

“THE INTERCONNECTED WEB”

A Sermon Given by the Rev. Ken Sawyer
At the First Parish in Wayland, Massachusetts
On April 21, 2002

[More than most sermons, this one was given somewhat extemporaneously, i.e., I tried to leave the manuscript and speak verbatim more than I usually do. What I had with me in the pulpit as a manuscript – and what you have here – included more direct quotations than I actually used. – Ken]

Back on Question and Answer Sunday, John-Eric, Erin and I were asked what books we had recently enjoyed. I said that since reading *The Botany of Desire* in the fall, I hadn't read a book I liked more. Knowing that ministers rarely appreciate anything without imagining there's a way to work it into a sermon, you may have wondered why you hadn't heard me speak of the book before – especially if you knew how many times I've managed to work it into everyday conversations.

I think the book, written by Michael Pollan and published last year, is entertaining and provocative in a rather significant way. I just couldn't think what the sermon was it went into until Erin and I got to talking about sermon possibilities for the remainder of the church year and the Purposes and Principles came up. These were adopted by the vote of representatives of UU congregations from all over the continent at General Assemblies in 1984 and '85 and amended slightly in '95.

They attempt to say what unites our UU congregations. They include six sources we draw from, and seven principles we covenant to affirm and promote. The seventh principle is “reverence for the interdependent web of all existence of which we are a part.”

Now you can argue whether or not there should be a comma in the middle of that phrase or not, but in either case, the intention is to declare that we humans are part of a universe in which all things interrelate, and that interrelatedness deserves our reverence – our wonder, awe and respect. This has implications both theological and pragmatic. It calls us to be more concerned with the effects of our actions on the biosphere and our global co- inhabitants.

In *The Botany of Desire: A Plant's-Eye View of the World*, Pollan affirms this very principle – the interconnectedness of all of life -- in a startling and powerful way. He wants us move beyond thinking of ourselves as the subjects in our interactions, and see how much the interrelatedness goes both ways, how we and plants are “partners in a coevolutionary relationship,” [xiv] just as, more obviously, we are with dogs, cats, cows, and horses.

Pollan was planting potatoes in his garden when he saw a flowering apple tree with lots of bumble bees in it; and he got to wondering, “What existential difference is there between the human being's role in [a] garden and the bumblebee's?” [xiii] We humans like to think we're in charge. “Even our grammar makes the terms of [our] relationship [to plants] clear: I choose the plants, I pull the weeds, I harvest the crops. We divide the world into subjects and objects, and ... in the garden, as in nature generally, we humans are the subjects.

“But ... what if that grammar is all wrong? ... A bumblebee would probably also regard himself as a subject in the garden and the bloom he’s plundering for its deep nectar as an object. But ... the truth of the matter is that the flower has cleverly manipulated the bee into hauling its pollen from blossom to blossom.

“The ancient relationship between bees and flowers is a classic example of what is known as ‘coevolution.’ In a coevolutionary bargain ... the two parties act on each other to advance their individual interests but end up trading favors.... Consciousness needn’t enter into it on either side, and the traditional distinction between subject and object is meaningless.

“Matters between me and the spud I was planting ... really weren’t much different; we, too, are partners in a coevolutionary relationship, as indeed we have been ever since the birth of agriculture more than ten thousand years ago. ...” [xiv] We and plants use each other, just as the bee and the apple tree do.

“Bees and humans alike have their criteria for selection.... The fact that one of us has evolved to become intermittently aware of its desires makes no difference whatsoever to the flower or the potato taking part in this arrangement. All those plants care about is ... making more copies of itself. Through trial and error these plant species have found that the best way to do that is to induce animals – bees or people, it hardly matters – to spread their genes. How? By playing to the animals’ desires, conscious or otherwise.” [xv]

For about a million years, plants have had ways of using animals to spread their genes that don’t play on our desires directly. For instance, they have seeds that stick to our clothing.

But with the onset of agriculture, plants entered into a more directly interactive role with us. We think of those plants as having been domesticated, but Pollan thinks that word “leaves the erroneous impression that we’re in charge. We automatically think of domestication as something we do to other species, but it makes just as much sense to think of it as something certain plants and animals have done to us, a clever evolutionary strategy for advancing their own interests.” [xvi]

So one way of describing the introduction of agriculture ten thousand years ago is that some plants “refined their basic put-the-animals-to-work strategy to take advantage of one particular animal that had evolved not only to move freely around the earth, but to think and trade complicated thoughts. These plants hit on a remarkably clever strategy: getting us to move and think for them. Now came edible grasses (such as wheat and corn) that incited humans to cut down vast forests and make more room for them; flowers whose beauty would transfix whole cultures; plants so compelling and useful and tasty they would inspire human being to seed, transport, [and] extol ... them.... It makes just as much sense to think of agriculture as something the grasses did to people as a way to conquer the trees.” [xx-xxi]

Not that any of this required awareness; that’s just the as-if way of speaking that’s hard to avoid. “Evolution doesn’t depend on will or intention to work; it is, almost by definition, an unconscious, unwilling process.” [xxi] But “the species that have spent the last ten thousand or so years figuring out how best to feed, heal, clothe, intoxicate, and otherwise delight us have made themselves some of nature’s greatest success stories.” [xvi]

This all occurred to Pollan that day, when his “garden suddenly appeared before me in a whole new light.... All these plants, which I’d always regarded as objects of my desire, were also, I realized, subjects, acting on me, getting me to do things that they couldn’t do for themselves.

“And that’s when I had the idea: What would happen if we ... regarded our place in nature from the same upside-down perspective.

“This book attempts to do just that, by telling the story of four familiar plants ... and the human desires that link their destinies to our own.” [xv-xvi]

Pollan thinks “these human desires form a part of natural history in the same way the hummingbird’s love of red does....” [xvii] The four he deals with are our desires for sweetness, beauty, intoxication, and control. Because of these desires of ours, the apple, the tulip, marijuana, and the potato have thrived.

In his four chapters, Pollan takes up each pair of desire and plant in turn, and there are some memorable observations too good not to pass on, and I will briefly. But if you find yourself in the library and you have a few minutes to spare, I encourage you to read the Introduction, much of which you will recognize from the sermon so far, but all of which is illuminating and fun.

Those of you who have read the book or heard Pollan interviewed on the radio will have your own list of favorite examples of how plants have coevolved in concert with human desire.

One feature that distinguishes all the crops he picked to write about is their variability, how much and how quickly they mutate. Apples, for example, are extremely heterozygous – every one of the five seeds in every apple is an experiment, a new variety of apple. No seed will grow a tree true to the parent tree. In their original setting in the Andes, there are types of potatoes that thrive in one small section of land, and, like apples back in their original home in Kazakhstan, they come in all sorts of sizes, shapes, and colors. And as innovative as they are, they spread abroad well because some of their offspring mutate to suit the new environment.

European apples didn’t fare well in our climate, but soon apples developed that did -- and if you grafted a good one, you could replicate it over and over. That’s how particularly sweet varieties spread – following the discovery of a random, highly unlikely single tree.

All the other apples grown from seed provided some sweetness, and that was hard to come by in the early nineteenth century. But you wouldn’t eat one out of your hand. Still, Johnny Appleseed (as he was called) did a fine business providing settlers in the Ohio River valley seedlings he grew from seed, because they grew them to make cider. The idea of eating apples for one’s health arose as a public relations effort by the apple industry as Prohibition approached.

Among flowers, the ones that have most captivated whole cultures are also notable for their variability, their creativity in appealing to our interest in beauty – the rose, orchid, and tulip in particular. These have spread around the globe, along with peonies. The degree to which tulips accommodate our changing tastes is easy to see in the contrast between the lacy, long-petaled flowers in old paintings and the tidy flowers we grow today in bunches.

Marijuana has demonstrated its ability to become a different kind of plant if that’s what we want. To appeal to our desire for intoxication, it has become more potent; to

escape the war on drugs, it has moved indoors and developed a very short growing season under artificial light for extended periods. In that as-if way of speaking evolutionarily, it has figured out how to get us to plant a lot of itself by providing what some people want.

The potato chapter gets into questions of genetic engineering which I will avoid for now. But Pollan does make a good case for the importance of biodiversity, for preserving numerous forms of a plant, given the dire consequences of overplanting one variety of potato before the Irish Potato Famine, when that variety was struck with disease.

An interesting section is spent on the role that the potato played in creating the Industrial Revolution and the population explosion, because people could count on eating. Potatoes are simple to grow, good for storing, and very nutritious. You can just about live on them alone. Families grew. And so did the number of potatoes.

Yes, quite a web it is, the connectness that interrelates all things in existence, including us. Though I confess, just between you and me, I'm not as 100% enamored of the web image as most people seem to be, especially UUs. I can't completely ignore the fact that a web is, in the first instance, a death trap, a way that spiders have to catch other animals so the spiders can eat them.

Heaven knows, webs can also be beautiful. And they do portray the idea that if you pull at one part of creation, the consequences go further – but even that can be exaggerated. A fair number of things that happen, don't matter. All existence is a pretty big place. Why just the other day, events transpired in some other galaxy far from here, and it won't effect our planet ever. Heck, things happened in Wayland, maybe even in this room, that tugged on the web so insignificantly, we need never care.

But yes, life is an interconnected web, and of course we would do well to consider how our activities affect the community and the planet, interactively if you will. But I have a final voice to introduce before I close, that of the entomologist Jeffrey Lockwood, a member of our UU Fellowship in Laramie, Wyoming, and author of a new book from the UUA, *Grasshopper Dreaming: Reflections on Killing and Loving*, an interesting, well-written account of his personal wrestling with the ethics of pest control.

As if to complement Pollan's emphasis on our arrangements of mutual benefit, Lockwood writes, "as an entomologist ... the most common question I hear at parties goes something like, 'I know we shouldn't kill them all, but really, what are they good for?' *Them* refers to the particular insect that is the topic of discussion....

"I admire our increasing awareness that all beings are part of an interconnected whole and that when a strand of the web is broken, there are often systemwide effects. All of that is true, but it suggests, however implicitly, that the purpose of this web somehow involves us humans. The problem is that nature doesn't exist for us, ecosystems don't care about us, animals don't generally love us, and the universe doesn't really need us. Nearly two thousand years ago the Roman emperor and Stoic Marcus Aurelius counseled that it was important to 'desire every one of your own actions to be right in your own judgment, but remember two things: Your actions are significant, but the circumstances in which they take place have no significance.' This paradox is compelling: Each life is of infinite value to itself and of no importance to the universe. To ask what a life, human or insect, is 'good for' presumes that value lies in utility, that worth is not intrinsic.

“I know grasshoppers. I’ve dedicated my professional life to their study. Over the past fifteen years, I have employed many methods for learning *about* grasshoppers. Only recently have I begun to consider what I might learn *from* them.... The grasshoppers have taught me ... the nature and value of nothing.” [2-3]

“The fact is that grasshoppers spend most of their time doing nothing. Our struggle to understand their languor arises from our approaching these creatures with the same question with which we approach one another: ‘What do you do?’” [10]

“If we were to reconstruct our scientific understanding in the context of intrinsic value (the notion that something can have worth in and of itself), a rather different interpretation of animal behavior, ecology, and evolution would emerge. If we seek to reveal the inherent worth and dignity of life ... then it is not surprising that a grasshopper might spend a couple hours just sitting.” [10-11]

Some plants and animals have survived because they figured out how to fit into our sense of how life should be. Others are still around anyway, and sometimes, as it happens with grasshoppers, able to serve our interests if we learn to cooperate with them, as on how to maintain a grazable prairie, a potential alliance that Lockwood describes. And then there are some forms of life that, just doing what they were designed to, we have to try to destroy for our own sake, like deadly viruses.

We are all of us in this together, whether co-creators or competitors, ultimately entwined in “the interdependent web of all existence of which we are a part.” Sometimes that’s cause for celebration, sometimes cause for grief or anger, often cause for careful thought. But always cause for reverence, for our wonder, awe, and respect.