Principles of Financial Permaculture

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Financial Permaculture has been a part of the overall concept of Permaculture as it has cropped up in many Permaculture certification programs. It is our aim to add value to the existing knowledge around the concept of Financial Permaculture. Our team of designers, who are organizing the Financial Permaculture course, October 24-28, 2008 in Hohenwald, TN wanted a baseline comparison of the core principles of both Permaculture and finance. I've put together a comparative chart that has finance principles, taken from Solari Inc., and common Permaculture principles, drawn from David Holmgren and others. This piece takes the slant from Permaculture because I, the writer, am a Permaculture Designer, not a finance expert. Following is a brief description of Permaculture, a comparative chart and then an overview of each Permaculture principle and how it relates to finance. First though, I'd like to share my basic definition of Financial Permaculture.

I view Financial Permaculture as a model for systems thinking that takes a whole ecosystem approach to economics. Financial Permaculture strives towards total economic return – where the entire system and its parts are optimized. I like to think of Financial Permaculture as a design tool or a piece of appropriate information technology. When I say appropriate, I mean that we must apply efficient designs that generate the least amount of waste for the highest yield, taking into account the true social and ecological costs within a local economy. The current use of the word 'green' as it is so often used to describe the current sustainability based socioeconomic and environmental movements, does not always apply this true cost principle. One day, I hope that the word 'green' truly equals no waste. Waste, in whatever form debilitates the system. Financial Permaculture looks to cycle waste streams, whether physical byproducts or human potential, back into the system. This loop causes problems to become opportunities. This cycle, when conducted within a local economy empowers both consumers and producers. The result of this empowerment can be seen in an increased creative use of human potential, as both consumers and producers constantly adapt to local supply and demands, filling new niches as they arise. Through this intimate balancing act, product based pollution can also be eliminated through not in my back yard campaigns. In total, Financial Permaculture strengthens community development and local economic resilience, whilst valuing and protecting the natural resources that sustain the system.

PERMACULTURE OVERVIEW

Permaculture means permanent agriculture and permanent culture, " consciously designed landscapes which mimic the patterns and relationships found in nature, while yielding an abundance of food, fiber and energy for provision of local needs. People, their buildings, and the ways that they organize themselves are central to Permaculture." *David Holmgren in Permaculture: Principles and Pathways Beyond Sustainability.* At the basis of Permaculture are three ethics: people care, earth care and fair share. I'd also like to add that it's about self-care and that beyond landscapes, Permaculture is about mindscapes and the intricacies of human interaction.

Permaculture is a multi principle approach to whole systems designing. Using only one principle can cause inefficiency in the design and imbalance in the system. In Permaculture a net economic return means that you are using the least input (time and energy) while obtaining the most productive output that benefits the entire system (self, society and the environment). Because the world is diverse, every location is going to have a different technique that is appropriate and relative to the conditions of that system. It basically comes down to energy consumed versus energy created.

HISTORICAL PERSPECTIVE

A system that has extra caloric energy enables that system to catch and store energy for future

generations, or for times of hardship, or to advance culture. Nature became a commodity to humans with the onset of surplus. This surplus has always been a survival mechanism whether the surplus was held in the ecosystem, within the community or individually. As more and more people began to hold surplus individually we fell into the trap of our natural tendencies for greed, coveting, jealousy, lust, fear and attachment. All of which stem from a simple survival mechanism of self-preservation.

In history there was a time when humans were kept in consistent check with their ecosystems. Society started creating things that would make them more productive - freeing up people's time to advance culture. Then at some point, our ancestors started making things, not to increase productivity, but to have things for the sake of things. This is the trap. These things start to distract us from being productive. They fragment us, separate us and isolate us. We begin to spiral into a perpetuated turn of events that exponentially move us toward net energy loss for the entire system. We consume more and more and produce less and less. We begin to loose our social and environmental context and we become dependent on systems that we have very little control over and are generally out of sight. Permaculture is about reversing this spiral back towards total economic gain.

COMPARISON OF INVESTMENT AND PERMACULTURE PRINCIPLES

Investment Principles	Permaculture Principles
Use "Total Economic Return"	Obtain a Yield Produce NO WASTE The Problem is the Solution Stacking Functions
Quadrants: Liquid vs. Nonliquid and Local vs. Global	Catch and Store Energy Use and Value Renewable Resources and Services Designing From Pattern to Detail Site Analysis - Zones
Scenario Planning "plan for the worst and hope for the best"	Observe and Interact Creatively Use and Respond to Change Designing From Pattern to Detail Site Analysis
Diversify "don't put all your eggs in one basket"	Use and Value Diversity Use Edges and Value the Marginal
Financial Intimacy "build networks of trust"	Apply Self Regulation and Accept Feedback Designing From Pattern to Detail Site Analysis - Zones
Organize/ Conspiracy "Take control of your power"	Zones - Relative Location (Companion Planting, Guilds) Stacking Functions (one group achieving complimentary functional yields and producing net energy plus)
Play Net Energy Plus "Pay it forward"	Apply Self Regulation and Accept Feedback Integrate Rather than Segregate Catch and Store Energy Obtain a Yield Produce no Waste

* Investment principles taken from Solari Inc. with permission from Catherine Austin Fitts. For access to Solari finance principles view http://solari.com/store/audio-seminars/positioning_your_assets/

SOME FAVORITE QUOTES
"True wealth is the ability of a society to transfer increasing amounts of energy and attention from the material side of life to the nonmaterial side and thereby to advance its culture, capacity for compassion, sense of community and strength of democracy": Arnold Toynbee

"Preserving Life should be the natural result of commerce, not the exception": Paul Hawkin

PERMACULTURE PRINCIPLES
Following is a short description of important Permaculture principles in relation to energy investment. Because there are thousands of Permaculture teachers, there are different variations of principles and definitions. I've been most influenced by the principles outlined by David Holmgren, co-founder of Permaculture. Here are my definitions pulling from his teachings.

Obtain a Yield
Obtain a yield means that you are getting more out of a system than you are putting into the system. This does not mean exponential yields though because in Permaculture we need to account for any residual energy used in the system and account for the net yield of the entire system, not just us.

"By paying constant attention to our successes and failures in design to obtain a yield and judging how close those designs are to maximum power for ourselves, our communities and the earth, we can resist both subsidized delusions of efficiency and rampant disregard for what we are consuming": David Holmgren

Produce No Waste
The cost of items in today's market does not include the true cost to human health, society and the environment. Using total economic return takes into account the true costs of an investment. No WASTE means that there are no social or environmental wastes generated during the production, packaging, distribution, usage or disposal - at every level energy is recycled back into the system to produce more products or services that benefit life. Thus it includes the energy and quality of life of all living creatures . Any production of a good or service brings about a total economic return, increasing the quality of life and optimizing wellness at all levels: self, social and environmental. Waste is something that has no use or value and is often damaging to the environment and to the health of people who are a part of that environment. Waste is also of human potential or of time. Waste finds itself in a system where an activity (like the production of a product) causes harm to the health of an individual, which later brings about a greater cost to society by the way of healthcare or crime. If you look at all activity as the cycling of energy - the question for this principle is, "how can we use this energy to create more life and cause no harm and how can we be most effective and economic about the process."

The Problem is the Solution:
When waste is generated - then we look to the principle called, The Problem is the Solution. This is the idea that one man's trash is another's treasure. We immediately ask ourselves how can we (collectively) benefit from this problem? How can this be a blessing? Is there some way we can cycle it back into the system?

Stacking Functions
Another principle that has to do with total economic return is stacking functions. To stack functions one must have an intimate understanding of his/her own needs along with the needs of other people and the ecosystem that they are a part of. To stack functions, one designs strategies that meet the most needs with

the least effort. Thinking this way helps one become a problem solver: creative, adaptable, effective and abundant. One's entire life can be based on these principles; they can be implemented with every decision that you make.

Catch and Store Energy has to do with non-liquid assets as it is about long term storage of savings and investment to build human capital that may not have an immediate return on your investment. "We live in a world of unprecedented wealth resulting from the harvesting of enormous storages of fossil fuels created by the earth over billions of years . . . most of the adverse impacts of this over harvesting will show up as available fossil fuels decline…inappropriate concepts of wealth have led us to ignore opportunities to capture local flows of both renewable and non-renewable forms of energy": David Holmgren. "Long-term assets building for the benefit of future generations has been a focus of ethical behavior down the ages. In a time of rapid change and short-term thinking we need to rebuild the aspect of our culture that emphasizes caring for the future, as well as deciding what is worth investing in": David Holmgren

Use and Value Renewable Resources and Services
Renewables are things that come again; non-renewables generally have a net energy loss to the system. Even if it does have a net benefit initially it creates dependency on a resource that can be depleted. This in turn creates inequality though the control of the resource by those who have the advantage of access. This inequality inevitably leads to a net energy loss for the system. We should invest our energy in local reusable and uncontrolled resources. I say local, because different areas on earth may have different levels of renewables. The more something can renew itself within a local system the better for the system. Local public renewable resources promote self or community reliance. Fossil Fuels are an extreme example of a non-renewable. Genetically modified patented seedless food sources are another example of a type of non-renewables that cause dependency and inequality. Depending on resources that cannot be produced in your local environment is a potential form of non-renewable that should be valued less than and invested in less than things produced locally.

Observe and Interact:
" Good design depends on a free and harmonious relationship to nature and people in which careful observation and thoughtful interaction provide the design inspiration": David Holmgren

Observing and interacting is a design process that emphasizes active experimentation balanced with reflective observation and benefits from including a complete design cycle of survey, analysis, design, implementation and evaluation. To observe and interact is to watch, sense, collect information, look for patterns and trends, predict behavior, accept feedback from your experiments and make preparations for possible identified scenarios. From this intimate interaction with the system we can invest our energy most efficiently in designs that support the entire system through the most possible scenarios or to have back up plans to invest energy elsewhere. Through gaining this intimate knowledge we're increasing the potential sounder strategies that conserve energy in the system.

Creatively Use and Respond to Change
With this principle we seek to be adaptable and opportunistic. We try to take advantage of change, to find the benefits and blessings and even value change for the sake of increased diversity and resilience that it often garners. Change can bring strength and build capacity. Problems become solutions. Of course not all change is good, but change is inevitable so we must learn to move with and benefit from change. We should limit our consumption of energy on maintaining outdated, unproductive, low yielding techniques and beliefs that no longer serve the system, but rather drain the system creating a net loss. We should invest our energy in things that have endured previous change and that have been proven through vigor and resilience. We should also remain open and adaptable to the opportunity of investing energy elsewhere if a new form of productivity presents itself. With this attitude we become invested in learning,

observing and interacting with the system and we value diversity and marginal opportunities. We become more active, alert, conscious and less attached to our unproductive habits.

Integrate Rather than Separate

When we ask what makes things similar we are seeking a holistic unification and we are likely optimistic and will have more value for the entire system. This will increase cooperation and the system will have a shared symbiotic net gain. When we only focus on what makes us different, we fall into the trap of judgment, segregation, fragmentation and greed. When we know that we are not separate from the environment or from one another we start creating whole system designs. This does not mean that we devalue individuality or difference, instead it means that we first look at what makes us the same, what needs do we share and then asks - what in our vast diversity can meet the most needs for the most involved. We should invest in things that unite us, not in those things that fragment us or that foster inequality.

Designing From Pattern to Detail

Looking at separate details within a system without looking at the overall patterns of how the system interacts is dangerous because we can isolate behavior. Our society is already overly fragmented and isolated. Fragmentation leads us away from self-reliance and towards dependency on specialists who are usually disconnected. This disconnection almost always leads to a net energy loss for the system. Isolation is also a net energy loser because true productivity comes through cooperation. Details are extremely important but are dangerous if not integrated into the entire system. Focusing on details can cause us to form unproductive habits and become attached to outcomes. We can also lose sight of the true reason for are initial intention or action. Designing first by looking for patterns is a much more holistic approach that looks for how the entire system can benefit, not individual parts within the system. Designing first with patterns also means that we can stack more functions, create more symbiotic relationships, produce a higher yield, remain open to change, benefit from mimicking nature, and not waste time reinventing designs that have already been created. We begin to flow with nature not against it. We don't have to assert our control and authority over desired outcomes. Once we create our designs we need to stay balanced between macro and micro, always staying aware of the larger picture - the metasphere. We should invest our energy in designs that support the entire system, not its isolated and fragmented parts.

Site Analysis

Through site analysis we observe patterns, we interact with and receive feedback from our experiments and data collection. We look for what resources are already present in the system through each zone of possible interaction (distance from homestead and amount of time spent interacting in that area). We plan our designs and where we're going to invest our energy based on what resources (goods and services) are already in existence. The more resources that you can use from zones closest to the homestead (or place the homestead in the middle of the resources) the more the entire system will be integrated and the more resilient and self-reliant you will be. We can spend a lot of time in a location that is not very close to the homestead - if that is necessary, then we can benefit from looking at what other functions we can stack while in that location and how can we interact more with that edge. In site analysis we also look at sectors and vectors. Sector analysis is looking at the system to see where the flow of resources is located (solar, wind, plant, animal, food, water, fire). You can also do this for human resources. Whereas sectors are things you can utilize, vectors are things to be avoided. Vectors could include environmental toxins, industrial pollution, high crime areas, polluted water, and/or a landfill. These are all components that might exist in our zones close to home that affect our senses, esthetics or even our health. We should invest our energy in things that are closest to home that increase the flow of resources, and transform vectors into areas that contribute to the overall productivity of the ecosystem. We must remember that what may be a vector for us personally may be a useful product for something else in the ecosystem.

Use and Value Diversity
'Don't put all your eggs in one basket.' What are eggs? Eggs equate a form of sustenance. Eggs are fragile and will break if the basket falls. Eggs equate birthing/seeds of life, of ideas, of your creation. Increased diversity means that we'll be more resilient. We'll increase our opportunity to adapt during times of change. If one of our energy sources becomes limited we're not dependent on that one source. With diversity we get more potential for specialization and quantity of possible products. Each product would require a different input, thus we could say that there would be less competition for the inputs and possibly more cooperation. Though diversity can create a competitive edge - but this edge can be beneficial for responding to change and for regulating unwanted and unproductive inputs. We should try to get our energy from multiple sources. We should invest our energy in multiple places.

Use Edges and Value the Marginal
The more edge and margin there are the more diversity, the more resources and opportunities. New niches are created, new ideas crafted, more transfer of information, cooperative trade increases, and the potential for compatibility increases as objects of edges are often capable of surviving on two sides or on a human scale - can be a liaison between 2 sides. We should invest in cutting edge portfolios and projects that have a proven record of thriving on the edge. Thus we will be more resilient to change.

Apply Self Regulation and Accept Feedback
Apply Self Regulation and Accept Feedback "This principle deals with self-regulatory aspects of Permaculture design that limit or discourage inappropriate growth or behavior…In modern society, we take for granted an enormous degree of dependence on large-scale, often remote systems for provision of our needs, while expecting a huge degree of freedom in what we do without external control. In a sense, our whole society is like a teenager who wants to have it all, have it now, without consequences.": David Holmgren.

If we were intimate with our purchases, if they were local - we would see the consequences. We would not permit the atrocities of production to happen in our own neighborhood. We can use our personal purchasing power to provide feedback to the production of goods and services. The more contained a system is, the more it provides feedback and regulates its parts. Edges are essential components, though, because it is here that we can observe the most feedback and usually the initial feedback as well. Also, the more time it takes for a solution to a problem to be worked out, the more potential there is for observable feedback. The simpler and more local a solution is, the better it fits into a true environmental context. We should strive to create systems that provide accountability. Depending on resources from our outer zones means that it is harder for us to regulate the quality and quantity of that resource. We should invest locally in simple, small, and slow solutions that are self-regulated and that empower consumers.