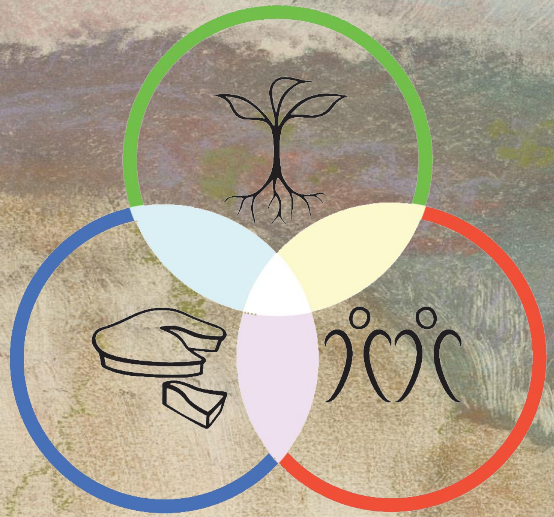
Permaculture:

From Ethics to Techniques



Vision without action is merely a dream. Action without vision just passes the time. Vision with action can change the world.

Joel Barker

“Permaculture is Revolution disguised as Organic Gardening”

Graham Burnett, ‘Permaculture – A Beginners Guide’

Back to the Garden, Flower Power Comes Full Circle

¿WHAT IS PERMACULTURE?

Permaculture One, Bill Mollison, David Holmgren - 1978: "a **design system** for creating sustainable human environments".

Introduction to Permacultura, Bill Mollison: "The goal is to **create** ecologically sound and economically viable systems, which provide for their own needs, do not exploit or pollute and are therefore sustainable in the long term. "" Permaculture uses the inherent qualities of plants and animals combined with the natural landscape characteristics and structures to **produce a life-supporting system** for the city and the countryside, using the smallest area possible".

Holmgren Design website: “a **design system** based on ecological principles”

Rosemay Morrow **: “**Permaculture has to do with **designing** strategies for the world that are based on the healing of the earth, the healing of the people and the healing of future generations. Within a framework of ethics and principles inspired by nature and the best that ancient cultures had to offer, permaculture offers much to **shape** a healthier, more sustainable and just world.”.

Whether we realize it or not, all of us are designers; for good or ill, much of what we do is design work. And all design is ecological design in that it either hurts or helps nature, whether it was intended to or not.

Heather Jo Flores

Thinking outside the garden box: Using the GOBRADIME permaculture design process

Click in the rectangles to go directly to the corresponding slide

Deep Values

ETHICAL PRINCIPLES

DESIGN PRINCIPLES

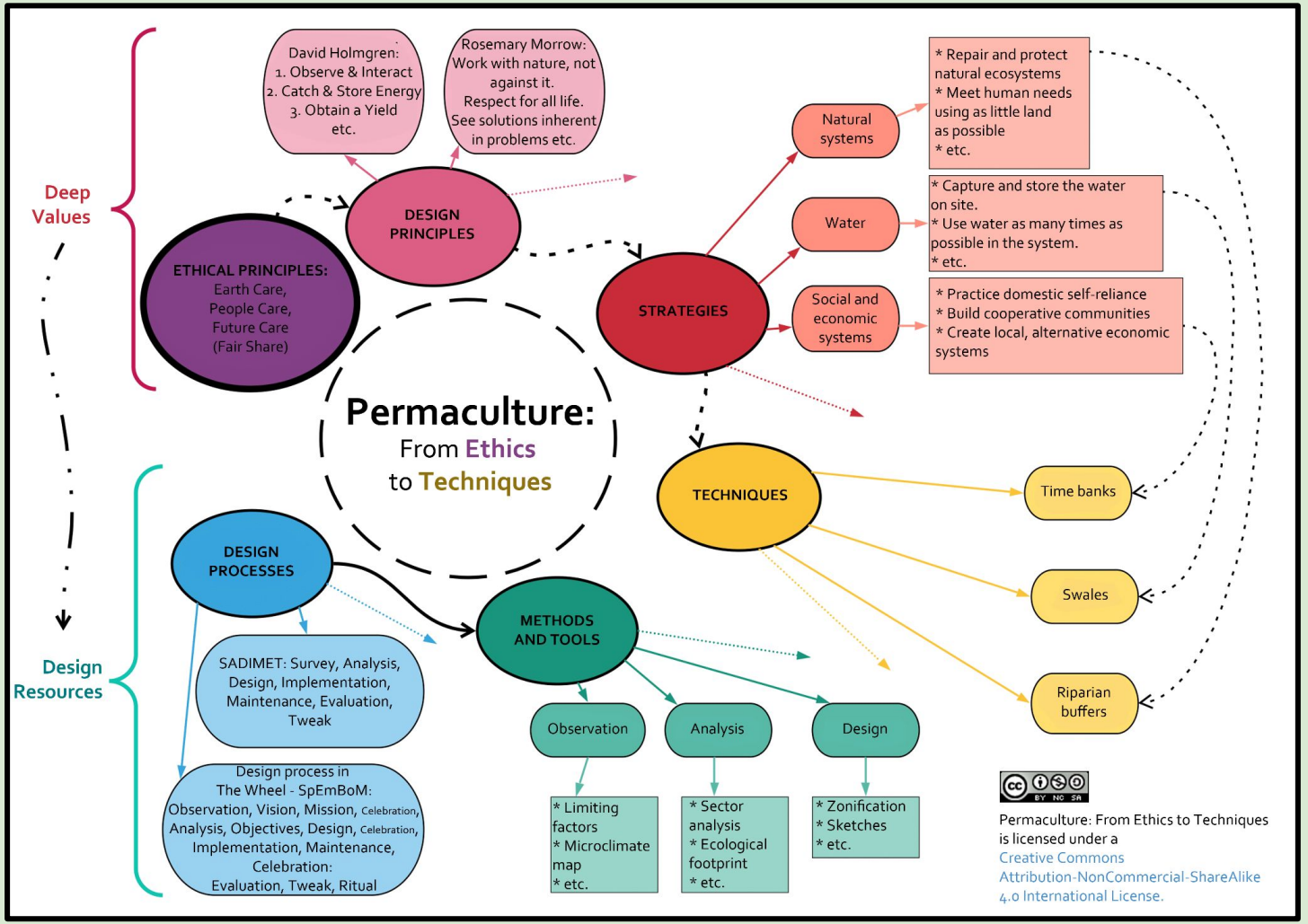
STRATEGIES

TECHNIQUES

Design Resources

DESIGN PROCESSES

METHODS AND TOOLS



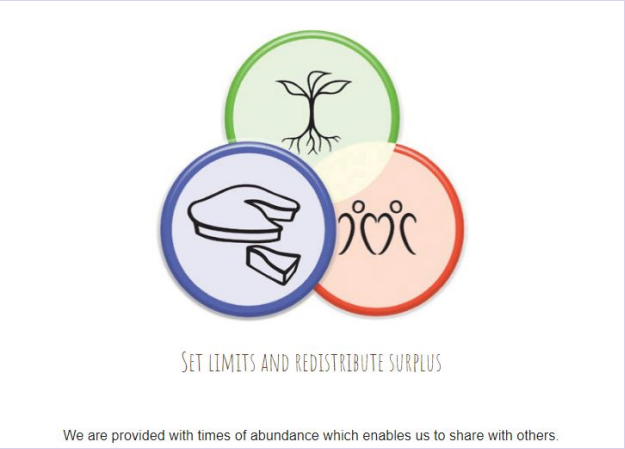
Deep Values

Ethical Principles, Design Principles and Strategies

The greater the power of humans, the more critical ethics becomes for long-term biological and cultural survival.

David Holmgren
permaculturepriciples.com

Ethical Principles



The third ethic

Origin:
Bill Mollison regarding the third ethic then called *"Setting Limits to Population and Consumption"*: "...by governing our own needs, we can set resources aside to further the above principles (*Earth care and People care*)"

Other interpretations:
Fair shares (David Holmgren)
Limits to population and consumption
Return the surplus
Live within limits
Future care (African Permaculture school)
Redistribute surplus to one's needs (Rosemary Morrow)
Recycle all resources towards the first two ethics (Heather Jo Flores)
Careful process (Jessi Bloom)
Return the surplus (Toby Hemenway)…

Interesting articles:

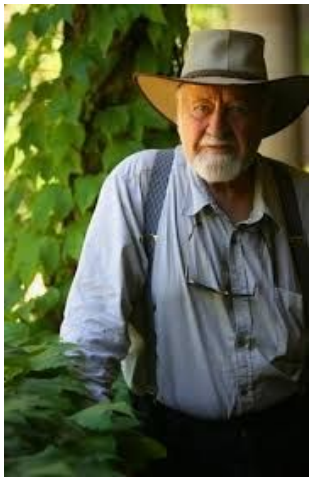
On permaculture, entitlement, and that pesky third ethic: all aboard the elephant in the room. *By Heather Jo Flores*.

THE CONTROVERSIAL THIRD ETHIC OF PERMACULTURE. *By Tobias Long*

Design Principles I

Bill Mollison

- Relative location.
- Each element performs multiple functions.
- Each function is supported by many elements.
- Energy efficient planning.
- Using biological resources.
- Energy cycling.
- Small-scale intensive systems.
- Natural plant succession and stacking.
- Polyculture and diversity of species.
- Increasing ‘edge’ within a system.
- Observe and replicate natural patterns.
- Pay attention to scale.
- Everything gardens.
- Attitude.



David Holmgren

Design Principles II

Art Ludwig

• Transcend market culture.
• Alternatives to the conventional scoreboard for success.
• Follow nature's example.
• Context is everything.
• Moderate and efficient resource use.
• Not too little, not too much: just enough.
• Empower and require individual thought and action.
• True progress.
• True comfort.
• Natural harmony.

Heather Jo Flores

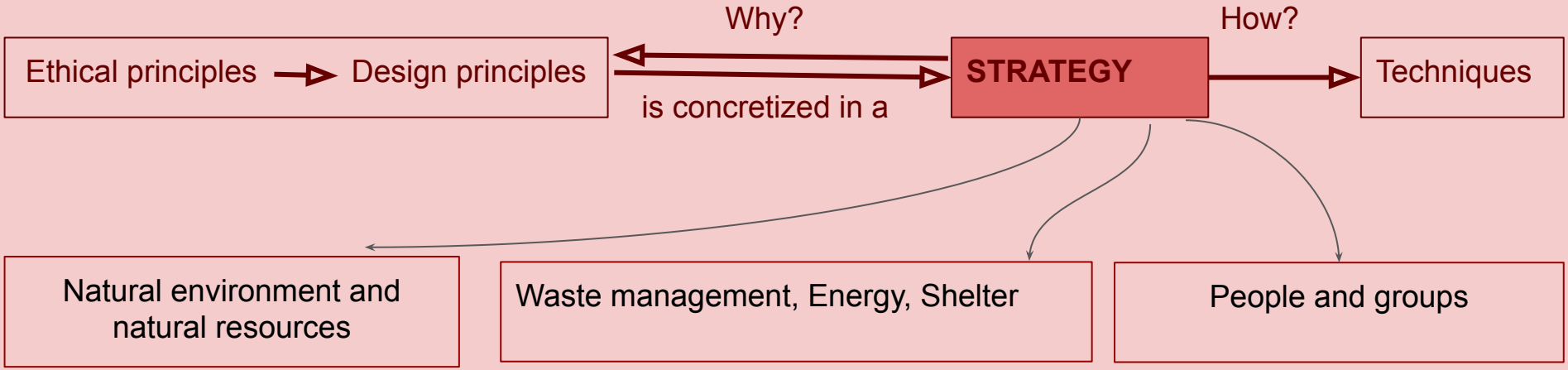
1. Recognize and respond to natural patterns
2. Be specific
3. Put everything to work
4. Prohibit waste
5. Replace consumption with creativity
6. Let autonomy reign
7. Emphasize diversity at all scales
8. Keep your head up
9. Use the shadow

Joel Salatin

• Transparency.
• Grass-based.
• Individuality.
• Community.
• Nature's Template.

1. No sales targets.
2. No trademarks or patents.
3. Clearly defined market boundary.
4. Incentivised work force.
5. No initial public offerings (IPOs).
6. No advertising.
7. Stay within the ecological carrying capacity.
8. People answer the phone.
9. Stay seasonal.
10. Quality must always go up.

Strategies


Why?
How?
Ethical principles
Design principles
STRATEGY
Techniques
is concretized in a
Natural environment and natural resources
Waste management, Energy, Shelter
People and groups

Strategies I: Natural Environment and Natural Resources

NATURAL SYSTEMS

Repair and protect natural ecosystems.

Protect and enhance biodiversity.

Meet human needs using as little land as possible.

FOOD PRODUCTION

Produce food onsite or locally.

Use organic methods, polycultures, and perennials and limit fossil fuels.

Treat animals humanely.

Build up the biological resources of your site.

WATER

Capture and store the water on site.

Use water as many times as possible in the system.

Conserve water as much as possible.

Release water from the system clean.

SOURCE: Heathcote community: What are some useful strategies and techniques for creating and implementing a site design?

Strategies II: Waste Management, Energy, Shelter

WASTE MANAGEMENT

Produce no "waste" or pollution.

Refuse to use substances that cannot be recycled.

Reduce what you use.

Reuse materials.

Repair damaged things.

Recycle materials.

Rot compostable materials.

ENERGY

Use renewable energy sources.

Maximize efficiency and minimize emissions.

Use fossil fuels only to establish systems that create more energy than they consume.

SHELTER

Locate buildings to minimize environmental impact and transportation requirements.

Renovate older buildings.

Use natural and recyclable materials.

Design buildings to incorporate sustainable energy, water, food production, and waste management systems.

SOURCE: Heathcote community: What are some useful strategies and techniques for creating and implementing a site design?

Strategies III: People and Groups

PERSONAL EMPOWERMENT

Love and nurture yourself.

Engage in inner healing work.

Cultivate inner peace.

Art-therapy.

INTERPERSONAL RELATIONSHIPS

Create cooperative, caring relationships

SOCIAL AND ECONOMIC SYSTEMS

Practice domestic self-reliance.

Build cooperative communities.

Create local, alternative economic systems.

SOURCE: Heathcote community: What are some useful strategies and techniques for creating and implementing a site design?

Techniques

Techniques

Natural Environment and Natural Resources	Waste Management, Energy, Shelter	People and Groups

SOURCE: Heathcote community: What are some useful strategies and techniques for creating and implementing a site design?

Techniques I: Natural Environment and Natural Resources

NATURAL SYSTEMS

Riparian buffers
Swales
Baskethedges
Zaï
Biochar
Holistic livestock management
Permapiculture

FOOD PRODUCTION

Do not mix soil layers
Mulch
Raised beds
Plant association
Plant rotation
Herb spiral
Food forest
Swales
Hügelkultur
Green manure
Biochar
Greenhouse integrated in the house
Holistic livestock management

WATER

Roof water collection system
Swales
Gray water management system "Branched drain"
Fog collection
Zaï
Keyline design
Warka tower
Ram pump
Qocha
Clay flasks

SOURCE: Heathcote community: What are some useful strategies and techniques for creating and implementing a site design?

Techniques II: Waste Management, Energy, Shelter

WASTE MANAGEMENT

Composting
Vermicomposting
Black soldier fly composting
Dry toilet
Compost toilet
Earthship
Pallet construction
Biochar

ENERGY

Solar shower
Solar kitchen
Bicimáquinas
Photovoltaic energy
Ram pump
Thermal mass rocket stoves
Biochar
Greenhouse integrated in the house

SHELTER

Straw bale construction
Plastering with sand, clay and straw
Earthship
Cob
Quincha
Reciprocal ceilings
Timber frame
Pallet construction

SOURCE: Heathcote community: What are some useful strategies and techniques for creating and implementing a site design?

Techniques III: People and Groups

PERSONAL EMPOWERMENT

Meditation
Emotional integration
Gestalt therapy
Seva (voluntary service)
Waldorf education
Breastfeeding
Natural birth
Enneagram
Homeopathic medicine
Chinese traditional medicine
Die with dignity

INTERPERSONAL RELATIONSHIPS

Nonviolent Communication
Sociocracy
Sociocracy 3.0
Holocracy
Agoras
World cafe
Open Space Technology
Wwoofing
Car sharing
Local currencies
Time banks

SOCIAL AND ECONOMIC SYSTEMS

Voluntary simplicity
Exchange
Cooperativism
Cohousing
Open Source technology
Wwoofing
Car sharing
Local currencies
Time banks

FUENTE: Heathcote community: What are some useful strategies and techniques for creating and implementing a site design?

Design Resources

Processes, Methods and Tools

A permaculture design process clarifies our goals and ideas, gets them on paper, and provides a road map for implementation.

Heather Jo Flores

Thinking outside the garden box: Using the GOBRADIME permaculture design process

Starting from the center out:

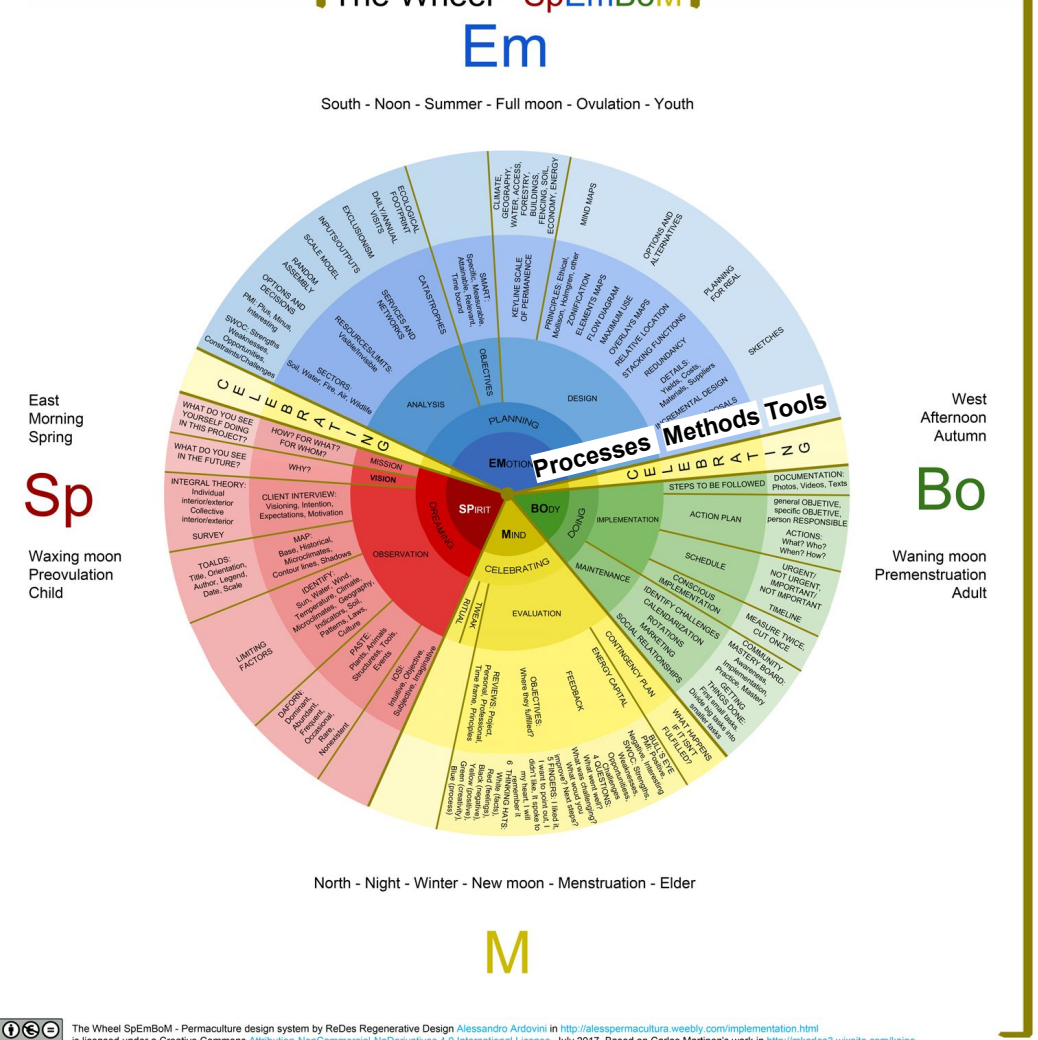
LEVEL 1: METAVISION - Individual. Medicine Wheel

LEVEL 2: MACROVISION - Groups. Dragon Dreaming

LEVEL 3: PROCESS

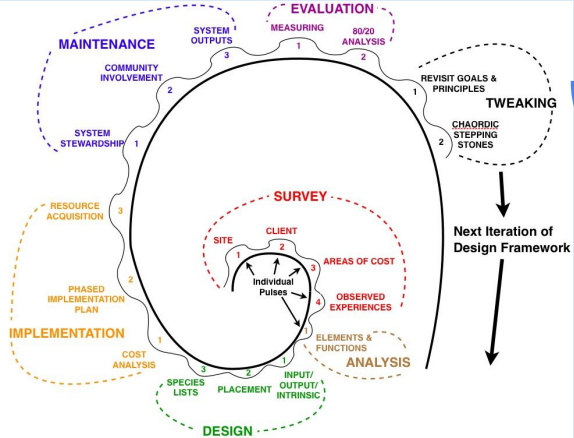
LEVEL 4: METHODS

LEVEL 5: TOOLS



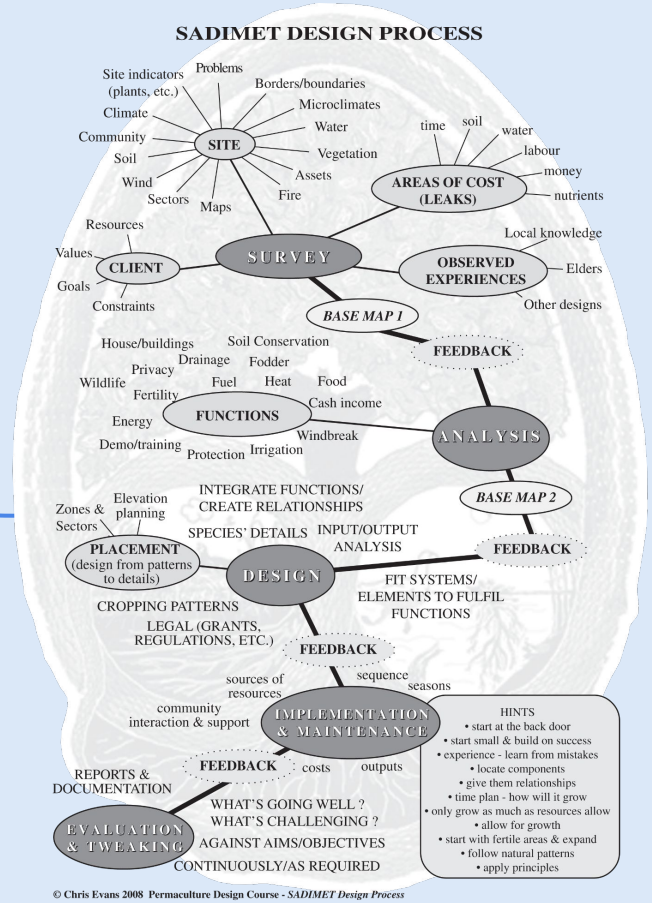
SOURCE: The Wheel - SpEmBoM

Design processes I: Linear



SADIMET:

Survey
Analysis
Design
Implementation
Maintenance
Evaluation
Tweak



DADI - **D**ata, **A**nalysis, **D**esign, **I**mplementation

OBREDIMET - **O**bserve, **B**oundaries, **R**esources, **E**xamine, **D**esign, **I**mplement, **M**aintain, **E**valuate, **T**weak

CEAP - **C**ollect site information, **E**valuate the information, **A**pply permaculture principles, **P**lan a schedule of implementation, maintenance, evaluation and tweaking

OViM*AOD*IM*ETR - **O**bservation, **V**ision, **M**ission, Celebration I *, **A**nalysis, **O**bjectives, **D**esign, Celebration II*, **I**mplementation, **M**aintenance*, Celebration III: **E**valuation, **T**weak, **R**itual

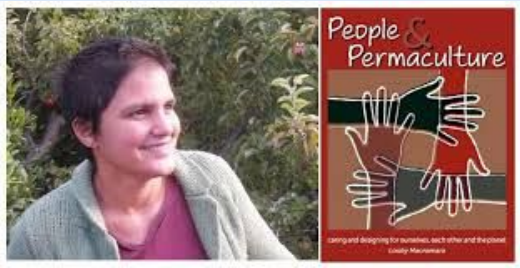
SOURCE: ReDes Regenerative Design

Design processes II: Web

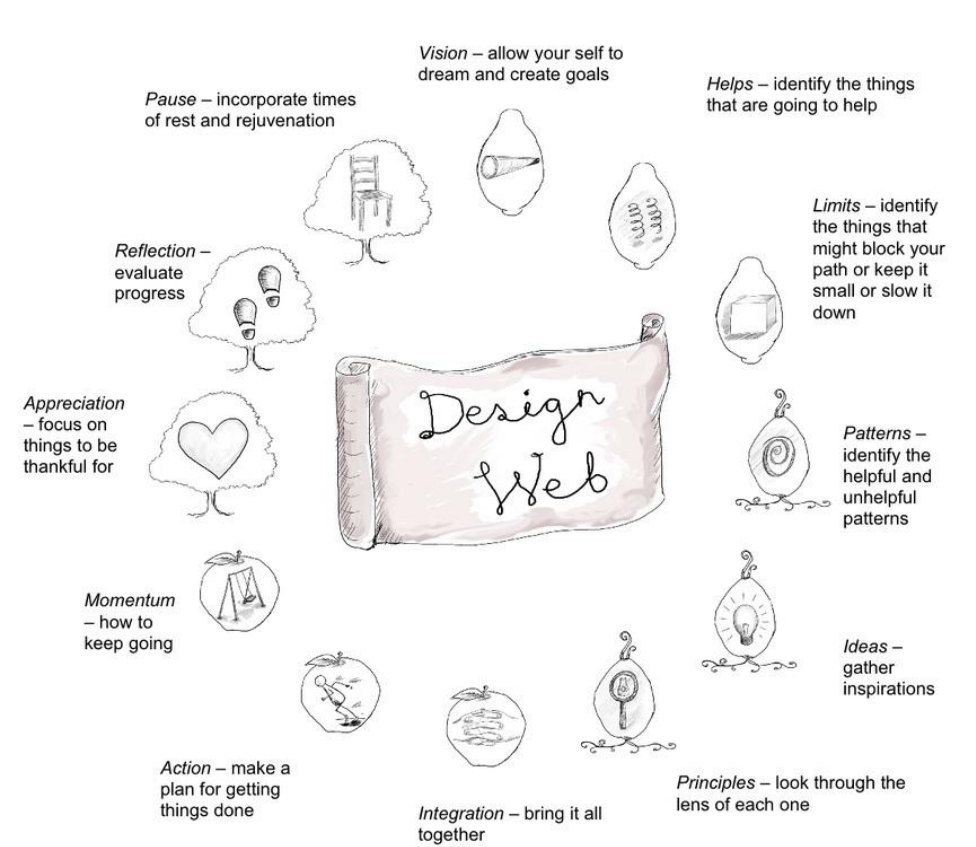
Design Web - Looby MacNamara

The Design Web is a permaculture process specifically focused on social permaculture and developed by Looby MacNamara.

Its peculiarity is that the steps are not in a fixed order, you can go back to them more times and you can skip some of the steps.

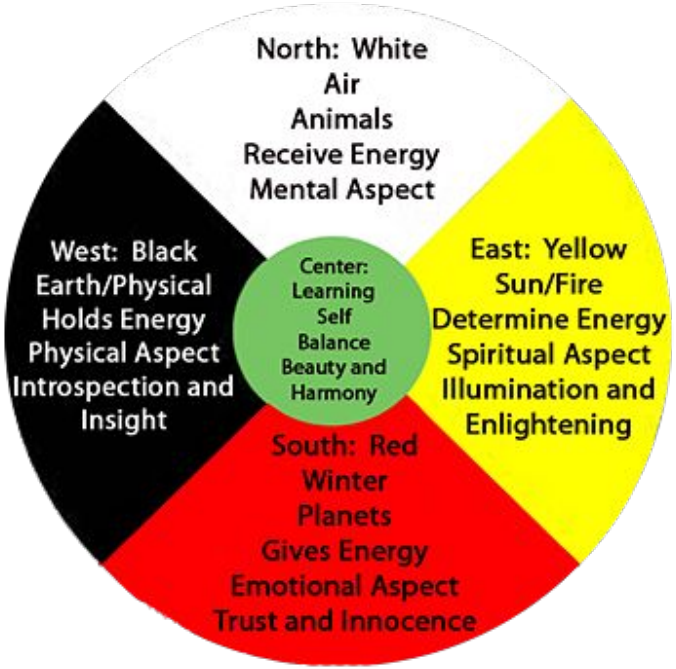


SOURCE: ReDes Regenerative Design

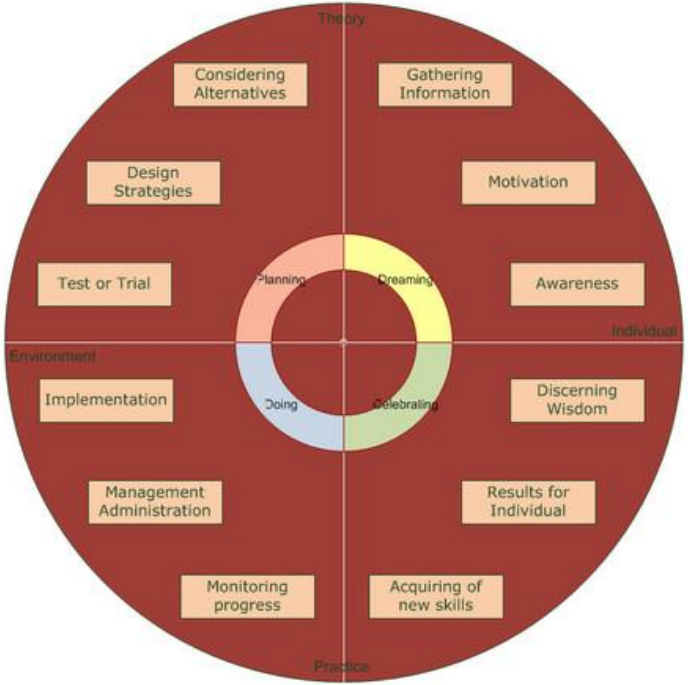


Design processes III: Traditional

Medicinal Wheel



Dragon Dreaming



"My people have practiced permaculture long before it was called that. It is our traditional way of living."

Justin Willie, Native American of Navajo/Dineh descent

Methods and *Tools* I: **SP**irit-Dream-**O**bservation

IDENTIFYING FACTORS

Sun
Water
Wind
Temperatures
Climate and microclimates
Geography
Indicators
Soil
Patterns
Legality
Culture

IDENTIFY LIMITING FACTORS

PASTE

Plants
Animals
Structures
Tools
Events

DAFORN

Dominant
Abundant
Frequent
Occasional
Rare
Nonexistent

IOSI

Intuitive
Objective
Subjective
Imaginative

MAPS

Base
Historical
Microclimates
Contour lines
Shades

TOALDS

Title
Orientation
Author
Legend
Date
Scale

SURVEY

CLIENT INTERVIEW

Visioning, Intention, Expectations, Motivation

INTEGRAL THEORY

Individual:Interior/Exterior
Collective:Interior/Exterior

SOURCE: The Wheel - SpEmBoM

Methods and *Tools* II: **SP**irit-Dreaming-**Vi**sion and **M**ission

SOURCE: The Wheel - SpEmBoM

Methods and *Tools* III: **EM**otion-Planning-**A**nalisis

CATASTROPHES

SERVICES AND NETWORKS

RESOURCES/LIMITS (Visible/Invisible)

SECTORS Soil, Water, Fire, Air, Wildlife…

ECOLÓGICAL FOOTPRINT

DAILY/ANNUAL VISITS

EXCLUSIONISM

INPUTS/OUTPUTS

SCALE MODEL

RANDOM ASSEMBLY

OPTIONS AND DECISIONS

PMI: Plus, Minus, Interesting

SWOC: Strengths, Weaknesses, Opportunities, Challenges
(remember that the problem is the solution!)

SOURCE: The Wheel - SpEmBoM

Methods and *Tools* IV: **EM**otion-Planning-**O**bjectives

SMART

Specífic

Measurable

Attainable

Relevant

Time bound

SOURCE: The Wheel - SpEmBoM

Methods and *Tools* V: **EM**otion-Planning-**Design**

ETHICAL PRINCIPLES
DESIGN PRINCIPLES
(STRATEGIES)
ZONIFICATION
ELEMENTS MAPS
FLOW DIAGRAMS
MÁXIMO USO
OVERLAYS MAPS
RELATIVE LOCATION
STACKING FUNCTIONS
REDUNDANCY
DETAILS: Yields, Costs, Materials, Suppliers
INCREMENTAL DESIGN
DESIGN PROPOSALS
FINAL DESIGN

KEYLINE SCALE OF PERMANENCE

CLIMATE
GEOGRAPHY
WATER
ACCESS
FORESTRY
BUILDINGS
FENCING
SOIL
ECONOMY
ENERGY

MIND MAPS
OPTIONS AND ALTERNATIVES
PLANNING FOR REAL
SKETCHES
WILD DESIGN

SOURCE: The Wheel - SpEmBoM

Methods and *Tools* VI: **BO**dy-Action-**I**mplementation

STEPS TO BE FOLLOWED → *DOCUMENTATION*
Photos
Videos
Texts

ACTION PLAN →
GENERAL OBJECTIVE
SPECIFIC OBJECTIVE
PERSON RESPONSIBLE
ACTIONES: *What? Who? When? How?*

SCHEDULE →
URGENT/NOT URGENT

IMPORTANT/NOT IMPORTANT

CONSCIOUS IMPLEMENTATION →
MEASURE TWICE

CUT ONCE

SOURCE: The Wheel - SpEmBoM

Methods and *Tools* VII: **BO**dy-Action-**M**aintenance

IDENTIFY CHALLENGES
CALENDARIZATION
ROTATIONS
MARKETING
SOCIAL RELATIONSHIPS

COMMUNITY MASTERY BOARD: *Awareness, Implementation, Practice, Mastery*

GETTING THINGS DONE: *Do small tasks first; Divide big tasks into small tasks*

SOURCE: The Wheel - SpEmBoM

Methods and *Tools* VIII: **M**ind-Celebration-**E**valuation

CONTINGENCY PLAN

WHAT HAPPENS IF IT ISN'T FULFILLED?

ENERGY CAPITAL

FEEDBACK

OBJECTIVES: Where they fulfilled?

REVIEWS: Project, Personal, Profesional, Time frame, Principles

BULL'S EYE

PMI: Plus, Minus, Interesting

SWOC: Strengths, Weaknesses, Opportunities, Challenges

4 QUESTIONS: What went well? What was challenging? What would you improve? Next steps?

5 FINGERS: I liked it, I want to point out, I didn't like, It spoke to my heart, I will remember it

6 HATS: White (facts), Red (feelings), Black (negative), Yellow (positive), Green (creativity), Blu (process)

SOURCE: The Wheel - SpEmBoM

Methods and *Tools* IX: **M**ind-Celebration-**T**weak

SOURCE: The Wheel - SpEmBoM

Methods and *Tools* X: **M**ind-Celebration-**R**itual

SOURCE: The Wheel - SpEmBoM

KEEP CALM AND PRACTICE PERMACULTURE