

Environmental Trade-Offs
February 28, 2010

When Utah legislator, Rep. Mike Noel, declared during this legislative session that global warming was a “conspiracy” to control world population, he was half-right. I would not exactly call it a conspiracy, but environmental concerns do extend to the world’s overpopulation. And the message is loud and clear, anything but conspiratorial that populations need to be curbed if life is ever to become sustainable on this planet.

Environmentalism has emerged as a wedge issue, polarizing people and congress as though we had the luxury of time to debate the validity of global warming as a legitimate scientific concern. When eleven scientists from BYU defended climate science and rebutted, point-by-point, our legislature’s resolution to urge the Environmental Protection Agency to drop plans to regulate pollution blamed for climate change, BYU scientists were asked to apologize. Our non-scientific legislature claims that the science of global warming remains unsubstantiated, thus demanding that the science faculty act contrite for overstating its claims. No apology was made.

What’s going on? Senator Orrin Hatch has made clear that there’s a preoccupation with environmental issues, and among the warning signs was that children might be abusing drugs. Climate skeptics and right-leaning politicians have successfully derailed our nation’s climate bills and totally undermined the United Nations’ Climate Change Panel that sought a global effort of dealing with climate change through the cooperation of the international community. On the Web site of the Science and Public Policy Institute, a Washington-based research and educating institute, it says: “Proven: There is no climate crisis.”

Only 57% of Americans believe in Global Warming as though it were some theological hypothesis...and to a large extent it is. Imagine living in a time when science supported the religious concept that our solar system comprised the entire universe with the earth at its center and the sun revolving around the earth. The stars were located just beyond the furthest planet. This was the “proven” science as proclaimed by Ptolomy in the early second century. It prevailed for fourteen hundred years until Copernicus threw a monkey-wrench into the whole cosmic perspective. Copernicus introduced the heliocentric system with the contrary view that earth and all the planets of our solar system revolve around a fixed sun.

The year was 1543 and the idea that WE were not at the center of the universe was quickly denounced by Martin Luther. The Catholic Church banned everything Copernicus ever wrote and of course, Galileo did not fare much better with the church. His telescope not only confirmed everything that Copernicus had recorded, but he also discovered four of Jupiter’s moons. The church condemned

heliocentrism as false and contrary to scripture, finding Galileo guilty of heresy. (I think the Utah legislature essentially charged the BYU science faculty with heresy).

Would not most of us, if we were alive in the 1500's, have preferred holding on to the old ideas of standing at the center of the universe? We would have scrutinized the new science and tried to discredit the scientists...just like the tea partiers of today and the conservative politicians on the religious right, the Utah legislature, climate skeptics all. They adhere to a blind faith precluding evidence to ANYTHING leading to conclusions that diminish or interrupt one's private wishes for how life really ought to be.

“Don't disturb my universe” is the rallying cry that echoes throughout the debate on evolution, creationism, and belief in a personal God who affirms my central place in the universe. Today might as well be 1543 with science challenging the hubris of humankind, positing the notion that we are NOT at the center of creation. We have today, as when Copernicus rocked the suppositions of an earth-centered universe, a crisis in epistemology.

Epistemology relates to the theory of knowledge; how do we know what is true? But more to the point, it studies knowledge with regards to method, validity, and scope. Epistemology, essentially, investigates what distinguishes justified belief from opinion. As long as global warming can be down-sized to a mere opinion rather than a scientific justification that calls for radically new beliefs and behaviors, then the old framework for understanding the universe and our role in it can remain unchanged.

Just like the church casting doubt on Copernicus, undermining and discrediting his scientific methods, validity, and scope in order to preserve the old cosmic paradigm, so too, do we have a frantic mindset today trying to invalidate science and prevent a new worldview from emerging. Then, like now, the intent was to preserve a certain narcissism. Long ago it meant that we were the apple of God's eye and He thus placed us in the center of His universe. Now the hubris has even exceeded that level of cosmic self-importance with the view that we are entitled to exploit the earth for its resources as was (seemingly) God's intentions all along. And furthermore, God loves us so much that we are exalted—stand above all other living organisms as though we human beings were exempt from the laws of nature.

Just as scripture once proved enough justification to reduce science to mere opinion in the 16th century, we face today an enormous body of religious faith whose epistemology remains rooted in a supernatural Deity. God has created us to dominate the earth. And the crisis generated by science that calls for a new paradigm and a reconstruction of society, is met with an amazing cry of Don't Change My Universe.

A local case-in-point that serves as a microcosm for the clash: BYU scientists support the evidence of climate change while LDS second counselor James Faust wrote in

1995: “Those who argue for sustainable growth lack vision and faith. The Lord said, ‘For the earth is full, and there is enough to spare.’ That settles the issue for me. It should settle the issue for all of us. The Lord has spoken.”

I don’t think anyone would argue that the BYU scientists don’t have faith. The issue forces us to examine the theory of knowledge and how we justify our beliefs. A belief in God does not preclude support for the science of global warming. Faust makes a ludicrous assumption that God has somehow already addressed the issue at the beginning of time, and the Lord Almighty doesn’t want the universe changed.

A new world view does not happen quickly, even as the urgency of climate warming dictates commonsense approaches to legislation limiting greenhouse gasses and individual lifestyle changes. The resistance we encounter today from Capital Hill in Salt Lake City to the halls of Congress to the hysteria perpetuated by Glenn Beck and Sarah Palin is a fearful response to the fact that the old paradigm has an increasingly difficult time explaining or justifying a worldview of capitalism, accumulation, exploitation of resources as in drill baby drill. The old worldview which posited that we are central to creation and hold dominion over other creatures, cannot absorb the inevitable formation of a new paradigm that views the world as interrelated and interconnected: Humans, animals, trees, earth. We are nothing special; we are part of an organic cooperative and we are ruining the very sacredness of the earth by trying to exempt ourselves from the cooperative. I use the word “organic cooperative” deliberately because it evokes images of socialism which terrifies those holding on to the old worldview. The paradigm of entitlement is shifting slowly, but shifting nonetheless, to an understanding that we **MUST** let go of our selfish desires and cravings – if not for the sake of other people and animals, then for the very life of earth itself.

But let us not be too quick in pretending to wear the mantle of enlightenment. The call for a reconstruction of society does not come easily even to us. A local environmentalist, Steve Trimble, whom I am sure many of us know, and I am privileged in getting to know as we serve together on the board for Utah Interfaith Power and Light, has just published his latest book, *Bargaining for Eden*. It offers many themes, but revolves unambiguously around the tension between maintaining the purity of the west and open space colliding with the purchase of Snowbasin by Earl Holding. Holding might well be viewed as a model of all we progressives abhor, namely getting rich through land development, and he even got the government, courtesy of Bob Bennett, to pick up much of the cost.

But Steve also offers a bit of self-examination from which we all could benefit. Just as environmentalists regard developers like Holding with great disdain, Steve at least looks at his own personal violations of land use in reconciling his second home down in Torrey. “We all live conflicted,” he writes, “caught between competing demands. We want to be authentic, and we want to be successful...I strive to live lightly and yet I have purchased my dream acreage, built a retreat home, and diminished our open space in the rural West. I still prefer slow chairlifts that let me

pause and look around, reconnect me with weather and context in between runs, and don't raise a gondola's fogged windows between me and the wild mountains. And yet when development opens new mountains for skiing, I'll ride all the high-tech lifts and try all the runs. Life is a giant, teetering, fun house of trade-offs."

We should all examine some of the trade-offs we are willing to make or not make, and we would probably find deep within ourselves a resistance to giving up what we may consider as being "too much to bear." These are personal battles that test our mettle and commitment. I don't believe that many of us fare well in these cases beyond switching to compactfluorescent light bulbs, placing a solar panel on the roof, recycling and eating locally.

A new book out which falls into the genre called "Nouveau Thoreau," makes living with zero carbon sound absolutely heroic. Just like super heroes of old like Superman and Spider-man, the new hero is named "No Impact Man." The book in fact is called, "No Impact Man: The Adventures of a Guilty Liberal Who Attempts to Save the Planet and the Discoveries He makes About Himself and Our Way of Life in the Process."

Waking up one day as No Impact Man, he refuses to blow his nose into a Kleenex because that produces trash. So he blows into a cloth napkin. Then he faces problems with his baby's disposable diapers and the milk carton and how does he bring his tofu home from the store without paper or plastic. We admire his nobility, but it feels so utterly absurd in the face of the larger dangers and the trade-offs we are not prepared to make.

In the larger scheme of things, we enlightened liberals drive a hybrid car and think we're saving the planet. But there are immense trade-offs that we bury in our consciousness. Each Prius motor contains a kilo of neodymium, and each battery contains more than 10 kilos of lanthanum. These are RARE EARTH elements from China. Not good!

We love wind turbines, and although not much came out of the Copenhagen meetings, Denmark showed the world that 20% of its energy comes from wind turbines. But the permanent magnets used to manufacture a 3-megawatt turbine contains two tons of RARE EARTH.

Rare earth processing in China is a dangerous and polluting industry using toxic chemicals, acids, sulfates and ammonia. The workers have little protection. China meets 95% of the world's demands for rare earth.

The technologies we use from computers to mobile phones and energy-saving light bulbs all use rare earth. Local Chinese villages and farmland have been ruined by the mining of rare earth as it releases fluorine and sulfur and radioactive materials.

Here's the trade-off: In trying to make the world energy sustainable, alternative energy technologies exact a heavy price as rare earth elements are mined illegally and release toxic wastes into the air and water. Another trade-off: If our purpose is to reduce our dependence on foreign oil, and yet we need rare earth to put hybrid cars on the road, we're just exchanging one dependence for another.

We will soon face a shortage of rare earth elements. Last September China announced plans to reduce its quota to conserve scarce resources and to protect the environment. A rare earth element mine is scheduled to open in California by 2012. What safe-guards will be implemented?

Environmental trade-offs:

- 1- Theologically, moving from God's center of attention to just another organism on the planet.
- 2- Personally, reducing our appetite for accumulation to be better aligned with environmental principles to sustain the planet
- 3- Technologically, acknowledging that an energy-saving future still relies on dangerous exploitation of rare earth elements and we need to go in a whole new direction.

Change is hard and never comes about quickly. Its too easy for us progressive types to think we're already there; we know the answers and we've made the changes. But our feeble efforts are as laughable as "Nouveau Thoreau."

I believe that we are still into medieval thinking. Few are breaking out into new ways to imagine the future as Thomas Berry. He proposes that our thinking move from human history to cosmological history. To change the worldview requires, in Berry's thinking, a New Story. It will take a New Story to chart our way into viable future. A New Story involves new ethics, new ways of thinking about human justice and the environment and evolution and the relationship among all living creatures.

Berry may be the Copernicus of our age. Is anyone prepared to adopt the New Story required for how the cosmos really works? Or, are we somehow hoping after everything is said and done, that our universe won't need to be disturbed after all?