

Human experience, technology and the environment

Michael D'Aleo

Dec. 19, 2001

(This is the full version of the article published in Newsletter of the Society for the Evolution of Science, Vol. 18, No.1, Spring 2002, pp. 15-19)

In our modern, technology-driven culture many people experience a sense of being disconnected from the world. Much of modern life is spent living inside of human-created environments such as those developed for transportation, housing and the work environment. In fact, the goal of many of these human environments is to isolate the human being from the natural world and its unpredictable or “negative” effects. Has the technology and the results of human endeavors really created a “better world”? In what way do we measure our quality of life?

I spent a number of weeks in the summer of 2001 living in a tiny cabin in the Adirondack Mts. of New York with my wife and daughter. The cabin had no power and was located on a small dirt road over 1 mile from the nearest town road and utilities. It was a 2- mile walk each way from the town to the cabin, much of it being rather mountainous. One of the intentions of the experience (as is that of many of the other people who are drawn to the mountains in the summer) was primarily to relax and experience the beauty of nature. Often it was necessary to go to town to get food or other necessary items. From the beginning of this experience, I resolved to walk to town whenever possible rather than driving a car. The walk was initially challenging due to the steep inclines of the road but with every trip it became a less strenuous experience. Having walked the same road for a number of weeks I became aware of many of the obvious and subtle changes that occurred over time. This included the activity of animals, the growth and blossoming of plants, the daily variations in stream water levels and sounds as well as the changes in the surface of the dirt road from the occasional car that would pass-by.

One afternoon, after we had been there for a couple of weeks, we were walking up the road from town when a car pulled along side of us and asked us if we wanted a ride. We politely declined, to the surprise of the driver of the vehicle. After a moment the next question asked was, “who are you, and how come you always walk on the road?” I tried to politely explain that we were here for the summer and that the walk allowed us to run our errands,

experience the mountains and get a bit of exercise. The driver stopped for a moment and then asked, "Are you the people who my husband saw walking up the hill carrying groceries?" When I replied that we were, I sensed a puzzled look of curiosity, understanding and surprise all at once in the driver's expression. After a brief introduction of names and where we were staying, the driver wished us a nice day and headed up to a camp about half-way between our cabin and the town. Over the course of the following weeks, I only saw the driver of the vehicle on one other occasion. At this time she was riding a bicycle in full riding-gear up the hill. She had the appearance of someone who was out to get her workout in for the day. It appeared that to this person, the concepts of exercise, performing daily tasks and enjoying the natural world were all separate activities. Each activity had its own purpose and its own set of special equipment necessary for the successful completion of the task. The idea of experiencing the mountain seemed to be limited to the times when that was the only task at hand. By no means was this an isolated incident that summer.

We live in a society that allows us on the coldest winter morning, about -10F here in Northern New York, to experience the day practically as if we were in Florida. You can wake up in a house with central-heat, take a steaming shower, drink a glass of Florida orange juice (possibly fresh squeezed) and head out to the car that was started up 10 minutes earlier with a click of a remote-control unit so that the car is already 70F inside when you enter the vehicle. You can then drive off to your place of work and continue this experience of the "custom-tailored human made environment" to what ever level you like. (Palm trees in the office, relaxing CD of water sounds and waves etc.).

The irony of the above description is that more and more the above description is becoming the WORLD more people experience on a daily basis. We are trading the predictable world created by human beings for the less predictable, and sometimes less comfortable experiences of the natural world. The media has been filled with stories about this question for centuries. Most of the stories can be broken down into a few generally categories:

- 1) "Mankind is taking his rightful place in the world and is taming the savage wild." While this view was popular in the past, it is not politically correct to take this stand at present although it continues to manifest in the world in subtle ways. For example, a contemporary issue might be

the use of herbicides to rid ones lawn from weeds. The idea is that the monoculture of the lawn is a “better” environment than a weed filled lot. More subtle forms of this argument can be seen in the conventional approach to disease and medicine. In this view of the world, nature is something to be controlled and in many cases, kept at arms length.

- 2) A second approach would take the opposite tack of the first. “Nature is fine just the way it is. In fact it is MAN who is the problem and destroys the natural character of the world.” Man’s impact on the world is considered to be evil and most technology is thought of as suspicious. Therefore the only solution advocated for in this way of thinking is that we must go back to some simpler time, a time often seen as related to some idealized earlier culture that lived more in harmony with the land. The movement of living the lifestyle of the Native Americans is something that was popular with some people in America in the past. The difficulty arises when one begins to investigate the effect of such a culture on the land. In fact, the Native Americans of the Northeastern United States would regularly set forest fires in order to create “open forests” (see Tom Wessells book, *Reading the Forested Landscape*) as part of “their way of living”. Is this any less an environment altering event than the creation of open pit mines that are later recovered? Is it possible for man to have no effect on the environment? Must we go back to a subsistence form of living?
- 3) A third tack combines some elements of the first two in stating that, “yes nature needs to be tamed.” “Yes, mankind is having a destructive effect on the environment. But if we can only get that next generation of technology into effect that the scientists have promised us, (in reality, usually misrepresented by individuals with a lesser scientific background) we will get rid of all our problems.” This argument can be studied from a historical viewpoint with often-humorous implications from the position of our present time (their future). Interesting examples of this way of thinking are common today in the development of genetically engineered organisms that solve one problem but seem to have “unexpected” results that yield “less desirable” characteristics in other unsuspected areas.

While there are many combinations and variations of each of these themes, the apparent lack of real solutions can lead us to reconsider our relationship to our experience, the environment and technology. It is clear that much of

our human activity has a negative impact on the environment. It is also apparent that much of this same technology has the effect of isolating individual human beings from the world around them.

When we look at the historical development of many modern conveniences, the isolation of human experience from the environment was often the primary intent of the technology. Examples include central heating, almost every accessory in an automobile and personal headphones (walkmans). In each case we as humans choose to give up an experience of the surrounding environment for the predictable experience that the machine will offer us. We then live in an environment that we control, something we already know, rather than having to deal with the unexpected that we often experience in the natural world (rain, temperature changes, unexpected guests, other sounds, etc.). When one of these devices fails, we can become very frustrated as the outer world slowly makes its way back into our controlled environment. This can be most strongly experienced when there is a power outage, when the batteries die in a Walkman or with the breakdown of an automobile in inclement weather.

This method of working in the world can also be seen in the development of the technology itself. In many cases, the engineer creates an environment that tries to keep-out the natural world so that only the forces and conditions desired by the engineer are able to manifest in the given space. The application of rust-inhibiting coatings on automobiles, the vacuum found in incandescent light bulbs as well as the electromagnetic shielding required for some computers are all examples where the outside world is specifically removed from a system. What are often called “bugs” is the reappearance of the outside world into the controlled environment that we have tried to so carefully isolate. Sometimes this condition is referred to as “contamination”.

In either case, the goal of mankind is increasingly becoming one of turning away from the world at large, and toward a separated and controlled world of man. However this creates a fundamental problem. Over time the world at large begins to appear as something that is a nuisance, an obstacle to the formation of the manmade world and ultimately it becomes something that is not understood and finally feared. Our society is full of fear based on a lack of understanding of the natural world. One can see this in the limitations that continue to be placed on children. They are often prevented from going outside because it is, “too cold, hot, rainy, muddy, buggy or dark”. With this

way of thinking, the only safe environment begins to become one that is controlled by human beings. Huge markets have grown up around the thought that given just the right materials, we as humans can create the perfect situation (vitamins and fad diets come to mind). Rather than increasing one's experience of the world, the fear of the outside world limits one's possibilities and understanding. There is a significant loss of human freedom that often results from a lack of understanding of the outside world culminating in the destruction in the environment. The recent fear of mosquitoes and the subsequent spraying of large areas of the Northeastern United States in response to the presence of the West Nile Virus, is an example of these phenomena. Many people considered not sending their child outside for fear that mosquitoes would bite them. Birds, a potential carrier of the virus also became objects of fear. All this for a handful of fatal cases of the disease in humans (I believe there were less than eight over three years?).

But another approach to interacting with the world is possible. If instead of separating ourselves from the world we actually embrace it, new opportunities arise. When we are present to the experiences we find in our everyday world we begin to see that much of what was to be avoided as inconvenient and apparently chaotic has its own underlying order. The dynamic world that is present begins to be seen as a series of processes and relationships rather than only as a series of objects that are accepted or rejected based on our present needs. By carefully paying attention to the details of our sensible experience as well as the formation of concepts, we begin to see that our understanding of both the world outside of our self and the world inside are related through the uniting of our sense experience with our conceptual understanding. By recognizing this dynamic relationship it becomes problematic to be concerned only with the needs that are inside of one's self at the expense of the outside world's vitality. When we turn only to the inner world, we shut our self off from the rich experiences of the world outside. In many cases, the turning away from these experiences can lead to avoidance and a reduction in the free functioning of the individual. To be truly free, we must accept all of these experiences and avoid nothing. This does not imply a role as a martyr, but instead advocates for the tremendous courage necessary to stand and face any experience. This does not also imply that all sense experience will be painful. To the contrary, much of it is pleasant. However, an equal imbalance can occur from the constant longing for the pleasant, while avoiding the unpleasant. Many

individuals describe tremendously difficult experiences in their life as the times when significant growth took place.

Staying present to each experience and beginning to see the relationships that arise in them will result in deeper understandings of how phenomena are related in the world. It is through such work that a true solution to the struggle between the human being, technology and the environment can arise. If we can more deeply understand the relationships that exist in the world around us, human activity can begin to work with and embrace these naturally occurring processes. This would help to reverse our present situation in which a singular specific effect is removed from a larger context, placed into an isolated environment and used solely to satisfy human goals. If one pays attention to the natural world, one will observe that in nature there are no wastes. What appears to be the waste of one process is a required material that can be utilized in another. If too much of one product is produced, it correlates to an increase in the rate of another process (example: fish, bacteria, plants in a pond). Much of human technology ignores this principle. As a result, our technical processes often produce products that have no place in the natural world. By developing technology that works on the same processes and principles as the natural world, not only will the technology no longer be destructive to the world; it could potentially support it! At this point, man can become responsible not only for the protection of the natural world, but actually cause it to flourish. For an example of this, one can recall the experience of sitting in the garden of a true master gardener. This is not simply a place where the plants have been allowed to grow, but instead, a special place where the gardener works with the forces of the plant and the environment to allow the plants to reach their full expression. At the same time, a healthy garden is maintained by constantly observing the processes at work to determine what balancing elements are needed at that particular time.

While the example of the garden is clearly from the biological realm, similar results are possible by paying attention to the phenomena and observations that can be made in the chemical or physical realm as well. By working with the forces that are apparent in the natural world and combining these observations with the principle of wholeness in process, it becomes unnecessary to create machinery that is insulated from the natural world. By its design, the technology can not only accept but also embrace the interactions of forces in the outside world. Additionally, by opening up to the possibilities that already exist in the world around us, we create the

conditions for developing a deeper understanding of the relationship between our understanding of what we now see as the world outside of ourselves and our inner life.

We thus have the tremendous opportunity to work constructively with the world while with the same efforts meeting both the outer and inner needs of the human being. The qualities of becoming more aware of human experience, working creatively in the world and supporting our environment do not have to be mutually exclusive. Through the method of developing a more conscious understanding of the relationships that exist between the senses and conceptual abilities we too can rightfully take on the task of truly creative beings.