

# **DYNAMICS ECOLOGICAL DESIGN**

Site Planning • Landscape Design • Construction • Education • Permaculture

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## **ECOLOGICAL CULTURE DESIGN: A HOLISTIC VIEW**

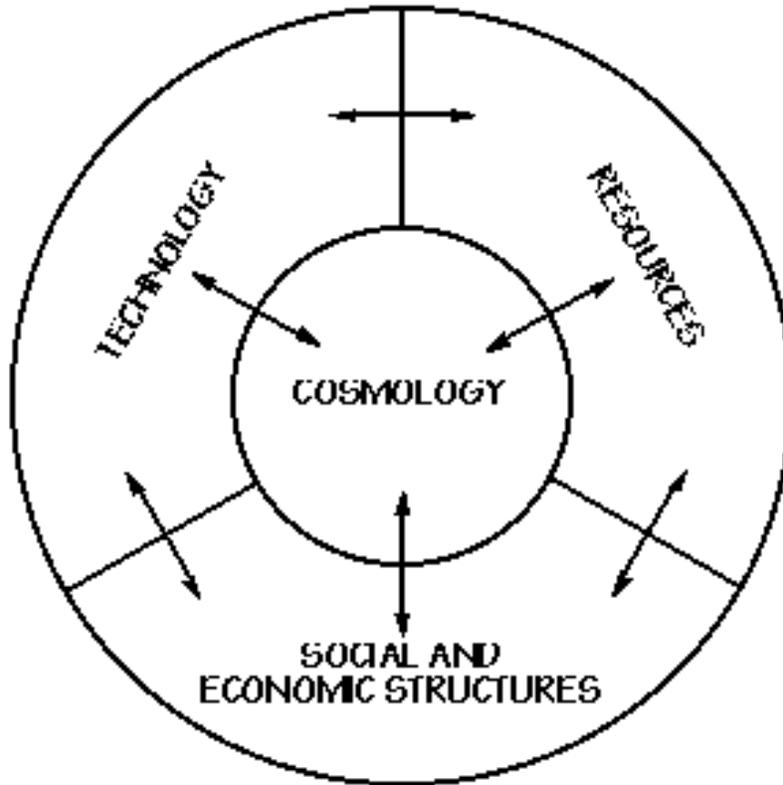
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### **INTRODUCTION**

Few sane, aware and knowledgeable people would argue that our current culture is ecologically sustainable. Clearly there is an urgent need to re-design the way we live, work and play to meet our needs without destroying the ability of other living beings and of future living beings to meet theirs. Permaculture offers a holistic approach to that task, which involves not just the sustainable use of resources and the use of appropriate technologies, but also the creation of socio-economic structures and of belief systems that support ecological technologies and resource use—as well as the engagement and enlightenment of all human beings. In fact, it is our belief systems, our “inner landscapes”, that are the most critical factor limiting the development of ecological cultures.

The word “permaculture” is a contraction of both “permanent culture” and “permanent agriculture”, for it is impossible to sustain a culture without a sustainable agriculture. At its essence, permaculture is the conscious design and co-creative evolution of agriculturally productive ecosystems and cooperative and just social and economic systems that have the diversity, stability and resilience of “nature”. Given this mission of conscious design of sustainable and ecological cultures, it is critical that we understand what it is we are designing, or we will fail to reach our goals. What is culture?

One way of looking at culture in this context is expressed simply in Figure 1. In this model, culture can be thought of as consisting of four interrelated parts: Resources, Technology, Social and Economic Structures, and Cosmology. These elements, and the relationships between them, are what create the “whole” we can think of as “culture”, which is greater than the sum of its parts. Culture is a natural phenomenon, an evolutionary adaptation of the species *Homo sapiens* which has enabled us to adapt to a far broader range of ecological circumstances far faster than regular physiological adaptation would allow. Culture is the primary adaptive mechanism of humankind, though physiological adaptation has not ended with its invention. It is our greatest tool, and the greatest threat to our survival.



**Figure 1:** A model of human culture. We must design the four parts as a whole system or we will fail to create a ecological culture. Cosmology is like the DNA of a cell: its patterning determines the structure and behavior of culture's more visible parts.

## **RESOURCES**

The first piece of the culture pie is the base of Resources. Resources are a perceptual phenomenon, in that the ability of someone to use something as a resource is dependent, first of all, on their ability to recognize it as such, and then to adapt their thought, behavior and technology to its use. Take garbage as an example. For the past 30+ years, we have treated garbage like waste. It is only recently that we have, of necessity, again begun to see garbage as the resource it can truly be for us, and we are now as a culture trying to adapt our thoughts, behaviors and technology to its use. In this sense, then, our ability to shift our perceptions of things may be our greatest resource, if we would but use it.

A thing as a resource is somehow different than a thing as an entity in itself. This is because a resource is a cultural phenomenon, while an entity in itself is a natural or noncultural phenomenon. Respecting this boundary is what the asking and thanking rituals of native peoples are about, for in using some-body for our purposes, we lay claim to it and remove it from its natural state. I

remember working with a friend who was a forester who could only see the forests for trees, and trees for lumber. I would look in awe at some of the trees we were evaluating, and so would he—but he would almost always comment about how many logs were in it. I think my responses must have struck a chord in him, for he is now an arborist, and works to keep trees alive rather than cut them for timber.

## **TECHNOLOGY**

Technology is the primary interface between ourselves and our environment, and is the part of culture we tend to be most fascinated with. Through the use of tools, instead of only specialized body physiology, we have increased our ability to adapt to, exploit and change our environment, increasing our chances of genetic success, comfort, wealth and a myriad of other goals— up ‘til now. The kind of technology that a culture uses is determined by the kinds of resources that are used in order to survive. For example, in order to use uranium as a resource, we need certain kinds of technologies; in order to use the sun as a resource, we need certain other kinds of technologies. Hence the form of technology is determined by the resource base available for our culture’s use— as well as by the existing mind set and social organization within the culture.

Most movements for ecological sanity have tended, until recently, to focus on resource and technology issues, for these are somehow the realm of “environmentalists”, the interface of “nature” and “culture”. However, there is a growing recognition that the “tweak the system” approach leaves much to be desired, and that it is the whole system that must be changed— from the inside out. Ignoring the other parts of the culture pie leaves any effort for change hamstrung and/or just helps strengthen the system which maintains the destructive dynamic by helping make the system look “green”.

## **SOCIAL AND ECONOMIC STRUCTURES**

Social and economic structures are somewhat harder to understand because they are not things in and of themselves, but sets of relationships between people. These structures have allowed us more security and strength, not to mention companionship, support and love. The socio-economic system is the supporting mechanism of technology, for, without people with specialized skills to create, manufacture and use technology, culture, in large part, wouldn’t exist.

Different technologies demand certain social organizations in order for that technology to be created and used. For example, the social and economic structures required to create and support nuclear technologies are centralized, hierarchical, and capital intensive, while a solar greenhouse technology is more likely to be supported by and create social and economic systems which are decentralized, egalitarian, and labor intensive. Technology also affects social organization in more subtle ways. For example, television has contributed to many of society’s problems, including the break up of the family, the most basic social unit. A culture’s social and economic organization is

determined, in part, by the technology that society chooses to use, and the technology that it uses is dependent on the social organization and cosmology of those involved.

## **COSMOLOGY**

Cosmology plays a key role in determining the kinds of social and economic structures that we set up, as well. Indeed, cosmology is like the DNA of a cell, in that it guides the design and evolution of all the other parts of culture, even as cosmology is itself changed by the other parts of the culture “pie”. Cosmology, in this model of culture, includes our ethics and values, our cultural Story and/or Myths, and our belief systems: our beliefs about who we are, what we are, what our place in the universe is, whether and what kind of God or god(s) exist, and so on. It also includes what we consider to be valid ways of knowing, whether these be scientism, mysticism, rationality, intuition, etc. All of these are the filters of our perception, the conscious and unconscious basis of our choices, the foundation of our reality, the sum total of our experience and thought. Our cosmology defines how things are, and how they should be, who we are, and who we should be. Our cosmology can be blinding and limiting, or it can be liberating. And only we can change it.

Communist and Capitalist ideology were the two main driving forces of social and economic organization in the Twentieth century. Both of these systems are or were hierarchical, centralized, capital intensive, dominator-based systems in their manifestation. Yet, though it has always seemed that these two systems are driven by ideology, neither could have been born or existed without a certain set of resources and technologies that made the beliefs behind them, and social structures created by them, possible. Both systems rely on concentrated, high energy sources to maintain hierarchy, monoculture and their own special forms of control.

All of these parts of culture, then, are interrelated. For example, technology is a piece of a whole called culture, and the kinds of technologies we humans fashion are interrelated with the resources we use, the social and economic structures we create, and the way we think about ourselves and the universe. This is the only reason anthropologists can study the artifacts of ancient cultures and piece together a relatively complete picture of the ancient civilization. In other words, culture is a hologram, and you can see the whole by looking at one of the pieces.

## **WHERE DO WE START?-- THE INSIDE AND OUTSIDE EDGES**

The key thing here is to see that it is the relationships between these parts that makes a culture work, grow, change and die. And that we must consciously deal with all of these aspects of ourselves and our way of being in the world if we are successfully to transform our current culture into one that can sustain us, our children, and the life of the planet. But where do we start?

Dr. Stuart Hill is an entomologist, formerly at McGill University in Montreal, Quebec, whose career tells an interesting story about the importance of cosmology in re-designing “the American Dream”, and perhaps the Western Dream overall. Dr. Hill developed an interest in Integrated Pest Management and began working with farmers to help them move to what he calls a

“deep organic” approach to agriculture. This approach involves system redesign rather than simple efficiency or substitution approaches which are inherently limited in scope and results. Stuart found that, for many, their internal “unfinished business” prevented them from being able to let go of attempts at controlling the system to “eliminate” “pests”, or even to be able to consider alternative systems that could meet the ecological and economic goals they ostensibly shared. As a result of these experiences, Dr. Hill has added studies in and the use of psychotherapeutic tools to his wide-ranging career. He draws fascinating links between the inner and the outer landscapes, and points out that our species is psycho-socially undeveloped — and that paradoxically this is our greatest reason for hope.

Having been involved in permaculture work over 25 years now, I can corroborate Dr. Hill’s experience. Many times when I have gotten a ecological system designed or built, the thing that has prevented the system from working over the long haul has been the inner landscape of the people involved: either the interpersonal dynamics didn’t work out, or personal issues of control and dominance threw the system out of balance or prevented it from being designed, installed or maintained properly. These behaviors are generally an unconscious acting out of unhealed woundedness, which act as an “automatic pilot” driving our perceptions and actions in a certain direction. We can make a conscious effort to override the automatic pilot and go a different direction, but this is a constant expenditure of energy on our part. And, if we don’t reprogram the automatic pilot, when we stop making the effort the automatic pilot takes over again, and we go back to our old behaviors and perceptions. What is the program?

Our current culture’s cosmology I would characterize as anthropocentric and/or egocentric, addictive, consumerist, monocultural and dominator-oriented. It is this cosmology which has institutionalized the wounding of ourselves, our children, and our planet. This woundedness, more specifically, our response to this woundedness, is also what gives the addictive culture its grasp over us, causing us consciously and unconsciously to wound ourselves, our children and our planet.

We need to shift to a cosmology that is biocentric, recovering, has a strong gift economy, and is polycultural and partnership-oriented. The value shift entails switching from endless, linear, more-is-better values of Profit, Power, Progress and Products to self-limiting, circular, enough-is-enough values of Nourishment, Fulfillment, Sustainability and Relationships, respectively.

As Dr. Hill says, the cycle of wounding and the psycho-socially undeveloped state of humanity have been maintained in Western culture for many centuries by slavery, feudalism, dictatorships, industrial capitalism and socialism along with sexism, racism, classism, adultism, etc. Each of these systems has had a set of punishments and rewards and controlled access to resources and information that limited psycho-social development. We now have the means to develop psycho-socially in ways that previously were not possible. This human development is a necessary pre-requisite to achievement of genuine sustainability, since any attempts to make progress in that direction are flawed to the extent that the “actors” are carriers of old distresses. Recovery from these old distresses, personally and culturally, will lead to empowerment and improved awareness, visions, values, goals lifestyles and actions. I call this work the “Inside Edge”.

There are also many, many technical issues to be resolved in the evolution of a ecological culture, ranging from how to make an extremely diversified small farm work on a technical and a biological level to the development of new high-yielding varieties of tasty acorns and blight-free chestnuts to how to create plastics from renewable resources, what kinds of economic structures can help us to revitalize cities ecologically and make a living in the meantime, and more. These issues are diverse, broad, deep, technical, social, economic, and resource related. The mind boggles at the range of what needs to be done. But all of it can be done. I call this the “Outside Edge”.

So, basically there are two edges at which each person must be working if we are to succeed at creating ecological and sustainable ways of being— the Inside and the Outside. On the Outside Edge, we must apply ourselves consciously to re-designing our technologies, our resource use, and our socio-economic organization. And we must work toward recovering our whole selves from woundedness on the Inside Edge, opening ourselves up to the full power of our inner resources so we can disengage from the destructive inter- and intra-personal dynamics of our addictive culture, fulfill our responsibilities to ourselves, our children and our planet, and each live out our specific dreams and visions. For, it is my belief that once we release ourselves from the wounded, limited thinking that got us into this mess, we can turn the full force of our creative energies to resolving the myriad technical, organizational and resource issues that confront us. And history has shown that we have the intelligence and resourcefulness to meet any challenge once we set our minds and hearts to it.

Dave Jacke is a permaculture designer living in southwestern New Hampshire. He would like to thank Stuart Hill for his ideas and support, Peter Bane for his editorial and philosophical comments, and a certain young upstart who first formulated these ideas years ago. This article originally appeared in Synapse, a quarterly journal published by Neahtawanta Research and Education Center, Traverse City, MI.