Creating a Civilization that Flies: An Allegorical Look at Sustainability

We see a world full of species that look as if they could go on living indefinitely. If we believe this is possible, then we should be able to formulate this observation as some sort of law. The easiest way to show how this law operates is by analogy with two common laws – the law of gravity and the laws of aerodynamics.

The law of gravity, simply stated, is that unsupported objects fall towards the center of the earth. The laws of aerodynamics do not provide us a way to defy the law of gravity. They simply provide us with a way of using the air as a “support” to counteract the effect of gravity. The “sustainability law” we are looking for is like the law of gravity. We cannot escape ultimate unsustainability, but our sense is that there is a way of achieving a long-term freedom from it. In other words, we believe that it is possible to build a civilization that essentially “flies.”

Early aeronauts did not begin with an understanding of the laws of aerodynamics. They just built contraptions, pushed them off cliffs, and hoped for the best. Let’s examine a hypothetical early trial with a pedal-driven contraption with flapping wings – based on a misunderstanding that for man to fly, he need only to imitate birds.

As the flight begins, all is well. Our airman has been pushed off of a cliff, is pedaling away, and the wings of his craft are flapping like crazy. He is feeling wonderful and is experiencing the freedom of the air. What he doesn’t realize is that his craft is aerodynamically incapable of flight. Fortunately, he has chosen a very high cliff. His disillusionment is a long way off in time and space. He is like the man in the joke who jumps out of a 20-story building and as he passes the 10th-floor says “Well, so far so good!”

After a while, our airman looks down and realizes that the earth seems to be rising up toward him. Well, he is not worried about that. So far everything is a success and there is no reason to believe that it will not continue to be. All he needs to do is pedal harder and faster. Then he looks down again and sees that the law of gravity is catching up to him at an accelerating rate. He is concerned, but not really alarmed. After all, his craft has brought him this far safely. He just has to pedal a bit harder and faster.

There is a connection between the doomed airman and civilization. Ten thousand years ago, the people on earth embarked on a similar adventure: a “civilization flight.” Like our imaginary airman, they were totally unaware that there are laws that must be complied with in order to achieve sustained “civilization flight.” At first, all was well. They were pedaling away, the allegorical wings were flapping beautifully and they were experiencing a freedom from restraints that bind and limit the rest of the biological community. And with that freedom wondrous things were happening – urbanization, literacy, mathematics, science, air conditioning, automobiles, space flight, cell phones, flat screen TVs, etc. They couldn’t know, wouldn’t even have guessed that like our hapless airman, they were in free fall. They were blind to the fact that they were simply not in compliance with the laws that make sustainable “civilization flight” possible. The earth is providing for all their needs; their disillusionment is far away in the future, and so they are blissfully pedaling away and having a wonderful time.
They do see strange sights. They see remains of craft very like their own – either destroyed or merely abandoned – by the Maya, by the Hohokam, by the Anasazi, and by the Sumerians to mention only a few. They ask, ‘Where are these people? Why are they not in the air like us? We are not going to abandon our craft. We are going to continue to enjoy the freedom of our civilization flight forever.’ But alas, laws are catching up with them. They don’t even know that such laws exist, but this ignorance affords them no protection from its effects.

Today, simple answers are no longer enough to reassure the people. The impact on basic ecological and planetary systems is intensified more each year and the effects are painfully obvious. Basic irreplaceable resources are being devoured more and more greedily each year. Of course there are optimists who say, ‘We must have faith in our civilization craft. After all, it has brought us this far safely. What’s ahead isn’t doom, it’s just a little hump that we can clear if we all just pedal a little harder and faster, i.e., develop new technologies or find more of the resources that we need. Then, we will soar into a glorious, endless future – up to the stars and we will conquer the universe itself.’

But, it is becoming increasingly evident that this approach is carrying us toward catastrophe. Seven billion of us allegorically pedaling away – or 10 billion or 20 billion – can’t make our civilization fly. It has been in free fall for 10,000 years and that fall is about to end unless we do something about it.

We need to stop burning so much coal, oil, and natural gas, and to start using solar and wind energy and other such clean sources of renewable energy. We may never enjoy the clean air and water that our ancestors did, but it is absolutely critical for the next generation that we start immediately to do our best to get there. It is a test for humanity and of our humility. We are bound together, as we must be to save our beautiful planet. We need each other in complex ways we are only just beginning to understand.