The Ecovillage Design Web booklet



Design Web from *People and Permaculture* by Looby Macnamara Text and the assembly of exercises by Roos Derks

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Support spreading this work if it was helpful to you, with reference to Authors

Vision

A sparkling vision provides energy and direction. A vision stands like a lighthouse, which is not the final destination, but rather, a light in the distance to navigate by. Envisioning opens our imagination, helps to gain momentum as a group, and feel inspired to work for something. It is a great point to start at, or to return to when the aim of the project feels unclear.

Dream

Spend time developing the project with uncensored thinking, let your thoughts free flow, use your imagination.

- Dreaming circle, inspired by dragon dreaming
 - Going in a round, expressing one sentence each, the previous speaker writes down what the current speaker says
 - Start with a guided visualization, for example:
 "Close your eyes, feel your body, it is February 2023 and we are sitting around
 - the fire together, we are celebrating that the project was a great success. How do you feel, what happened that made it so good? What was beyond your wildest dreams?
- Dream non-verbally: Use art, creativity, draw, poetry, a vision board (collage style)

Create goals

What do you aim to achieve with this design? Moving from vision to goals, you can ask yourself: Where would you like to be in one week, 6 months, 3 year, or 50 years from now?

- Formulate goals in a SMART way: specific, measurable, achievable, realistic, timebound. Some examples:
 - In stead of "we have contacted many people" (vague)
 "In 2 months we have reached out to at least 300 people, and have made a mailing list to maintain contact regularly
 - In stead of "we have made a Permaculture design", "in one week we have made a map of the area, documented the main energy flows and resources available on the land" or "we have made an overview of needs and wishes, which elements could fulfill them and a first sketch on their placement"

 \rightarrow Jump to Action for more information on prioritizing Goals.

Helps

At this anchor point you list and identify things that are going to help you, resources that you own or have access to. Looking through this lens, a design could be described as a conscious way to combine resources in symbiotic and synergistic ways. What is on your playground?

Skills audit

The great advantage of working in groups are the collection of different characters and skills working closely together. Use this advantage! Which concrete skills can people bring, which skills would they like to explore and develop? Explore the human resources that are there, and consider the ways they are best used for the group.

8 Forms of Capital

List the available resources, can be done for individual people, groups or the project itself. The 8 forms of capital:

- Social (networks, connections to other organizations, regional initiatives)
- Experience (History of the project, experience of those working on it)
- Material (Non-living physical objects. Like buildings, infrastructure, tools)
- Financial (money, stocks, cryptocurrencies and precious metals)
- Living (The animals, plants, water and soil of theland)
- Intellectual (knowledge you have or have access to)
- Spiritual (religion, spirituality, or other means of connection to self and universe)
- Cultural Capital (shared internal and external processes of a community)

Resources on your land

Land-based design specific

This is where you can list the available natural resources on your site. To organize this you can use the PASTE acronym which stands for:

- Plants (and fungi)
- Animals (domesticated, wild)
- Structures (buildings, greenhouses)
- Tools (what kind of cultivation of the land is in place)
- Events (social events, also events like flooding or fire)

Limits

Knowing about our limits and integrating them consciously into the design is an essential step. This is where adaptation and specialization occurs. It can offer focus points for the designprocess, and point us to places where solutions are needed.

Brainstorm

Identify things that could block the project, keep the project small or slow it down

The Design Issue

What is a main challenge your project is facing? This can be an anchor for your design process. When something is not working a lot of mechanisms become visible, offering a great opportunity to evolve in response.

SWOC analysis

This exercise combines the Helps and Limits.

List some different aspects of your project. These could be about its infrastructure, its conditions, recurring patterns, specific elements, contexts. Some examples: "the house needs renovation", "the project attracts young people", "One person owns the land". Then identify the following:

- Strengths
- Weaknesses
- Opportunities it creates
- Constraints it has

\rightarrow Jump to Ideas

If you identify something is missing or is needed in a project, what is its natural habitat? Where would this thing/human/quality feel well, what would it be attracted to?

Helps and Limits in the Group

On way that integrates the Helps and Limits in a group, is to work with the 4G's. It is a way of forming the group culture more consciously. See it as a mini-design in the bigger design.

- Gains (what would I like to gain?)
- Gifts (what can I bring)
- Groans (which concerns and anxieties do I have?)
- Guidelines (group agreements, group culture)

Patterns

The Native American Navajo tribe describe their ethic as "the beauty way", for them, to live in integrity means to "walk in beauty". When we learn to see the beauty in nature, and practice to see it more, we are acquiring an intuitive intelligence for designing like nature. Patterns are an intricate evolution of function and beauty. Letting us be guided by beauty is like opening up to an intelligence beyond that of our individual minds.

What natural pattern could fulfill a function you need? What are existing patterns? What are old patterns you like to change (also known as spirals of erosion)? What are new patterns you like to create (spirals of abundance)? Work with the zones to place tasks and elements there where you are most likely to notice them. Check the Design manuals in the Permaculture Library when this anchor point interests you!

Succession

Apply the pattern of natural succession to your project, for example:

- The pioneer phase: what does it look like in the very beginning? what are it's qualities? what could be the first harvest? what are the needed conditions in order to evolve? how can perennial species/stable factors get established?
- The pioneer perennials: What are the initial more long lasting structures and elements? What brings resilience, builds up soil, yet is still flexible? What are the needed conditions for climax species to get settled?
- The climax vegetation: slow growing yet long lasting. These trees can get hundreds of years old, and will determine everything else. What will the climax vegetation be like? What are the main pillars? How can long lasting stability be supported?

Mapping the land

Land-based design Specific

- This is where you make a map of the land and record the flows of energies that are moving through the system (wind, sun, rain, water ways, noise, animal paths, etc.) This is also called Sector Analysis, find more information in the Permaculture Library
- Someone could take this task, this person could also ask for support, learn from youtube, or do it very creatively. Google Maps can be a good help here.

The Zones

Working with our patterns of energy and attention. This is a central Permaculture Design tool useful for land-based projects, but can be used creatively for social projects. How can we design efficient work flows? This is about placement of elements. It is important to make explicit the main determining criteria. This could be maintenance requirements, intensity, occurrence, engagement, closeness, be creative!

- **Zone 0**: The central house, or for social permaculture: the initiator, or the project group, the project's epicenter
- **Zone 1**: Directly around the house, visited every day, requires daily maintenance and harvest (leafy greens, salad and herb garden, chickens, greenhouse, compost garden and compost toilet). For social projects this could be the people that are engaged daily, the continuous tasks that require most attention.
- **Zone 2**: This is close to the house and gets attention several times per week (animals, the vegetable garden, the edge of the food forest etc.) For social projects the people you engage with on a weekly basis, the weekly tasks.
- Zone 3: This is a zone only bigger lands will have, it is further from the house and gets attention a couple of times per week (Grazing animals, the fruit orchard, the food forest, the fields, the wild living fences, the silvopasture, agroforestry etc.) For social projects this could include events that happen monthly, people that are reached out to locally, people you reach out to online, the bigger networks around you etc
- Zone 4: This is the forest on your land where fire wood and fuel is produced, where you might visit a couple of times per month to do maintenance or seasonal work.
 For social projects this could be the european/global network of similar projects, yearly events, tasks that appear only very rarely, etc.
- Zone 5: This is wilderness. Every land, and every project, has a zone 5. This can be a corner in a small garden, 20 hectares of forest, or several patches spread out here and there, big or small. In the zone 5 we come as guests, to observe and learn. After an initial interaction with the land to reverse a pattern of erosion, we do not actively manage this zone (earth works for water management or reforestation might be necessary to reverse a spiral of erosion into a spiral of abundance). For social projects this could be the "world out there", beyond your reach yet continuously bringing unexpected inputs and events! For social projects you can define your zone 5, where could you go and learn from what you can observe?

Ideas

This anchor point is about brainstorming freely and gathering inspiration. Here you could also do research about similar projects, or speak to inspiring people to get inputs and ideas from them. This is also an opportunity to generate unexpected ideas and find new possibilities to achieve your goals.

Brainstorm

- Brainstorm on how to apply the Permaculture ethics
 - Earth care (how to care for the soil, biodiversity, water cycle etc.)
 - People care (how to care for the people inside and outside of the project)
 - Fair share (Distribute surplus and set limits to consumption)

The 6 thinking hats

Take a certain idea or proposal that seems promising and make 6 short rounds on it:

- \circ $\,$ White hat round, about information known or needed, the facts and figures $\,$
- Yellow hat round, exploring the positives, what are chances and opportunities?
- Black hat round, let your critical thinking loose, spotting the difficulties and risks
- Red hat round, about emotions and feelings, loves and hates
- Green hat, creativity, what are alternative solutions and new ideas?
- Blue hat, overview and next steps

Systems thinking

Develop systems thinking with the following exercises:

- List some of the elements you would like to have. Ask yourself which functions you need from these elements, and which qualities do these elements bring?
- Each important function should be performed by many elements (name some important functions and see which different elements apply)
- Each elements performs many functions (pick 3 elements and name all their different potential functions)
- \circ $\,$ Visualize what you discovered

Random Assembly exercise

(from Bill Mollison's famous Designer's manual)

- Write ideas you have on small pieces of paper (this could be land-based elements, things you want to organize, functions, needs etc.)
- Write the following words on a big piece of paper, widely spaced and with big letters:
 - Attached to
 - besides
 - around
 - over in
 - on
 - under
 - containing
- Now you shuffle the small papers with ideas/elements and lay them out randomly, one before and one after each word, on the big piece of paper
- Look and laugh at what happened, does any of it make sense? How can parts of your system be related and combined?

Mindmapping

Making mind-maps is a great way to organize ideas you have. Create an overview of what you have thought of so far. Can you group ideas together and give them a title? Which ideas are connected? In which area do you lack inspiration?

Selecting Ideas

Which ideas resonate most with the group? Filtering out from the diversity and abundance of ideas, in order to be able to focus and deepen more. Each person gets a certain amount of dots or stickers and selects out ideas according to the following questions, this process is inspired by Dragon Dreaming and can also be used to distill the dream.

- What do I love the most?|
- What am I most curious about?
- What would be the best focus for this group at this point in time?
- What would serve the project the most?
- What if done first, would serve everything else?

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Principles

Principles help us to think more systematically and respond to complexity. Use them to analyze an existing design, idea or proposal. Which principles are represented well, which ones are overlooked? What could be improved? Or use them to generate something new, creating more ideas by brainstorming with each principle.

David Holmgren's principles:

- Observe and Interact
- Catch and Store Energy
- Obtain a Yield
- Self-regulate and accept Feedback
- Use and value renewable resources
- Produce no waste
- Design from pattern to detailed

- Integrate rather than separate
- Use small and slow solutions
- Use and value diversity
- Use edged and value the marginal
- Creatively use and respond to change

Design Justice Principles

1. We use design to sustain, heal, and empower our communities, as well as to seek liberation from exploitative and oppressive systems.

2. We center the voices of those who are directly impacted by the outcomes of the design process.

3. We prioritize design's impact on the community over the intentions of the designer.

4. We view change as emergent from an accountable, accessible, and collaborative process, rather than as a point at the end of a process.

5. We see the role of the designer as a facilitator rather than an expert.

6. We believe that everyone is an expert based on their own lived experience, and that we all have unique and brilliant contributions to bring to a design process.

- 7. We share design knowledge and tools with our communities.
- 8. We work towards sustainable, community-led and -controlled outcomes.

9. We work towards non-exploitative solutions that reconnect us to the earth and to each other.

10. Before seeking new design solutions, we look for what is already working at the community level. We honor and uplift traditional, indigenous, and local knowledge and practices.

 \rightarrow Look into the Permaculture Library for Bill Mollison's Principles

Integration

This is the start of the Productive phase of the Design Web. Here it is about the ways to reach your vision, and designing the pathway to get to your goals. For this it is essential to clearly (re)formulate the goals of the design, what are the issues you are addressing? This stage is about making decisions, what are the best ideas you like to concentrate more on? How can beneficial relationships be created between your different ideas or elements, that give your design resilience and efficiency?

Integrating the existing information

- What are your main design goals? Revisit *Vision* anchor point to gain clarity
- Is there already a system in place, why do you want to change/upgrade it?
- Make a quick overview over the process so far, be creative with it
- Which Ideas resonate the most with the group (\rightarrow Selecting Ideas)

Evaluating the information

- What were findings, discoveries, insights and learnings so far?
- What is a recurring theme in your process? What makes your design/project unique?
- What is the main issue or problem you face?
- Make decisions: what are the best ideas you would like to develop further?
- Prioritize, what if done first would support everything else?

Input output analysis

This is a great method to work practically with the principle "integrate don't segregate"

- List existing and planned elements, and collect characteristics of each element (for example for a pond: biodiverse, natural, beautiful, calm)
- For each element list the inputs and outputs
 - Inputs/needs: space, soil, microclimate, feed, protection, material, energy, work, skills (For a pond it needs a clay soil, a space of 20 m2 etc.)
 - Outputs/products: also indirect products and unwanted outputs. (For pond this could be a mild microclimate, algae, fish, biodiversity, beauty)
- Create connections between outputs/inputs of the elements and create groups
- Analyse the results: which needs are not provided by another element? Which new elements could bring these needs? Are there products that are not used and integrated well? Which new elements could use those products? How do elements need to be placed in order to support each other?

Action

This anchor points invites you to make a plan for getting things done. When jumping here early in the process it might lead you to be experimental or test a pilot version to get more insights. It is helpful to look at your resources (how can we best use them, and how can we act to access them) and the limits (how can we act within and around our limitations).

Prioritize

Create priorities and define short term goals, mid-term goals, long-term goals

- Which goal, when achieved first, would serve all the other goals
- Which action would have the maximum effect?
- What needs to be done before anything else can be done?

Making a timeline

- \circ $\,$ Write your main goal on a piece of paper, and lay it on the floor $\,$
- Write everything that needs to be done to achieve that goal in short statements on pieces of tape, stick them on the floor (don't speak, everyone writes in silence and doubles are stuck together)
- Start ordering the pies of tape in an imaginary timeline on the floor (don't speak or discuss, just move a piece of tape when you feel its necessary)
- Write the upcoming months on pieces of tape and organize them along your timeline in a realistic way, document the outcome

Dividing Tasks, working with Focalizers and Mentors

A focalizer is someone who keeps the focus on a certain task. This person keeps the overview, manages communication flows, initiates meetings, and so on. This can be a person who has experience with the task, or someone who is enthusiastic and would like to learn it. In the latter case, the person finds a "mentor", someone inside the project, or someone else who is available, to support the person in the process.

- Look again at the tasks on the timeline
- Which tasks are connected and happen in one flow? Group such tasks together and give each "task flow" a name
- Select focalizers for each task flow

Scale of Permanence

Plan the implementation of your design according to the Scale of Permanence. This is a tool developed by P.A. Yeomans (who also developed Keyline Design water management). This method also helps to organize the design process in itself, what do you design first? This method is about modifying the things that are most permanent first, and leave the things that are more easily influenced or changed for later in the process.

- 1. Climate (is the hardest to influence, if the project has no location yet, here you can determine what would be a beneficial climate)
- 2. Landform (can only be slightly changed an adapted by doing earthworks)
- 3. Water (this is the first station where a lot of design can happen. Spread, Slow, Sink and Store water)
- 4. Access roads (Maintaining roads is one of the biggest ongoing tasks when managing land, make sure your roads don't become rivers!)
- 5. Plants (especially long lived trees, should be well placed and spaced in the landscape, windbreaks are essential for growing edible crops)
- 6. Microclimates (working with sun, water and windshelter to diversify the possibilities on the land)
- 7. Buildings (should make the best use of microclimates)
- 8. Fences (divisions between fields, wild living fences)
- 9. Soil (is most easily adaptable and can be built in a matter of years)

A social adaptation of this method could look the following way

- 1. Consciousness. This is the source of our perception, our state of consciousness is the most permanent, and the hardest to change, yet there where most can be achieved. *What kind of design can support people towards enlightened perception*?
- 2. Mental models. Belief systems, ideas, that which gives meaning to our actions. *How can a design facilitate deep understanding and embodiment of connection and regeneration?*
- 3. Systemic models. Our architecture, the institutions that shape our lives. Systems of power. *What kind of systems and institutions empower people to live a regenerative culture?*
- 4. Patterns. Behavioral trends, habitual being. What systems facilitate regenerative behavior
- 5. Reaction. Action, Events. What can inspire people to respond attentively and ethically?

Momentum

How to keep going? This point is about endurance and maintenance. Here you answer the question: how to keep the project running once it has started up? Burn-out is a common limitation for idealistic projects, this is an important issue that needs conscious design. In order to stay focused it it important to work with a clear vision and a clear aim, if this has not crystallized fully yet, jump to the *Vision* anchor point.

Obtain a yield

A design aim is that harvest and maintenance meet each other in the same work flow, that essentially by the act of harvesting from a system it is maintained. Obtaining a yield is essential to keep up your work.

- How can you start harvesting from the project early on?
- Create overview of the seasons, which work is best done in which season, what are the project-harvests that can be obtained from each season?
- What gives you most energy? Which anchor point of the design web is the most alive? You decide where you focus on.

Group Chaos and Group Synergy

Synergy is when the whole becomes more than the sum of its parts, and you are achieving things in the group that you would not be able to do on your own. On the other hand group chaos is a real issue, and can be very challenging to hold. Systems are at their best when they are on the edge of chaos. Slipped over the edge? The Project and/or the group process is difficult? Great, there is some dense learning just around the corner. Some testing questions you could look at:

- Do we balance group, individual and partner spaces?
- Do we go in rounds to let everyone speak?
- Do we work with a facilitator and a time keeper, do they do their job in a way that serves the group? (Ask someone from the outside to hold space)
- Have we reflected on our group processes? (Helps&Limits, Reflection, Appreciation)
- Is there a clear vision and a goal? (Vision)
- Do we take enough breaks? (Pause)
- Are people's skills and abilities valued? (Helps)
- Are you losing energy and is it hard to keep up investing in the project (Pause, Appreciation)

Appreciation

This is an anchor point to spend time in celebration and appreciative feedback. Gratitude opens our minds, whenever you feel stuck, this could be a good anchor point to visit, after which you could jump to Ideas.

Feedback Circle

Feedback is very valuable, and there is a lot of growth that can happen through working together and getting to know ourselves in that. Do a feedback circle within the group, where you spend time with the process of each member in the group.

- The Hot Seat method:
 - Decide how much time per person is available and designate a time-keeper
 - The person in the hot seat speaks first.
 - They share about how they are, feeling in the process and in the group, what is going good, what is challenging.
 - They also express if they have any specific wishes for feedback (could be to ask for positive feedback, to ask for tough criticism, to ask for other perspectives on a difficult theme or a blind spot)
 - The team members give constructive feedback, not everyone needs to speak
 - \circ $\,$ Someone can write it down for the person in the hot seat to read again later $\,$
 - Make sure to do your timekeeping so everyone can be in the hot seat!

Reflection

At this anchor point you reflect and evaluate the process. What worked well, what has been difficult? What happened in an unexpected way? What happened because of the group? What about this design is Permaculture? Is our design ethical?

Group sharing

Think of a good question to reflect on and hear each member of the group speak. Determine a "talking piece" like a stick or a stone and pass it around. Time keeping can support people to stay with what is essential and respect the attention span of the group as a whole.

Ethical Design

Ethics are about the relationship between the individual and the collective, they are guidelines about appropriate participation within the whole. Is your design ethical?

Some testing questions:

- Do we really need this new design?
- Is it ethical to produce and use this new design in the intended way?
- What impacts does the design have on the people that live with it, produce it or employ it, is it really safe? Is it fair to them?
- Is the design ethical? Does it do fair share, care for people and the planet?
- Can it be repaired and reused?
- Does it offer a better solution than already existing designs?
- Does the design actively reinforce the lived experience of a regenerative culture and the narrative of interbeing?
- Does the design allow for things to emerge, be seen and integrated?

Dealing with Conflict

Conflict is a natural part of creative processes. Work with someone who can do mediation to dive deep into the discomfort and find out what it is really about. Around the corner of tension lies a lot of new information and deep insight!

Pause

This is about consciously incorporating times of rest and rejuvenation. Find out what happens when space is open, what wants to emerge? Take a break, go on a walk all together, spend time at the lake. This anchor point can also be visited for many short moments by take dancing/music breaks in between. Another way to incorporate this element is to be in silence together, starting a working session with a moment of silence is a great way to calm down and tune in! Projects evolve and mature in times of pause, design for time to rest and retreat.

Pinakarri

This is a project method developed by Dragon Dreaming. Pinakarri is the Martu Mandjilidjara Aboriginal word for Deeper Listening. It is a moment of silence and deep listening that can be invited for by anyone in the circle, at any point in time. Put a singing bowl or a bell in the center of the circle during the group project work. When someone feels themselves or the group process getting full, fast, overheated or reactionary, they can ring the bell. No need to ask for consent or permission, a Pinakarri just happens. All become silent and practice deep listening, to their body, emotions, the group, the surroundings, becoming fully present again.