

What is Open Source Permaculture?

This is from a discussion with Lucas Gonzalez in the Canary Islands:

I think we should start raising awareness for the concept of **Open Source Permaculture**. Let's define what that mean by the term. This would be a crucial upgrade to what Permaculture today is about.

I have ended up an a parcel of land. I read the theory, and found myself basically clueless in terms of producing an integrated permacultural operation when I got onto the land. I believe that proper information access could have allowed us to avoid wasteful, trial-and-error-reinventing-the-wheel on the practical level (living material choices). We are still suffering from huge waste along these lines - either by spending long research hours or planting crop that will not do well here. There are issues that one can't read about - such as layout and geography - but the living material issue should be a non-issue. This way, the focus could be on further adaptation and breeding of region-specific materials - not in not knowing the optimal materials. This point may be difficult to grasp for people without an open source philosophy or without agricultural experience - but better access to information is a true bane of permaculture - as it tries to survive in a playing field of its factory-farm-global-neighbors.

Moreover, one cannot emphasize how many surprises there are in the plant world. You could read all you want - but you will never find out about what plant material is really available - you will always find particular (and extremely useful, unique, more adapted, more disease resistant, etc.) varieties from some next-door neighbor or other unexpected source. It is impossible to keep up with nature's diversity. The only way to address this is to record instances - and make them widely accessible on the internet.

The hypothesis to be tested is simple: Can permaculture become the dominant paradigm - a favored alternative to its factory-farm-global-neighbors?

To me, open source permaculture (OSPC) is:

1. **Info on plant choice.** Data on what explicit varieties work where - with a visual, global map (see <http://www.permaculturemap.com/>) - if we make this a worldwide project. This point - combined with basic theory, such as

[Mollison's work](#)

- leads to permacultural designs that anyone can implement where they are. The shortcomings of all global-reaching work on the topic is the lack of site-specific information - requiring the invitation of outside experts (permacultural designers). Theory abounds - but practice boils down to knowing particular varieties of living materials and where to get them. One could live on the theory only and end up with suboptimal systems - but optimization can happen from site-specific performance data.

2. **Propagation** - how you would get the living materials accessibly - on the cheap. This includes both industry standard techniques for propagation, and bioregional facilities where this plant material can be obtained. It should be obtained along OS lines - DIY option where you could, for example, do sweat equity at a propagation facility to get low cost or free materials. Or, it could be that you buy the materials outright. The requirement is that the bioregional facilities have EVERYTHING - diversity, quantities, and prices that allow easy access to producing an integrated permaculture implementation.

3. **Machinery** - open source equipment for processing; energy production; field equipment. Other supporting equipment for complete permaculture startup and maintenance, from [neosubsistence](#) to economically significant market production capacity.

4. **Economic analyses of productive operations.** Both on the subsistence and market levels - such that analyses promote replicability.

Why this, and What's "food swadeshi" anyway?

Let's say you're interested in *food swadeshi*: **growing food for your own self-sustenance, for your community or for a "grow food locally" business**

. You've read several books and many webpages, and maybe you've gone to one or two courses or meetings or whatever.

Now you're standing on your very own piece of land (or in your very urban setting) and you look around.

Questions start to pop up in your head. *How do I ...? What do I ...? Where do I ...?*

It's now that you realise there's a whole body of information that is *at a distance* from where you are. It's in the minds of many food growers all over the world, in databases and webpages, but somehow it's not too easy to get the exact answers to your specific, extremely local and burning questions.

You could go so much faster if you had now the information you'll have in 5 years time!

Information and human networks

You could of course tap onto a *friendship network* and that's fine if you have plenty of access to that, or even if you gain access to an already existing *network of knowledgeable friends*

Such a network will also sustain your values, help you "trade" physical stuff, and a whole lot of "goodies" that come with human networks.

That said, if you want to go a bit faster on the information aspects, human networks often have some limitations:

- Your (old) friends probably have the same information as you do, which means they also share your ignorance.
- Let's say you join a network of "food growers". They may call themselves organic growers, permaculturists, or whatever. You're in need of specific information. But often it will happen that your (new) friends don't know everything you'll ask them, because their conditions are different (maybe they live in another country) and their knowledge is limited by their own experience (huge as it may be when compared to yours).
 - You don't know what you can ask them: do you know that they know what you need to know?
 - You don't want to treat them as a 24x7 resource. At least if you want to keep them as friends. ;-)

- Finally, don't tell your friends, but maybe you're that type of person who can learn faster if they have lots of information they can look into at their own pace. Just like many people learn to do stuff on their own, be it maths or juggling or whatever, if they have the books and some time on their own.

It's also true that you can access the information resources we're about to daydream about, and use them *as a group* (beverages and all), so it's not either/or at all!

Now, let's get on with this idea!

What we think we need

This is an evolving idea, and here's what we think we need:

1. Ready access to CONCEPTS: anything from permacultural ethics to design criteria. This is easy to find right now, but could be integrated in our "fab info" design.
2. Ready access to DESIGNS: keyhole raised beds, poultry tractors, etc. These would be text descriptions, videos and the whole thing. If it's in other languages, a link to translation tools would be a nice add-on.
3. Ready access to INFORMATION: what are the features of plants? which particular and explicit varieties are well-adapted to particular regions. This requires local and bioregional information.
4. A way to do SUBSTITUTIONS: Say a particular design uses a specific plant, which is not available to us. What other plants could we use? This could be extended if we look for FEATURES: imagine "google tree shade tropical edible-by-goats".
5. PROPAGATION/SOURCING - where do you get the plant or other living material? The most direct route is if you propagate the material yourself. Beyond this, you need seed, plant, mushroom, animal, other stock sources - such as businesses, individuals, etc.
6. OPEN SOURCE EQUIPMENT
7. ECONOMIC ANALYSIS

Are there more questions? Phrased differently? With many more details? This will be our first step, but please do read on.

Marcin says: To summarize this, I propose we narrow our mission to:

1. INFORMATION (as above) - focusing on mapping *what works*
2. PROPAGATION/SOURCING (as above) - focusing on obtaining the *what works*
3. OPEN SOURCE EQUIPMENT - this does not exist, but is crucial for competing with your factory-farm-global-neighbors
4. ECONOMIC ANALYSIS - foundation for replicable, open business models

I think these 4 elements are SUFFICIENT for producing state-of-art operations, competitive with global neighbors.

This is because CONCEPTS and DESIGNS are readily available in literature. SUBSTITUTIONS are covered by INFORMATION. We could do all the topics - but I'd focus on the essential information.

How to move forward

- First, look at our needs and phrase them appropriately. Feel free to jump in right now, Marcin and others! What questions do you ask on the field? Feel free to give details, with "stories that help"!
- Second, do the kind of work some software developers do, moving through those "needs" imagining things in slow-motion. What questions we'd ask. What results we'd expect from the system. What we do next. How we contribute (with questions or information). We'll get to this step soon, I hope.
- At some point in time, we'll want to look beyond the imagined tool to the wider ecosystem. Where's some information already (wikipedia, webpages, people's heads)? What can "they" provide and use? What are their interests and motivations? What do they find difficult or easy to do (talk, type, chat)? Are there helpers around (permaculture students who would be interested in cooperatively growing a tool which would help them if they feed it)? Probably lots of other factors. This will have to be iterative with the other steps, in the classic spiral pattern.
- Go wild with ideas. Think about clever hacks, maybe something that sits on top of wikipedia and google maps? A helpful clever software agent that helps us because it knows both more and less than we do? No limits to our thinking, please!
- Create a simple implementation of something that provides value straight away, and which is not too hard to implement. Here's where we need python gurus etc! Feel free to step in and introduce yourself! ;-)

At all times, look at what we can personally do. Even if the only thing we can do is tell our contacts about this.

Agricultural informatics

An identifying feature of permaculture is that it is heavy on design, information and intelligent planning. Not much water goes into making a permaculture farm work, not much fertilizer, not much stuff, but a huge amount of information. Information is the main resource.

In the past few decades, there have been teams of permaculture designers going around the world spreading this information. These designers have trained other designers, and the information is starting to make a dent in the world food system, turning patches of it away from monoculture and towards more productive methods. (I'm not talking about permaculture in the narrow sense, but all sustainable, intense farming systems.)

But what if we could spread this information at light-speed? What if it didn't require teams of people travelling around the world, or long training programs? What if, when you wanted to build a permaculture farm, you could consult a piece of software which gathers information on an open-content basis, gathers climate data, that knows what plants work in your climate, has a worldwide map of permaculture systems and what organisms they've used, and suggests [guild](#) [s](#) appropriate to your area? How about a program that lists the inputs and outputs of different organisms, and matches them up to form closed-loop systems? If we make it really easy for people to set up a different kind of farm, then they can produce more food locally and food security is finally secured, which doesn't seem too much to ask. All that is required is a website (or downloadable program), with some solid, clever programming behind it, and an open-content system and we could lower the barrier to entry to being a competent permaculturalist so that anyone could do it. Might this be the [trimtab](#) needed to transform the world food supply system?--Conor 20:28, 8 November 2010 (UTC)

See my proposal for [open source software for permaculture](#)

Comments?

Please write here or to [imagina dot canarias at gmail dot com](mailto:imagina.dot.canarias@gmail.com). You may also want to join <http://www.globalswadeshi.net/>

or look into

<http://permacultureinstitute.pbwiki.com/>

Finally, you may know about others who have covered lots of ground and whom we badly need

to know about!

Thanks!

Contacts and other initiatives

- <http://permacultureinstitute.pbwiki.com/Andy>
- <http://permaculturewiki.com/>
- <http://www.permaculture.org.au/topics/>

http://opensourceecology.org/wiki/Open_Source_Permaculture