coFirst Unitarian Universalist Society of Albany, New York

"The Evolution of Community"

Rev. Samuel A. Trumbore February 7, 2021

Reading

From: *This View of Life: Completing the Darwinian Revolution* by David Sloan Wilson

Consider an experiment that was performed on chickens by William Muir and his colleagues at Purdue University's Department of Animal Sciences in the 1990s. Their goal was to increase the egg-laying productivity of **hens**. Chickens evolved to live in flocks, but in the modern poultry industry, they are often housed in cages with five to nine hens per cage, so the study was focused on maximizing production ***in this*** environment. The design was simple: they monitored how many eggs each hen laid, the most productive hens from each cage were used to breed the next generation, and so on for a number of generations. If the trait of egg productivity is heritable, then this method should substantially increase egg productivity over a number of generations…

But that's ***not*** what happened. Instead, the subsequent generations laid fewer eggs and became more aggressive toward each other. [This image] shows one of the cages after the experiment had been in progress for five generations. The cage originally housed nine hens, but six were murdered and the survivors had plucked each other's feathers…The most productive hens in each cage achieved their productivity by bullying the other hens. Bullying behavior is heritable in chickens, so selecting the biggest bullies led to a strain of hyper-aggressive hens within five generations. The energy expended and stress induced by their constant attacks on each other caused all of them to lay fewer eggs…

In an experiment that was performed in parallel with the first, egg productivity was monitored at the level of whole cages. Instead of breeding the most productive hens within each cage, all of the hens from the most productive cages were selected to breed the next generation. [Here are the hens] from this experiment after five generations. All nine chickens are alive and fully feathered, and their egg productivity increased 160% during the course of the experiment.

These two experiments provide beautiful examples of within-group and between-group selection as envisioned by Darwin. The first one highlights the advantage that selfish traits have over cooperative traits within single groups. The chickens in the first image , tormenting and killing each other for their own gain, exhibit traits we would certainly call evil. The second experiment highlights the need for selection at the level of groups to evolve the traits that enable everyone within the group to thrive. The chickens in the second image, living amicably with each other, exhibit behaviors we would certainly call good…The number of eggs laid by an individual chicken is not an individual trait so much as it is a social trait, because it depends on how members of the group behave toward each other.

Spoken Meditation

adapted words of Peter Morales

> Please consider this morning that deep spirituality can feel like connection – connection to yourself, to others around you, to the earth and to all of creation. Connection to yourself can feel like deep peace, awareness, calm, authenticity. Connection to others can feel like compassion, community, acceptance, and enduring love.

This sense of spirituality is not an idea; it is an *experience*.

In this experience of connection, dividing lines disappear. Inner conflict gives way to integrity. The line that separates your individuality from others, fades; you become one. You find connections with your deepest self in solitary practice and reflection. You find connection with others in community and in worship.

This kind of connection with creation, with the earth and the cosmos, can be difficult. Artificial, controlled environments separate us. We live separated from the natural world, the world from which we emerged and that sustains our lives.

Just for this moment, may we let go of striving to control our world and allow ourselves to become one with it. Just for this moment, may we find ourselves in losing ourselves and really connect.

When that happens, may it change everything.

Sermon

Poor Darwin has been ***so misunderstood*** when it comes to social evolution. You've probably heard "survival of the fittest" applied to individuals within a social setting. This is an inappropriate application of Darwin's ideas; ideas that have justified eugenics, colonialism, and predatory capitalism. Especially here in America, it has ***permitted*** a narcissistic leader to claim power and harm the social fabric of our nation. Put too many narcissists together and you get the first chicken experimental result. The dead chickens are usually the altruistic ones. There are no winners. Only losers in the evolutionary process of group selection.

Humans are not rugged at all. We have no fur to keep us warm. Our muscles are weak for our size compared with other predators. Our digestive systems are adapted for cooked, ground and chopped food. We're easily poisoned by plant toxins. We need ***a lot*** of technology, such as knives, spears, grinding tools, cooking utensils, clothing, and shelter just to survive. Childbirth is extremely dangerous for women. Babies need a great deal of care for a long time before they can fend for themselves.

The ***only*** way we've been able to survive, as a species, is because we've lived in groups. Rather than the slow process of genetic adaption, those groups have developed culture. Culture has more quickly adapted them to their environment. Without culture, the Inuit in Canada would perish very quickly. In the frozen north, there is little fuel for fires to keep them warm and little to eat in the winter. Hunting and preparing food requires a great deal of skill. Nabbing a seal as it comes up to a hole in the ice to breath is no easy trick. And you'd need to know not to eat toxic polar bear liver – if you can kill one. I know I'm not going one-on-one with a polar bear!

The English expedition of 1845 led by Sir John Franklin got caught in the ice looking for the northwest passage. They had to abandon ship when their supplies ran out and camp on King William Island in 1848. Eventually everyone died because they didn't know how to survive in such a harsh climate. Fifteen years before the Franklin expedition, the *Victory*, had to be abandoned with a

crew of twenty-two. They lived for three years on the same island before being rescued. They survived by befriending the local Inuit who cared for them and taught them how to thrive as they did. Only two men were lost.

Darwin recognized that within a group, individuals might compete with each other for mates, resources and group leadership. The survival of the group, ***however***, was determined by how the group worked together. The group's fitness depended on the individuals in the group putting the wellbeing of the group above their own. If they did that, the committed group could survive much better than a group of individuals only concerned about themselves. Darwin claimed, this was the reason for the evolution of altruism which creates strong group cohesion. Altruism helped these cohesive groups survive much better than groups dominated by selfish individuals. And since human beings are so dependent on groups for their individual survival, altruistic genes got selected over selfish genes.

What is critical to understand here is evolution has demonstrated, so far, that altruistic groups survive better than individualist groups. This should be obvious just looking around us at sports teams, successful corporations, nations, religious groups, cooperatives, etc. What makes our congregation thrive is what we give to each other not what we take. In fact, giving is a virtuous circle where you get back more than you give in satisfaction, meaning and fulfillment.

Evolution doesn't have a plan or design for all this. Evolution didn't even have human beings as a goal. We are the result of what has worked in the past as well as what problems or mis-adaptations haven't been bad enough to be eliminated and got propagated forward. Evolution never stops, it keeps going at a faster and faster pace enabled by all our social technology. The big question evolutionary scientists ask is if there are patterns of what works that we can discern in the evolutionary process. If so, we can ***use our minds*** to help us ***choose*** adaptations that evolution favors and help humanity thrive rather than self-destruct.

A great way to do this is to consider a difficult social problem, look at how some groups have successfully solved that problem and see if there are any principles that can be derived for general use. One such problem is the problem of the commons. Garrett Hardin published an article posing the problem in the journal Science in 1968.

> Hardin asked the reader to imagine a village with a common pasture that was available for all of the villagers to graze their cows. The pasture can support only so many cows, but each villager has an incentive to add more of his cows to the herd, resulting in the tragedy of an overgrazed pasture. Hardin's example became a parable for the problem of managing common-pool resources of all sorts, such as pastures, forests, fisheries, irrigation systems, groundwater, the atmosphere. (Wilson)

In capitalistic economics that prize self-interest to deal with this kind of problem, the typical economist's suggested solution usually comes in two flavors. One is to privatize the land and divide it up among all stakeholders. The other is to impose top-down regulations. That might work for a pasture, but not so well for a fishery, ground water, or the atmosphere as we seek to deal with greenhouse gases.

Dr. Elinor Ostrom, a political scientist, was very interested in this problem. She decided to survey the world to find places where this resource sharing problem had been solved by the villagers themselves. Sure enough, she found examples of Turkish fishers and Maine lobster gangs who had done just that. These were egalitarian approaches created by the fishers and gangs with general agreement to the principles. Ostrom's great contribution was to deduce eight core design principles that made the difference between success and failure. For this work she was awarded the Nobel Prize in Economics in 2009.

Curious about those principles? Here they are:

1. Strong group identity and understanding of purpose that recognized boundaries, rights and obligations of being a group member.

2. Proportional equivalence between benefits and costs. Those who put in extra work, get the rewards, assuming everyone does their fair share. Fairness is paramount.

3. Fair and inclusive decision making. Everyone takes part in decision-making striving for consensus, if possible, to establish agreed-upon behaviors and goals.

4. Monitoring agreed-upon behaviors. Everyone must be willing to be monitored and held accountable for lapses and transgressions.

5. Graduated sanctions. Holding people accountable begins soft and gradually becomes harder. Most just need a gentle nudge or reminder. The threat of harsher punishment needs to back that up.

6. Fast and fair conflict resolution. Inside the group resolution is far better than appeal to outside authority.

7. Local Autonomy – The group needs to be able to create its own social organization and make its own decisions as outlined in 1-6.

8. Polycentric Governance – relationships between subgroups need to follow the same rules and procedures of the larger groups. The institutions, in which the group is embedded, also need to honor those rules and procedures. (Wilson - paraphrased)

While these core design principles were developed for sharing a common resource, they are just as applicable to schools, neighborhoods, churches, volunteer organizations, businesses, nonprofits, and even government agencies. These are principles for how ***any group*** can effectively work together.

Any group ***needs*** strong identity and sense of purpose. The individuals in a group want to feel it is worth their effort, energy and investment. Who doesn't want decision making to be fair for us and to be part of deciding what effects us, making sure we aren't harmed by the group. ***Then***, it gets harder, with monitoring and sanctions … but this is how trust and commitment are built and maintained. Fast and fair conflict resolution makes sense for how most of us want to be treated in a group. And finally, a big yes for local autonomy and polycentric governance.

What David Sloan Wilson recognized in these eight core design principles was an alignment with what evolution demands for successful multilevel selection. The principles support and enforce altruistic or prosocial behavior that makes groups much more likely to survive and thrive. The principles ***make it difficult*** for an individual group member to benefit ***at the expense*** of the group. Ostrom had tapped what Wilson calls, "the evolutionary dynamics of cooperation in all species and our own history as a highly cooperative species."

I find this all very exciting as healthy, satisfying and productive group life is what I ***constantly*** think about. I realize it's hard to hold these eight core design principles in your head and reflect on them right now. What is exciting to contemplate is that ***there are*** eight of them ***at all***. It is exciting to know that groups can begin to use these principles and expect positive results. That expectation is based in principles that have sound theory and real world experience to back them up. This is like a physicist having a formula to calculate lift. Then she uses it to design a plane and it flies. I am talking about having a solid foundation for designing and modifying group structures that are highly likely to be successful.

I bring all of this to you today partly because Darwin's birthday is next week. More importantly, I bring this to you today because it is extremely relevant to the project of building something that we are calling "beloved community" the theme for this month. If you haven't read my Windows article for this month, there is some background info on the beloved community idea.

Beloved Community has deep origins in Jesus' proclamation of the realm of God that he established on earth with his ministry, tragically cut short by Roman terrorism. His followers attempted to realize it in early Christian communities and failed. Every couple of hundred years or so some community decides to go back to those early ideas of the realm of God and recreate them. We still have those experiments today with Christian communities like the Mennonites and Amish. Dr. Martin Luther King, Jr. is the latest to adapt Jesus' vision into a universalized vision for all people. Unitarian Universalists have gravitated to it as language for unifying our vision of the kind of world we seek to create here on earth too.

This service is the beginning of our exploration of Beloved Community as Unitarian Universalists are currently working with it. I hope I've stimulated your interest in how evolution is relevant to successful groups and how these eight core design principles grounded in evolutionary theory might help us better image how to realize the kind of community we dream is possible for us and for all people.

Stay tuned! I will be returning to this theme in two weeks to take some of these ideas I've talked about today, compare them to Dr. King's thinking and look at how Unitarian Universalists are beginning to put them into practice. Perhaps we'll find some inspiration for our congregation's new governance model and policy book!

Prayer of Affirmation

adapted from the words of UUA President Susan Frederick Gray

Has there ever been a time when you wanted to give up?
Have you ever wanted to give up in activism or in ministry?
Yes, there have been times when my heart
has been so broken by disappointment.
Yes, there have been times when the work
of building beloved community has felt insurmountable.
Yes, there have been times when I cannot deny
wanting to throw in the towel.

And then … I reached out to a colleague, a friend,
someone as passionate for justice as I am.
She offered me witness.
She listened to my grief, my anger, my fear.
And she prayed with me, and for me.
Not a prayer for answers,
A prayer for compassion and healing
for my own heart and spirit.

The next day I got up and went back to work.

It was a lesson I learn again and again.
We don't create any real positive impact alone.
Community gives us strength.
Love gives us courage.
Remembering we are not alone—
remembering the people, the family, the community,
the ancestors we belong to—
gives us resiliency and power to
keep on loving, keep on acting, keep on working,
For the values and commitments we hold dear.

Be held by, and renewed, by the power of we.

So be it.

References:

This View of Life: Completing the Darwinian Revolution by David Sloan Wilson

The Secret of Our Success: How Culture is Driving Human Evolution, Domesticating Our Species and Making Us Smarter by Joseph Hienrich