



PERMACULTURE: DO WE NEED PRINCIPLES?

*This essay on the role importance theory and design principles in permaculture education and activism was the basis of a keynote presentation at the Seventh International Permaculture Convergence held in Croatia in May 2005. An earlier version was published in the IPC7 newsletter in 2004 prior to the event. The nature of the audience gave me the opportunity to explore the reasons behind my focus on design principles in **Permaculture: Principles and Pathways Beyond Sustainability**. The presentation was my first to an International Permaculture Convergence since 1984. For most of the participants it was the first time they had heard me speak.*

*The themes raised in this essay reflect the systems thinking of P:P&PBS but also represent the evolution of ideas about the permaculture movement written more than a decade earlier in Article 14 - **Permaculture Education and Movement: Searching For Ways Forward**.*



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PERMACULTURE - PRACTICAL ENVIRONMENTALISM

Permaculture is a concept for changing how we live with and from nature. It involves strategies, techniques and practices necessary to benefit from nature's abundance and to work within her limits. It uses ethics and design principles to guide and test the diversity of possible solutions and systems. However, the value of the permaculture movement in society is not judged by its conceptual framework. The test of efficacy is the output of people and projects that carry the label permaculture and the success in extending those models to the point where they impact on large scale economic, social and environmental systems. In other words, the performance of the models and their reproducibility.

For something so dependent on practical outcomes, how useful is the on-going development of the conceptual framework beyond intellectual interest in the evolution of ideas?

For some of us wedded to the importance of ideas as a driving force in human history, these questions maybe ridiculous, even offensive. On the other hand, for many people involved, and potentially involved, in permaculture innovation and education, they are valid ones. Many people come to permaculture because they are impatient with endless analysis of the problems, grand top-down schemes to change the world and instead want to be involved in positive action that has immediate benefits.

Few people are motivated by intellectual and abstract ideas and, arguably, in a world of energy descent, people will become more focused on simple and immediate practical solutions to basic problems. If a diversity of locally relevant, working models were available, replication with (or without) any understanding of conceptual underpinnings becomes more viable and achievable. In this way, local solutions would become mainstreamed not by some global top-down process but by simple replication within a geographic community.

But the core of permaculture remains conceptual not practical. The old idea that our actions should be "principled" is a reminder of the need for a conceptual framework of enduring value. While reaffirming the importance of practical action, I want to advocate the value of theory, and specifically principles, in permaculture design and education as a balance to the dangers of poorly understood action that can fail to lead to effective and useful replication.

The importance of principles rests on two systemic arguments about the nature of change and the diversity of design solutions.

ADAPTATION TO CONTINUOUS CHANGE

Past conceptions of sustainability (and permaculture) drew on the steady-state, climax model of nature. Permaculture was conceived around a low energy steady-state future while more mainstream sustainability ideas imaged a high, but energy-efficient future.

More recent pulsing models of nature suggest dynamic understandings of sustainability that can deal with continuous change¹. Continuous change expands the scope of possible futures.

While this acceptance of continuous change is a substantial refinement of permaculture concepts, it should not be interpreted as an acceptance of trend line projections of the growth in affluence (for the global middle class at least) from the last half century. The evidence that energy descent will be a key driver of human history over the next half century is compelling, so low energy natural systems remain relevant models for the design of human systems. What we do know from the history of the last few hundred years of energy ascent is that continuous change constantly upsets the apple cart of success. What was progressive yesterday loses its utility tomorrow. After generations of dealing with continuous change we have internalised a set of systemic design principles that has allowed us, to varying degrees, to innovate rather than copy. These design principles such as “dog eat dog” and “get big or get out” are increasingly dysfunctional as energy available to humanity peaks and declines.

What is required is that we internalise a new set of systemic design principles that will allow us to continue our culture of innovation, in a radically different context without being too set on a particular set of design solutions or even strategies as the final word in sustainability.

If sustainability is a search rather than an outcome, a continuous flow of innovation will be needed to sustain a continuous cascade of solutions. Success of models, in the current context should not automatically lead us to immediately try to maximise mainstream replication because future innovation will, almost certainly, allow us to leapfrog over past innovation. Incremental adoption may be more effective, with fewer adverse side effects, than mass adoption of what we currently think of as “best practice”.

THE CONTEXT SPECIFIC NATURE OF SOLUTIONS

The second argument for the importance of principles rests on the diversity and differences between low energy natural systems. In nature, the low and distributed energy base demands different design elements and solutions to make optimum use of varied local resources. Low energy societies follow similar patterns. High energy availability allows for growth and domination by single successful pattern of economic and social organisation such as emerged from western Europe in the last millennium. A growth in internal systemic complexity replaces geographic diversity. In this process of globalisation, a monoculture of industrial design solutions has been replicated everywhere with only slight geographic and cultural variation. Our common cultural inheritance tells us, there is one big solution to any problem, which, once discovered can be replicated everywhere. This is a false and destructive model of success in a world of declining energy.

¹ See Principle 12 in Holmgren, D. *Permaculture: Principles & Pathways Beyond Sustainability* 2002

In the future, copying dominant global systems will be less and less successful just as copying what was successful in the past has already proved to be dysfunctional. Instead we need appropriate abstract principles that are universally relevant to assist in creating and testing context specific solutions rather than simply replicating models. The repeated failure of standard economic policies to help poorer nations may be large-scale examples of how this is already the case.

UNDERSTANDING OUR SUCCESSES AND FAILURES

The above theoretical arguments for the importance of theory may be helpful but how can we integrate these apparently competing values of conceptual frameworks and practical models? What can we learn from the successes and failures in permaculture innovation and extension over the last quarter century.

An innovation or cluster of innovations which succeed in influencing society tend to pass through a number of phases from conceptual origins to working models which are refined and extended through both community networks and entrepreneurial action. The success of this stage leads to popularisation including interest from mainstream media. Eventually the innovation becomes codified and may be regulated to ensure complete adoption. This process could be summarised as follows.

Conception > Working Models > Popularisation > Regulation

While innovations as complex as permaculture inevitably involve all phases mixed together, different strategies and temperaments are needed in each phase². While all roles are valid and complementary, in Australia and some other countries there has been a history in the permaculture movement of successful promotion through media before community networks and entrepreneurial action or even before working models were established. In some cases this has had the effect of “innoculating” communities (both geographic and network) against permaculture because the first examples they came across were poorly articulated or applied. In answer to the perceived need to get the ideas out there as quickly as possible, my experience suggests that more effort in conceptual innovation, working models and careful local refinement are potent and spread rapidly once favourable social and economic conditions allow.

While many activists readily acknowledge the importance of working models and refinement to suit local conditions, the evolution and spread of permaculture has so far been decidedly global and post modern, garnering bits from everywhere. The spread of influence and action has been “network” in nature rather than geographic. Typically, permaculture innovators influence and are influenced by people on the other side of the world while their neighbours may ignore or even deride what is under their noses.

² This is a restatement of ideas presented by Robert Gilman from the Context Institute of California at the Australian Permaculture Convergence in Adelaide in 1995.

The undeniable success of this process in the rapid spread of permaculture ideas around the world has had some adverse side effects that continue to plague both permaculture education and extension; for example, the inappropriate replication of models of permaculture innovation combined with the ignorance of possible models that are not labelled permaculture. While these problems are to some extent inevitable, we need to optimise the adoption and replication of appropriate models as much as possible.

This reinforces the need for conceptual tools that help us to identify appropriate models independently of both geography and demeanour. While geographic proximity may be a cue to potential relevance, variation in soil type, microclimate, available skills and resources may nullify this relevance. In explaining the site and situation specific nature of permaculture solutions to visitors to Melliodora, I often point to the fact that we don't have a productive lemon tree but that our neighbour does (only 60 m away but 5m higher out of the frost hollow.)

Similarly just because a model is called permaculture by its designers or users does not mean it is the best or only model to which we should look. The label permaculture may be reason to show keen interest but the diversity of permaculture applications and variation in understanding and skill may nullify this relevance. At the same time, models with different labels³ or those espousing no particular conceptual framework, whether traditional or idiosyncratic, may provide highly relevant solutions.

Ethics can steer us in the right direction but design principles are our primary tools for assessing and filtering the diversity of possibly relevant information and models for the inevitably unique context in which we design and act. Thus the efforts to refine the tools, explain them and make better use of them are central issues for permaculture education. Arguably, to make those tools truly useful to a wide range of people, they need emotional and artistic expressions that work like indigenous knowledge; understandable and useful to a child but containing deeper levels of meaning that unfold with experience over time. This needs to be developed while at the same time guarding against the degradation into a rigid ideology that is closed to diverse sources and insights. The challenge for permaculture innovators and designers is to use observation of nature and pattern understanding to generate an expanding repertoire of working systems that can be tested against a robust set of design principles.

The strategies and techniques associated with permaculture are effective not only because of their technical veracity but due to their appropriate and timely application and adaptation. The challenge for permaculture educators is to find better ways to communicate abstract principles in ways that empower people to both understand the context of their actions and actively seek out and create technical solutions appropriate to that context.

3 Such as organic or biodynamic farming, wholistic management, analogue forestry, ecological architecture, biomimicry to name a few.

In countries where energy descent is a current reality, the urgency of implementing existing solutions can distract us from the need to use design principles constantly reassess what we doing. If the next decade continues to deliver a final economic boom in resource rich countries like Australia then keeping permaculture both currently relevant and of enduring value may be just as challenging. The more success we have, the greater the temptation to ignore principles in the excitement of action. Our actions should always be principled.

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