توسعه و طراحی فرازا- مقدمه

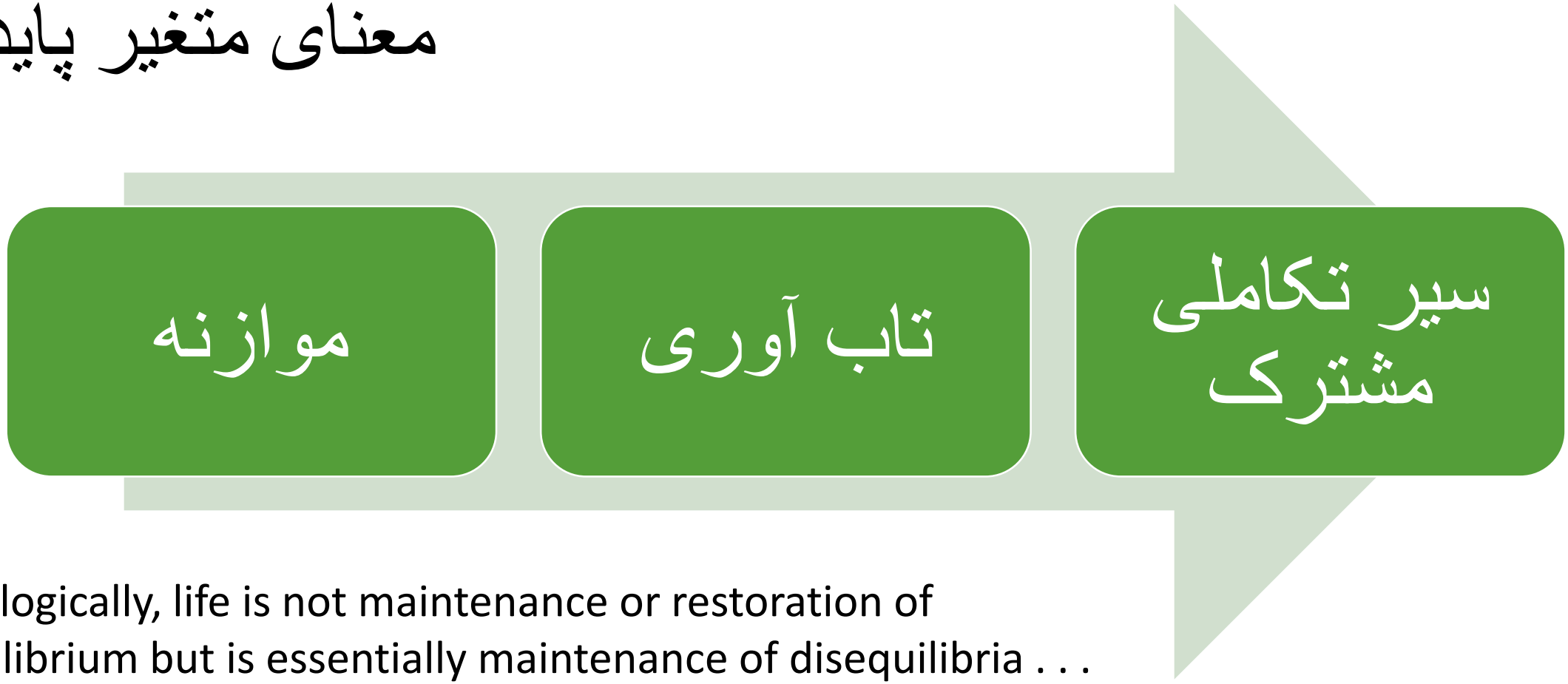
هدی همایونی

آذرماه 1398

دید کلی

- معنای متغیر پایداری
- تعریف طراحی و توسعهٔ فرازا
- فرازایش تحقق بخش سیر تکاملی
- کار کردن در مکان
- فرایندهای رشد و توسعه‌بخش
- بررسی نمونه موردی:Brattleboro co-op
- چگونه یک طراح فرازا شویم؟

معنای متغیر پایداری



“Biologically, life is not maintenance or restoration of equilibrium but is essentially maintenance of disequilibria . . . Reaching equilibrium means death and consequent decay . . . [A] living organism becomes a body in decay when tensions and forces keeping it from equilibrium have stopped”

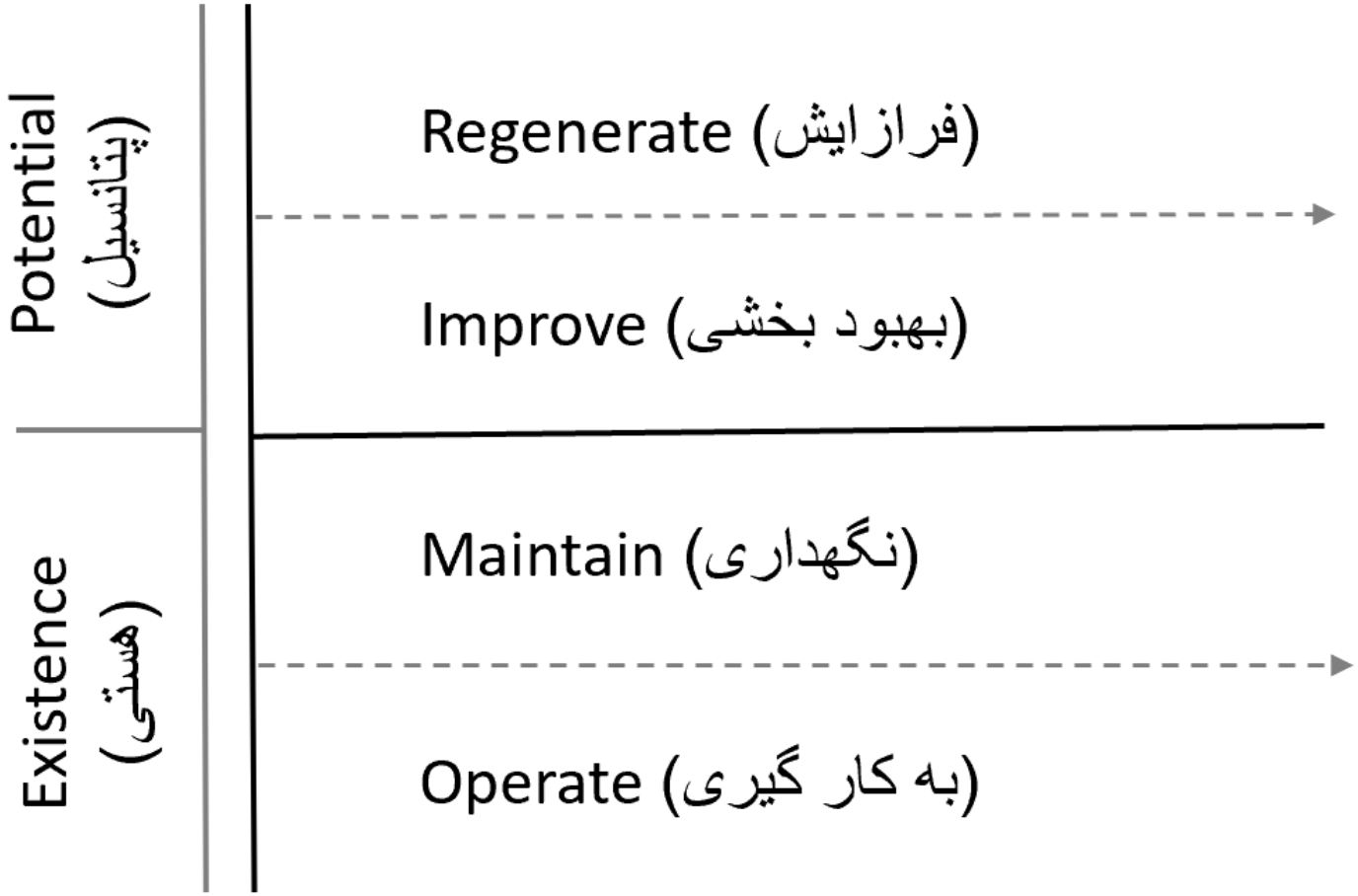
Oyster Reefs as Storm Surge protectors

Regenerative Development- Definition

- “investigates how human can participate in **ecosystems** through development, to create optimum **health** for both **human communities** (physically, psychologically, socially, culturally and economically) and **other living organisms and systems**”

-Sarah Jenkin & Maibritt Pedersen Zari

Regeneration as Enabler of Evolution



Charles Krone

Working in Place

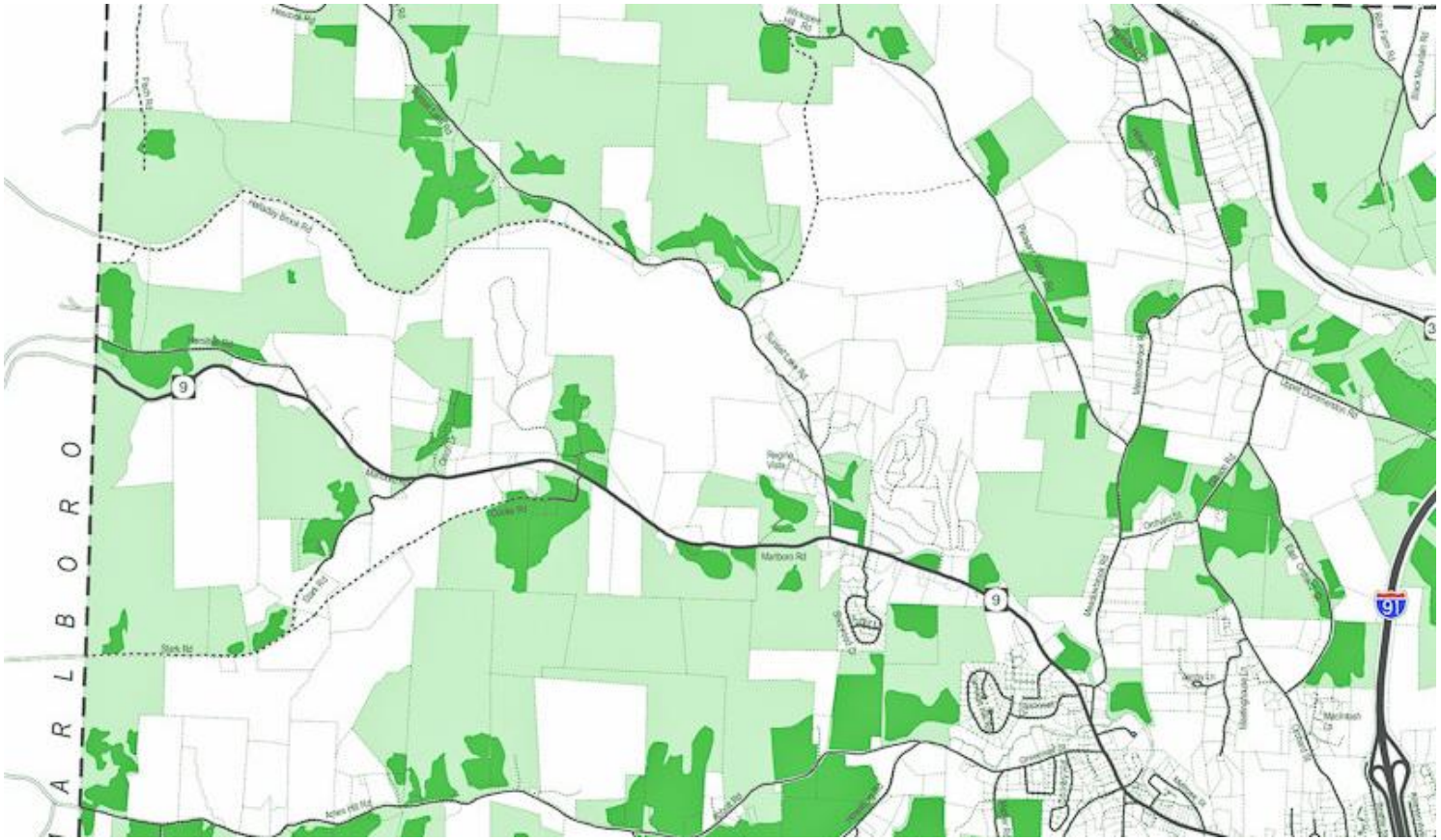
"Tapping into the consciousness and spirit of the people engaged in a place is likely the only way to sustain sustainability"

- It is only in relationship to place that humans experience a sense of intimacy with and responsibility for the living world.

Developmental Processes

- یک پروژهٔ توسعهٔ فرازا، اثراتی فراتر از ساختارهای فیزیکی از خود به‌جا می‌گذارد و کاری بیش از نفع رساندن به جوامع طبیعی و اجتماعی اطراف انجام می‌دهد. در واقع چنین پروژه‌ای ظرفیت‌های جدید را در مردمی که تحت تاثیر آن هستند، شکل می‌دهد و این کار را با لحاظ‌کردن رشد و پرورش انسان در تمام جنبه‌های پروژه انجام می‌دهد.

Regenerative project teams seek to develop their capability to think and act more systemically as they engage in the work of producing designs. Local stakeholders are invited into a field of commitment and caring where they can develop understanding of their place and how it works as they step forward to serve as co-designers and ongoing stewards. Local institutions and ecosystems are seen as project beneficiaries, and it becomes an explicit project goal to improve their ability to do their work.



The Story of the Brattleboro Co-op Grocery Store

Looking at the more fundamental issues of sustainability before jumping into defining a building program.

⇒The question that aligns stakeholders: “What’s the project purpose?”

⇒Identify the changing dynamics that posed key threats to the future viability of the project.

⇒Grounded itself in a profound awareness of place and its vanishing food heritage, by promoting local farming.

⇒Included other local organizations to build a resilient business network, aligned around a shared regenerative vision of place.

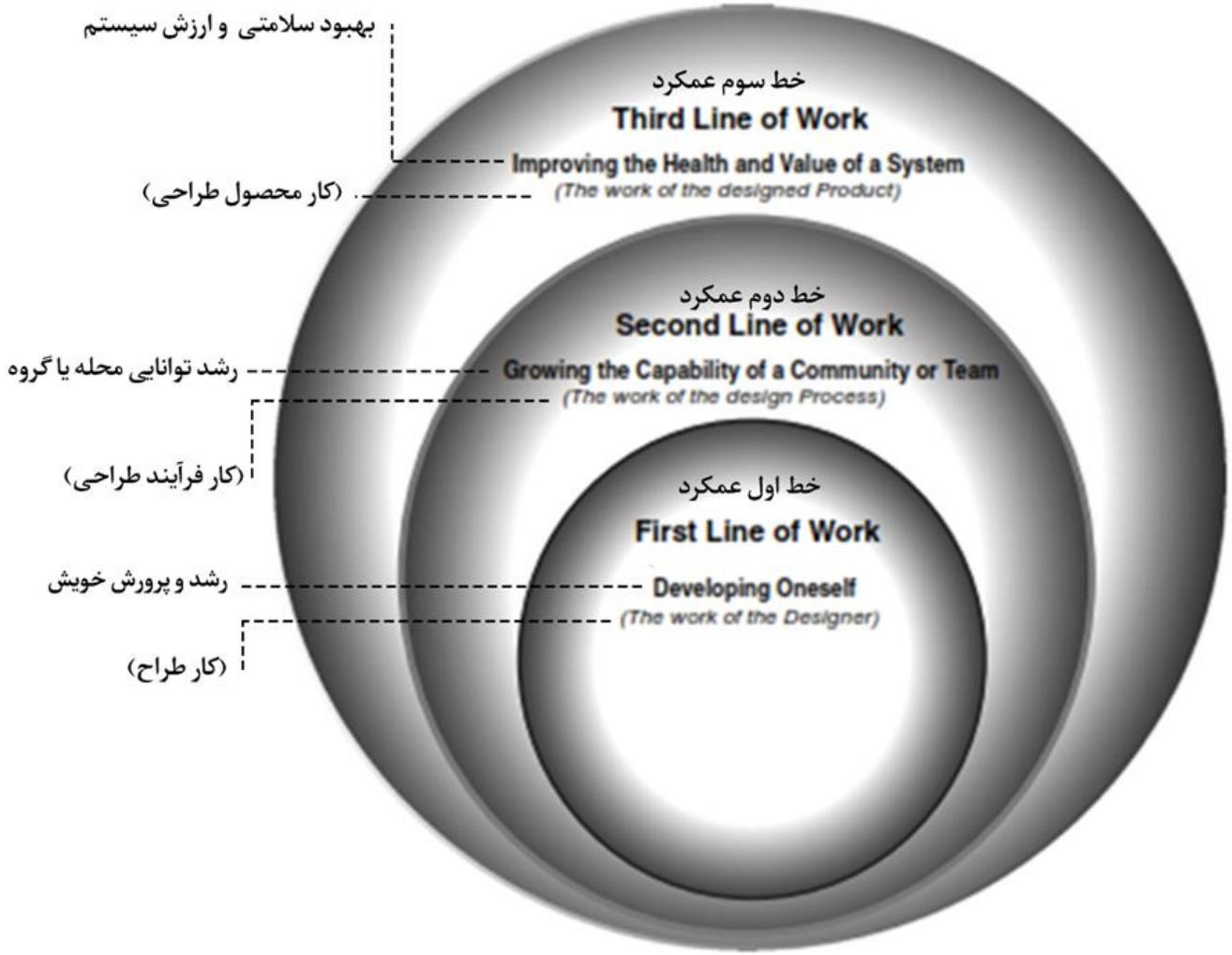
⇒The purpose of the project shifted from simply building a grocery store to taking a key role in creating a sustainable community.

Integrating Intentions with purpose: The Story of the Brattleboro Co-op Grocery Store

The program of the building expanded to potentially include:

- an agricultural and soil extension service;
- a food canning operation for local produce;
- A place for hunters to dress their meat;
- A credit union to support local agriculture and trading
- Sustainable agriculture education
- Mixed-income housing for employers
- A day-care center
- And an award winning highly energy efficient grocery store!

Becoming a Regenerative Practitioner



خلق پروژه‌های فرازا: طراحی برای سیر تکاملی

هدی همایونی

دی ماه 1398

دید کلی

- فصل اول: طراحی برای سیر تکاملی
- سیر تکاملی در برابر آنتروپی
- درک مجدد سیر تکاملی
- سیر تکاملی مشارکتی
- اکوسیستم‌های انسانی
- باقی ماندن در سیر تکاملی (قوانین بازی)
- بررسی نمونه موردی : اتاق‌ها نشیمن در مرز
- رهنمودهایی برای استفاده از اصول مطرح شده

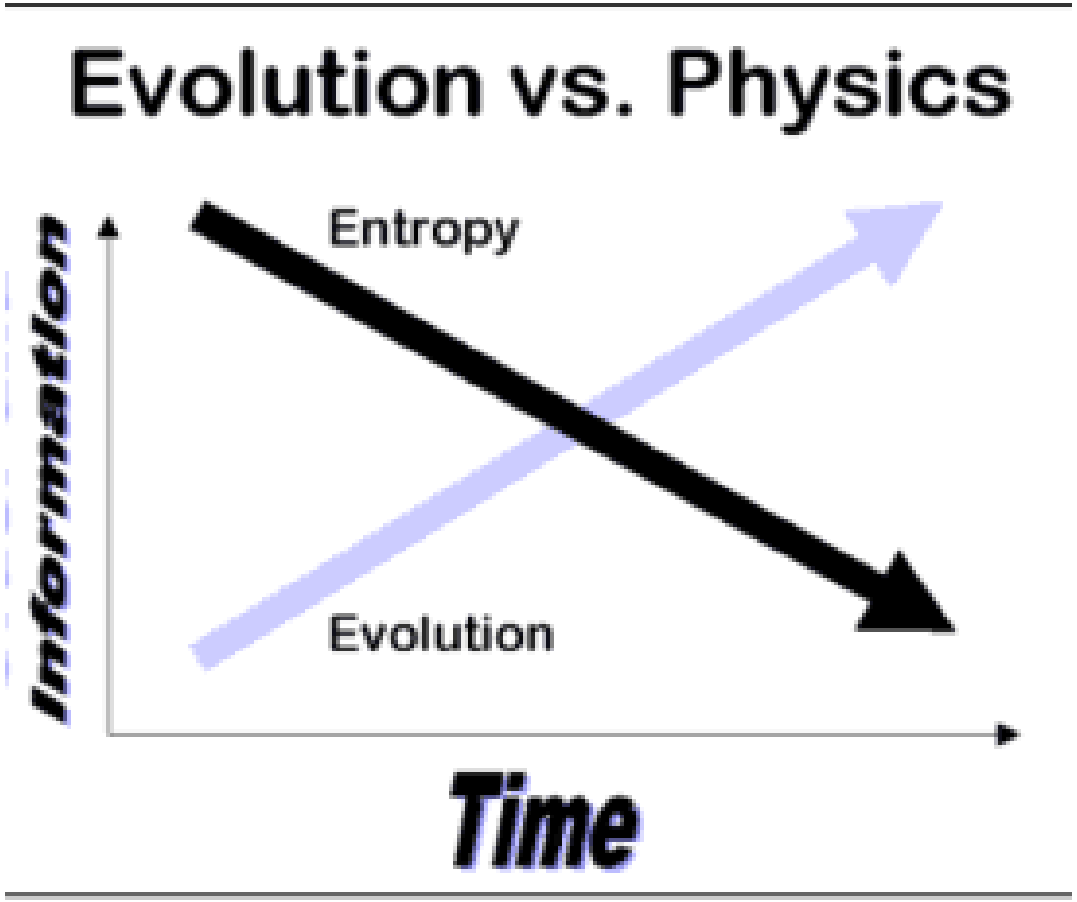
Chapter 1: EVOLUTION

Can we live with a forest in a way that makes it possible for the forest to evolve? To me, that's very different from asking how to harvest the forest appropriately.

--Charles G. Krone

Evolution vs. Entropy

- Although subject to the law of entropy, living systems are also governed by the countervailing processes of evolution.
- Living systems don't just run down; they also grow up.
- Premise One: Every living system has inherent within it the possibility to move to new levels of order, differentiation, and organization.
- The evolutionary drive has been key to life's four billion years of staying power.
- Principle One: Design for evolution.



Reconceiving Evolution

- Evolution's primary driver: cooperation rather than competition.
- "The most important of all causes of organic change is . . . the mutual relation of organism to organism—the improvement of one being entailing the improvement or the extermination of others."

-Darwin

- "The best life insurance for any species in an ecosystem is to contribute usefully to sustaining the lives of other species, a lesson we are only beginning to learn as humans."

-Evolutionary biologist Elisabeth Sahtouris

Co-evolution rather than evolution

Human Ecosystems

By treating rivers as simple conduits for delivering or removing a commodity (water), we undervalue and undermine their complex role in sustaining and elaborating life across multiple ecosystems.

Staying in the Game

Because humans are living organisms and products of evolutionary processes, we manifest the same complexity that we see in nature within our social behaviors and organizations. In the long run, the tendency toward differentiation, cooperation, altruism, and holism offer the same evolutionary advantages in human systems that they do in natural ones.

Learning how to stay in the game, bringing human patterns into alignment with evolutionary processes, is not just a way to survive. It is also a way to prosper.

The Only Constant is Change

- Each stage in the development of an ecosystem presents a new set of opportunities and challenges around which life must reorganize. In times of crisis (rapid and disruptive change) evolution accelerates.
- Explosions of new species followed each of the five mass extinctions that occurred in our planet's history.

=>Designers must help build the capability to use change positively into the systems in which they are working.

Diversity is about Exchanging Value

- organisms in an ecosystem evolve because of their interactions with one another, as an organism's ability to survive depends on what other organisms are around.
- A diversity of elements, such as organisms in an ecosystem or buildings on a site, adds nothing if there is no beneficial exchange of resources, energy, or material among them.

Value Enhances Viability

- Exchanges become important to evolution when they create value.
- Value arises when an object or service is delivered to a recipient.
- It increases when that recipient is enabled to contribute to the viability of a larger system.

Adding Value is a Nested Phenomenon

Too often, people design systems with inadequate understanding of how their effects, positive and negative, will move outward into larger and larger systems (or inward into smaller and smaller systems).

Regenerative Goals

Regenerative projects seek to transform human communities into living systems enablers.

=> designers will need to adopt new measures of success.

- An abandoned church repurposed to a community center, theater, and Cruze's office
- A community garden
- A series of open air rooms equipped with electricity and movable furniture
- Affordable live/work studios
- Larger houses for extended families
- Accessible spaces adaptable for alternative housing as needs change

Case Study- Livingrooms at the Border

- Affordable housing to stimulate political, economic, and social transformation
- Rather than settle for a one-time rezoning, Cruz worked with the city and Casa Familiar to develop a new zoning category, the Affordable Housing Overlay Zone

The concept

where a concrete frame creates multiuse space at ground

Weaving Together Private And Public Live

Where others see poverty, Cruz sees vibrant, creative communities….

Key ideas in Cruz's practice

1- Focus less on physical buildings and more on inhabitant's social flows and exchanges.

2- Draw on the inherent design intelligence of the community and leave open the potential for that intelligence to source future evolution.

3- Stimulate collaborations that can engender new political processes and economic frameworks.

4- Design to grow value-generating capacity, "shifting neighborhoods from systems for consumption to producers of cultural and economic wealth."

Guidelines for Applying the Rules

<u>Designing for Evolution doesn’t mean designing evolution.</u>

- Maintain the potential for evolution.
- Align with the wisdom of nature. Nature is a master developer.
- Define projects by their roles.
- Grow Value-Generating Capacity