you don't want to take on a challenge that is so hard that your progress stalls. This pattern examines how that balance can be achieved.

▼ In this context

When you're the one taking the initiative, there is no one telling you what to do; that can be very freeing, but it also prompts you to think deeply about what you can do, what you want to do, and what you might need to do to grow as a person.

- Once you have a small list of WORK THAT NEEDS DOING, you chose what work is yours to do, right now. What can you start today? Which work fits your skills and interests? What seems the most urgent? What motivates you? Choose that work and get to it.
- Your experience and knowledge are key considerations when choosing something that's yours to do. If I'm a computer programmer, I'm probably not going to volunteer to do free surgery with Doctor's Without Borders. That's obvious, but think about what you know, then look for ways you can build on it, or expand it by taking on something that's in your wheelhouse, but maybe still a bit of a challenge. It won't work very well to dive into something that's going to overwhelm you and burn you out and which you won't be able to deliver successfully.
- Part of the reason you're looking for a good balance of challenging but not too challenging is that those are the conditions for entering a flow state. Flow is a state of mind where you're intensely focused on an activity but relaxed. You lose track of time, and the experience is usually very satisfying. It also tends to be when you do your best, most creative work, so seeking out flow experiences has benefits for both you and the project you're contributing to.
- We each have unique capabilities, and those capabilities also give us a unique perspective on what needs to be done. Think carefully about what you might be able to offer that no one else can. At first, try to coordinate with others trying to solve the problem and offer what you can to aid their efforts. Over time, you'll begin to see opportunities that no one else can see.
- With all that said, don't spend too long trying to find the perfect project. Remember that your CREATIVE PRACTICE is a cycle, and you are in complete control of it. If you end up choosing something that you feel was a bad choice for any reason—maybe it's too hard, too easy, boring, or you just can't get into it—you can stop working on it and choose something else. Think of it a little bit like dating: you're learning more about the projects that are out there and looking for ones that seem like a good fit. You're not going to have a long-term relationship with every project you try out.

▼ Therefore

Decide what work is yours to do and follow through by doing the work. You've already got a list of work that needs doing, so make your best effort to find something that 1) you care about, 2) you might be effective doing, and 3) will be enough of a challenge that you'll be able to enter the flow state when you do it. Think about finding something that is a relatively small step forward with the idea that you'll learn from the experience and be capable of doing more on the next challenge.

▼ Consequently

When you work on a project, use the opportunity to try to connect with and encourage other cultural creators. Those relationships are what will strengthen and grow the TENSEGRITY OF CREATORS. Reach out and ask questions about your co-contributor's experiences and ideas and use what you learn to reflect and strengthen your PERSONAL UNIVERSE.

4.7 Evolutionary Design Groups

Evolutionary Design Groups

As the platform of OPEN ARTIFACTS projects grows and matures, we need to make sure the artifacts don't sit dormant but are put into use to make the world better.

▼ In this context

There is a danger that all this design and problem-solving will remain a kind of intellectual exercise that never really has a significant impact on the world. It's important that there be simple mechanisms that adapt these artifacts to local needs and build them in the real world in a way that is scalable.

- There is a maxim that says we should think globally, but act locally, and evolutionary design is both a global and local activity. The OPEN ARTIFACTS platform and global community of cultural creators— TENSEGRITY OF CREATORS—allows us to collaborate across great distances and across a diversity of experiences, but we still need that local component.
- An Evolutionary Design Group is a community-based organization that is formed by its members. It's a bit like other community service groups, except that it's focused on applying evolutionary design to the local community. The goal is to bring together a diverse group of individuals who dedicate a portion of their CREATIVE PRACTICE to collaboratively help improve their surrounding area. The group is intentionally local, so the members can meet in person on a regular basis.
- The groups can be whatever size makes sense for you, but if there are more than about 20 people, you might want to consider forming more than one group. Other models can work, though, with one large group breaking into smaller working groups on a project by project basis. On the other hand, you may just have a handful of people, and that's fine. With the power of the global community behind you, you'll be able to help improve the lives of those around you more than you might imagine.
- In a way, an Evolutionary Design Group is a local chapter of the TENSEGRITY OF CREATORS. We have the same goals and use the same tools to do our work. Rather than being redundant, however, they are the last critical piece for us to realize our vision as cultural creators.

▼ Therefore

Work closely with your neighbors by forming Evolutionary Design Groups, drawing upon the group's diverse knowledge, skills and experience to improve the community you live in. Identify what your community needs and look for existing open artifacts projects that you can adapt. If a suitable project doesn't exist, create it. Share what you learn with the world by creating, contributing to or adapting and implementing open artifacts projects.

▼ Consequently

Look for others in your community who want to make the world better and if necessary, introduce them to the principles of evolutionary design. Work together to understand the needs of your local community and find OPEN ARTIFACTS projects that you might be able to adapt to fill a local need. Share what you learn by contributing back to the projects you use.

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