



BY PHOEBE KILBY

# sympoetic communities

[W]e are taught that everything is alive. It is hard to teach somebody else that the land is alive. If we pray and there is rain, the grass starts waking up, it starts growing, and then you hear the wind whispering in the trees and the plants – they are talking to each other. That is how we are. We are like plants. That is how we are; we are like plants.

– *Roberta Blackgoat, Navajo elder*<sup>1</sup>

**P**lanners and others involved in guiding the development of human spaces speak often about “community.” I use the word in my planning practice every day. Most of the time I think of community in terms of human relationships with nature providing a context, a set of “opportunities and constraints” for development. But lately, I have come to believe that nature and community are far more closely related than I once thought and that we can learn a great deal about creating successful human communities by examining nature’s communities.

My exploration of the idea of merging natural and human communities into one larger concept started several years ago when I bought a set of bird song tapes to improve my birding skills. I wanted something to amuse and educate myself as I drove to business meetings and circled around the running track. The tape I chose was better than most, since the narrator worked very hard to provide mnemonic hints to help the listener remember the songs. Hearing a human trying to imitate a bird can be very funny, especially to your teenage children. I also enjoyed the traditional phrases that must have been developed years ago by English colonials to describe certain songs. Birds were portrayed singing “Drink your tea,” or “Maids, maids, maids, put on your tea kettle.”

My indoor listening exercise was interesting, but what I was not prepared for was the whole new world I would encounter when next I went walking in the country. Suddenly, the forests and fields were alive to me as they had never been before—alive with bird song. Life was everywhere, singing, chattering, hooting, and calling. I heard the Song Sparrow telling me to put on the kettle and the Towhee admonishing me to drink my tea.

“All is flux, nothing stays still.”

– Heraclitus (c. 540–c. 480 BC), Greek philosopher

#### A SEARCH FOR COMMUNITY

Learning the bird songs helped me begin to feel truly part of nature’s community and also sent me on a quest to relate my daily work as a community planner to my renewed interest in nature. I began to ask more earnestly, “What is community? How does nature fit in?” The result is my concept for the “sympoetic community,” which I offer as an alternative model for human interaction and settlement, a model that builds on nature’s poetry of survival. The sympoetic community is based on the adaptive processes of nature, processes that have sustained nature over the millennia and that I believe can sustain us. Modern scientists have only begun to uncover the complexity of these processes; therefore, the concepts behind the creation of a sympoetic community may seem relatively new. At the same time, philosophers and scientists have been alluding to these concepts throughout human history.

#### CURRENT THEORIES ABOUT THE NATURE OF LIFE

Scientists’ understanding of the functioning of living systems is undergoing great change, and with these changes a whole new view of nature is emerging. In the seventeenth century with the discoveries of Sir Isaac Newton and the invention of machines, scientists began describing nature in mechanistic terms. A scientist had only to discover all nature’s essential parts, its gears and wheels so to speak, its sources and uses of energy, and its physical laws to understand how it worked. With enough research, nature’s processes would be knowable and predictable. Because nature is defined by the laws of physics, it is stable and immutable. One has only to note the constancy of the earth’s atmosphere, the temperature and salinity of the oceans, and the rolling out of the seasons to realize that this must be true.<sup>2</sup>

This way of thinking about nature has survived into the twentieth century. Most science textbooks are colored by a mechanistic view of nature. An example from biology is the concept of natural succession. According to this theory, every habitable location on earth will support a particular stable plant and animal community type if left undisturbed by man or natural disaster. Scientists call this the mature or climax community. Natural succession is the process of nature that leads to the development of the climax community. If a natural area is disturbed by fire or by clearing for agriculture, for example, and then allowed to develop naturally, the area will be inhabited by a succession of plant types over time. For example, in the southeastern United States a few pioneer species of grasses and herbs (Broom Sedge, Asters, and Goldenrod) arrive first after initial disturbance. Over time, pine seedlings move in. They thrive in the open landscape flooded with sun. Gradually, as they grow in height and create a canopy, they shade the earth below them prohibiting new pine seedlings from becoming established. Instead, the shade-tolerant hardwoods grow to replace the pines and create the stable climax forest domi-

“Nature ever flows; stands never still. Motion or change is her mode of existence.”

– Ralph Waldo Emerson (1803–1882), *American poet and essayist*

nated by oaks and hickories and populated by a wide diversity of plant and animal species. Without significant disturbance, this mature forest is expected to perpetuate itself, a plant and animal community in harmonious balance with its environment.<sup>3</sup>

Most ecology textbooks describe natural succession in this way. However, recent critical analyses have shown that succession is not such a determinable clockwork process. Ecologist Daniel Bodkin contends in his book, *Discordant Harmonies*, that nature is far more variable than the textbook description of natural succession would imply. The species composition of the climax forest for an area is not constant, but is instead dependent on a number of factors. After the initial disturbance, say, by fire or clear-cutting, variations in the season or the amount of rainfall or the presence or absence of nearby plants as seed sources may lead to different compositions of species. The aspect of the land, whether it is south-facing or north-facing, can affect the character of the plant communities growing there as can the bedrock geology, the wetness of the soil, and many other factors. Over time, wind, fire, or disease can create disturbances here and there making the forest vegetation vary spatially. In fact, some forest types that scientists have always thought as the stable climax forests are only stable if subject to periodic fires. Scientists have known of these variations in forest composition for years, but the variations were always seen as exceptions. Detailed analysis now shows that the idealized climax forest is really the exception. Mature forests fluctuate and change in species composition within general natural brackets. But even this description is somewhat faulty; because with climatic changes over long periods of time, say with the waxing and waning of the ice ages, even the brackets move. Where oaks and hickories now dominate, spruces and firs once ruled in cooler times.<sup>4</sup>

So the forces of nature are not immutable. Change and variability are the essence of nature. This is a very unsettling idea, since many of us like to think that nature, if left to itself, creates its own perfect harmonious balance. There is a type of balance, but it is far more dynamic than we once thought.

#### NATURE'S DYNAMIC WEB OF LIFE

What creates this dynamism? The processes of nature themselves create it. According to Fritjof Capra in his book, *The Web of Life*, nature is best described as a network of interacting entities containing many feedback loops and complex interrelationships. Actually, it is more than just a network; it is a web of life composed of networks within networks of interacting components. Molecules form networks that create cells. Cells form networks that create organs. Organs form networks that create organisms. Organisms form the networks we know as ecosystems. The non-living components of the earth are also part of the web: the atmosphere, rocks, soil, rivers, and oceans. These constantly interact with the living components and change and are changed by them. All components of the networks have some importance, because all play a role in the

“The faintness of the stars, the freshness of the morning, the dewdrop on the flower, speaks to me.”

– Chief Dan George (1899–1981), *Native American (Salish) logger, actor, poet*

web of life.<sup>5</sup> The complexity of the feedback loops of nature’s networks promotes a modulating balance and allows nature to adapt to change. Nature’s networks are so complex that science cannot describe them adequately nor accurately predict how they will evolve. That is why it is so difficult to predict the exact results of natural succession or to predict the weather or to model the water quality of an estuary.

Nature’s web of networks displays a complex pattern of interactions and interrelationships powered by the sun. As the sun’s energy courses through the web, the process of life is created. Biologist Lynn Margulis has called the earth’s life processes “autopoietic,” based on work by scientists Humberto Maturana and Francisco Varela.<sup>6</sup> The latter developed the term “autopoiesis” to describe cell metabolism, the essence of life. It comes from the Greek verb “poiein,” to make (the same verb that provides the root for “poetry”), and “auto,” self. Nature is “self-making.” Nature contains networks of components that interact, influence, and transform each other to create self-organized, self-producing systems.<sup>7</sup>

#### A NEW FORM OF COMMUNITY – “THE SYMPOETIC COMMUNITY”

The difference between humans and other living organisms is that humans can know that they are participating in the networks of life and can make conscious decisions about their role and function in those networks. Therefore humans can create a step beyond the autopoietic network: the “sympo[i]etic” community, or “together-making” community. The sympoetic community recognizes that human communities are made up of networks of interrelationships that cannot be isolated from the web of nature’s networks. We can emulate the complexity, feedback loops, and dynamic adaptability of nature in the sympoetic community—and we can do this together.

Community is an important part of this concept. The word “community” has the same root as “communication,” and that is what much of the effort to create a sympoetic community is about. Through networks of communication we can know more about our community, how we are related to each other and nature, and how we can work together to create the kind of community we desire. As the Navajo elder says, we are like the plants; we talk to each other—just as I found the birds speaking to me in the fields and forests.

#### LIVING IN THE SYMPOETIC COMMUNITY

What might it be like to live in a sympoetic community? First of all, you would definitely know your neighbors. No longer would you slip out the front door with a non-committal nod to the woman next door as she gets in her car headed for work. You would know her name and her family. You would make a point of it, as would all your neighbors.

“The sea is a noisy place. Just swim near the parrot fish on a coral reef. You can hear them chewing, crunch, crunch. All through the water world, there are grunts, deep moans, snaps, drummings, squeaks, roars, clatters, bangs, and from time to time through the corridors of water, the calling of the great whales.”  
– *Mary Lee Settle (b.1918), American Writer*

You would also know your elected officials and you would be expected to participate actively in the process of directing how your community grows and adapts to change. This does not mean that you would be forced to participate by law, but rather participation would become part of the community ethic. Robert Putnam, of Harvard’s John F. Kennedy School of Government, calls this the “civic community.” Civic communities “value solidarity, civic participation and integrity.”<sup>8</sup> They have what Putnam calls a high level of “social capital,” networks of civic engagement that regularly bring citizens together in productive ways to solve problems.<sup>9</sup> A civic community is a “together-making” community.

Another characteristic of the sympoetic community would be a broader acceptance of our human diversity and a recognition of the importance of tapping into the power of diversity to forge new and creative solutions to community problems. Members of the sympoetic community would understand that we cannot isolate ourselves from others different from us. We are all part of the web of life, inextricably connected and constantly affecting and influencing each other. A potent analogy is one used by the great scholar of myth and religion, Joseph Campbell. In describing the Japanese view of oneness with life, he evokes the image of the net of gems: “...the universe as a great spread-out net with at every joint a gem, and each gem not only reflecting all the others but itself reflected in all.”<sup>10</sup> We are connected by the net, but we are not just undifferentiated knots. Rather, each of us is a gem to be appreciated and valued.

In the sympoetic community, decisions are made in ways that integrate ideas, tap creativity, and synthesize new solutions that are holistic in approach. For example, in order to resolve issues regarding new development and growth in the community, the public hearing would be used only as a last resort. Such hearings tend to divide communities into polarized camps. Participants often try to paint the opposing camp as evil by making outlandish claims and closing all possibilities for compromise and creative solutions. Many people who have been involved in controversial zoning cases come away feeling dissatisfied with the results and disappointed in fellow citizens, in developers, and in elected officials. The public hearing was required by many laws to rectify decision-making processes in the earlier part of this century, when citizens were not consulted at all by elected officials. Unfortunately, it was just a small variation in our hierarchical form of governance that has proven unsuccessful and has contributed to a general mistrust of government among the populace.

In the sympoetic community, collaborative decision-making processes would be used to allow community members to solve difficult problems and create the kind of community they desire. Together citizens, business leaders, and political stakeholders would work to develop solutions that consider the good of the community as a whole and the minimization of impacts on the web of life as well as individual needs. A number of communities across the nation use collaborative processes to solve difficult community problems as well documented by

“We have no reason for denying to the world of plants a certain slow, dim, vague, large, leisurely semi-consciousness.”

– John Cowper Powys (1872–1963), *English writer*

David Chrislip and Carl Larson in their book, *Collaborative Leadership*. For example, collaboration was used to develop a plan of action to upgrade Denver’s deteriorating physical infrastructure by the Citizens for Denver’s Future. And Roanoke, Virginia, developed its Roanoke Vision for empowering its neighborhoods and reinvigorating its downtown through forums, town meetings, and citizen surveys enclosed in the local newspaper.

The legal and regulatory systems in the sympoetic community would recognize change and adaptability through the use of incentives rather than controls, through rewards for creative solutions, and through the integration of impact analysis into decision-making. Regulations would not prescribe the means to an end, but rather, would describe a goal and allow multiple solutions to meet that goal. As Jane Jacobs has said, “Standardizations are... stultifiers of development... I don’t mean standardized goals, necessarily, but standardized means.”<sup>11</sup> The State of Virginia rejected standardized means when developing strategies to meet a water quality improvement goal for the Chesapeake Bay. Virginia had agreed with other Chesapeake Bay watershed states to reduce nitrogen and phosphorus pollution to the Bay by 40% by the year 2000. While in the past Virginia had imposed regulations to implement Bay improvement goals, this time the state decided to try a more cooperative method. The staff went out into the communities to ask them how they would propose to meet this goal. Computer modelers were available to test the efficacy of different approaches, and through collaborative methods solutions were developed. Each community developed its own plan suited to its needs: what its citizens and industries were willing to do and what was most effective given the sources of pollution present. Rural communities prepared very different plans from urban ones. The state legislature approved the plans and has appropriated funding and technical assistance to the communities to implement them. Since communities were made part of the process, there has been far less resentment than when regulations were imposed. A sympoetic community of clean water advocates is slowly emerging.

To relate this idea again to nature, I like to think of the sympoetic community as more like a mature forest than a pioneering new plant community. In the former, the networks are complex. The complexity of interrelationships allows adaptability to change. In the latter, the number of species and interrelationships are low. Small disturbances can create large impacts and instabilities. As people, as communities, and as a nation, we need to stop viewing ourselves as pioneers, conquering the ever extending western frontier. We need to establish and make use of higher levels of interrelationships that will expand our adaptability. Instead of retreating to the countryside isolated on large suburban lots, we should be forming integrated communities that foster neighborliness and bring us closer together.

“A rock has being or spirit, although we may not understand it.”

– *Leslie Marmon Silko (b. 1948), Native American (Pueblo) writer*

Our society tends to isolate and compartmentalize life’s activities. We live in one area. We work in another. Our children go to school in another. Shopping is in the big superstore across the interstate. The design of the sympoetic community would encourage the integration of home, work, school, shopping, recreation, and worship thus embracing the concepts of new urbanism and traditional neighborhood development.

#### NATURE IN THE SYMPOETIC COMMUNITY

So far in this proposal, I have focused on the human interactional aspects of the sympoetic community, but of course, the community also includes nature and the whole web of life. Animals, plants, insects, bacteria, soils, rivers—all are gems in the net. As we develop holistic solutions to our problems, those solutions must consider our relationships with the natural world. We are part of this world; by damaging other elements of it, we damage ourselves. All elements of the web of life are important, so a reverence for life and its diversity must infuse our culture. As Native Americans apologized to the plants and animals they killed for food, only taking the amount needed to sustain them,<sup>12</sup> we would practice true conservation by asking ourselves each day whether the plant and animal products we use for food and fiber are truly needed. Endangered species, no matter how obscure, would be more highly valued.

The sympoetic community is of nature and therefore works in harmony with natural processes. The cycling of materials and the flows of energy would be considered in all life’s activities. As nature recycles its wastes, so would we. Products would be designed from their inception to be reused and recycled. We would also look to our cities and towns, preferring to adapt and reuse older buildings and structures before opting for the new at the suburban fringe.

#### A PROCESS TOWARD SUSTAINABILITY

The sustainable development movement, a world-wide environmental initiative, has received a great deal of attention in recent years. According to the United Nations World Commission on Environment and Development, “[s]ustainable development meets the needs of the present without compromising the ability of future generations to meet their needs.”<sup>13</sup> This noble thought, however, is very difficult to translate into action. It describes a goal, but provides little help in guiding us toward the goal. The sympoetic community model is really a process, a way of thinking and acting in harmony with nature. I see the sympoetic community concept as providing the means to achieve sustainability. It is not an endpoint, but a way of life. Already, after working on this concept for the last few years, I find myself looking at the world through a sympoetic lens. It helps me think about positive approaches to solving problems and provides an ethical base for action.

“Long live the weeds and the wilderness yet..”

– Gerard Manley Hopkins (1844–1889), *English poet and Jesuit priest*

#### RESPONDING TO LIFE’S COMPLEXITY WITH THE SYMPOETIC COMMUNITY

It is important to remember that just as the web of life is so complex it is difficult for scientists to understand it fully and to predict its evolution, so the sympoetic community will be complex and somewhat unpredictable. In making our community together, we may try out many different solutions to problems as we try to adapt to changing conditions. Some solutions will not work. But the sympoetic community will be able to adjust by listening to the communications along its feedback loops and responding with new ideas and approaches. We can take comfort that sympoetry provides us ways to embrace and adapt to life’s complexities.

The sympoetic community is a positive model for human activity. It does not supply simple answers or absolute maxims for life. This will be unsettling for some. But it does provide an ethical base and decision-making process for creating the healthy, safe, closely-knit communities we desire. If we are to survive as a species, we need to adopt a more successful model for our communities, one that emulates the dynamic, adaptive characteristics of nature—the sympoetic community.

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sympoetica  
CREATING COMMUNITY