

Evolution 2.0 Newsletter

September 2020

Viruses, Racism & Evolution

Unless you've been a hostage in a fallout shelter for the last few months, you know racism in America is a roiling cauldron of emotions.

A few weeks ago some of my kids asked me, "Dad, you have a big platform. Why don't you use it to address racism and inequality?" My response: "If you think I can materially affect an issue like racism in America, you greatly overestimate the degree of my influence."

But there's another reason I'm hesitant to apply my "platform" to this issue. My contention has always been that if you cannot solve a problem... don't try to solve it. And... if there's a problem you CAN solve, go all the way to the *bottom of the swamp* and don't stop until you have the head of Grendel's mother in a steel bucket.

Example in my own life: I've had an African American foster kid and Godchildren from the inner city. I have adopted kids who are from another race. This does not solve the problem of racism. It doesn't get to the bottom of the swamp. But it certainly does help one person at a time.

Evolution 2.0 on the other hand is bottom-of-swamp work. One can easily make a case that 10% of systemic racism is rooted in a diabolical scientific narrative that is greatly misleading. The full title of Darwin's original book, after all, was *On the Origin of Species by Means of Natural Selection, or the Preservation of Favoured Races in the Struggle for Life*. By any modern standard it was an explicitly racist book. And make no mistake, the materialistic narrative was harnessed full force by the Lenin, Stalin, Mao, Hitler and the eugenics people.

If you remove the transcendent elements, all science leaves you with is the brutality of nature, "red in tooth and claw." Most people lose; a few win. And that's just the way the world works. No absolute space for mercy or love or compassion. No iron-clad case for racial equality.

I can already hear the objections: *No Perry, you don't understand. The evolutionary theorists have a fully developed theory of cooperation and kin selection, and everyone knows modern notions of human rights can be derived from computer models of genetic altruism.*

I imagine these models of "altruism" are why Richard Dawkins, author of the world's best-selling evolution books, told a woman that if she finds herself pregnant with a child with Down's Syndrome: "Abort it and try again. It would be immoral to bring it into the world if you have the choice."

In the Darwinian narrative, there's always an "in group" and an "out group." But consider the Declaration of Independence:

"We hold these truths to be self-evident, that all men are created equal; that they are endowed by their Creator with certain unalienable rights; that among these are life, liberty and the pursuit of happiness."



If you examine the logic of this statement, it hinges on the phrase *endowed by their creator*. And whether you're an old-fashioned creationist or if you're hip to the latest symbiosis experiments, we are all faced with a question:

What argument exists for saying that *evolution* has endowed anyone with such rights?

In all my travels I have never found one.

When someone says that “SARS-COV-2 is a highly *evolved* virus” or “Chimpanzees far more *evolved* than chipmunks”...

The meaning of the word “evolved” is *entirely different* than when we say:

“A truly evolved society should care for its poorest citizens, find a way to have affordable health care for everyone, build wheelchair ramps and ensure that blind and deaf people have jobs.”

Evolved biology and technology based on competence is the Darwinian competition we're all familiar with. Evolution is 80/20. Evolution is based on *extreme inequality*. Evolution **requires** competence. It is competition from start to finish. This is what we mean when we say, “dogs evolved a tremendous capacity to smell.”

Defining “evolved society” according to equality and human rights is a spiritual value that *cannot* be derived from the Darwinian definition. They exist on entirely different planes.

If you think about it, our evolved society with equality and human rights is a *defense against* Darwinian tyranny. In many respects, civilization exists to *mitigate* evolution!

The Darwinian story (any version, old-school or new) is what I call **Evolution Alpha**.

The equality and human rights version is what I call **Evolution Omega**. I explore this in depth in this discussion: <https://evo2.org/why-christians-have-failed-to-reckon-with-good-and-evil/>

Darwinian theory tells you that the most competent male is he who copulates with the most females. But civilization has produced things like #MeToo movements that are most emphatically against that. Not to mention centuries of sacred traditions around marriage, chastity, decency and divorce laws. I dare you to name a society that does not place heavy strictures on sexual activity.

But the attempt to transform the theory of evolution into a bully pulpit for atheism removed our ability to argue against racism. Science became an argument *for* racism. I am working to remedy that at the very roots of science itself, to change the narrative. How can that be accomplished?

I don't think there is anything more self-evident than the proposition that the world is divinely ordered. From the fine-tuning of the universe, to the origin of life, to evolution itself (the most spectacular engineering anyone has ever seen), the notion that our cosmos is random or accidental is absurd in the extreme. Not only that, the more details that can be accounted for by *natural* explanations, the more impressive it all is.



Nonetheless, the notion of the divinely ordered universe has been jettisoned from science. *Despite* the fact that people like Isaac Newton and Albert Einstein passionately insisted it's true. This in turn has excised divine order from the public square.

The notion of equality that the *Declaration* refers to originates from St. Paul who said, "In Christ there is neither Jew nor Greek, male nor female, slave nor free; all are equal." This was the first unequivocal statement of human equality in the history of literature. Before that, *nobody* believed "all men are created equal."

The divinely ordered universe and the divinely dignified human being are twin triumphs of western Civilization. The former gave birth to science. The latter gave birth to equality.

No God = Random purposeless universe. Leads to junk science.

No God = No Equality. Leads to human rights abuses.

When you subtract the divine from the picture, you get:

"We hold these truths to be self-evident, that all men are ~~created~~ SOMEWHAT equal; that they are endowed by ~~their Creator~~ US with certain ~~unalienable~~ NEGOTIABLE rights; that among these are life, liberty and the pursuit of happiness."

Without the insistence that everyone has a divine spark, that all will someday stand before a divine judge... that "the first shall be last and the last shall be first"... *everything* is negotiable. Anyone who's paid attention to American politics in recent times has watched a whole bunch of our rights get negotiated away. The politicians are stealing everything that isn't nailed down.

That's why Evolution 2.0 is my bottom of the swamp project. I am going to stay in my lane because I am making progress. The strides this project has made in the last 18 months is astounding. *I'm getting somewhere with this.*

I am absolutely against racism. I am surrounded by people of all colors. Many of you know my "black sister from the west side of Chicago" Vivian Hearn. A photo of my staff looks like the United Colors of Benetton. But... if I stop to wave placards and stage protests, it's like jumping over \$100 bills to chase pennies. A lot of other folks are just re-arranging the deck chairs on the Titanic. But you and I are solving racism *at the bottom of the swamp.*

Viruses & Evolution

It's not been easy getting publicity for Evolution 2.0 since COVID hit. The world has been preoccupied with, shall we say, more urgent concerns. So in March I was having a conversation with my publicist Kelly Sullivan. She said, "Perry, surely you have an angle on COVID-19. The media doesn't want to hear about *anything* except Coronavirus right now. Any thoughts?"

I thought, "Well, no, I haven't yet. But let me do some digging and see what I can come up with."



I started digging, asking scientists, sending out feelers, emails. One scientist sent me a paper demonstrating that Coronavirus has lab-engineered insertions of HIV.

This seized my attention. So I dug deeper. I started talking to other scientists I know. One or two were quite concerned. But nobody else seemed particularly interested in looking at the data.

I decided it was time to spin up a genetics virus research company to take a closer look. I allocated some of our Evolution 2.0 funds, got on Upwork and hired three geneticists and a biologist. I asked them to look at the data in the paper and try to make sense of it.

Within weeks I started getting definitive answers. Our data showed that these sequences of HIV and SIV were there, but very short. They were only 20 to 30 letters long. That's quite small. They were also “noisy.” In other words, they matched 80%, but quite a few of the letters were wrong. Not an exact match.

What we deduced, after painstakingly comparing the new coronavirus to hundreds of genome sequences, was that you find the same HIV- and SIV-like patterns in fish or humans or bacteria. You can find them anywhere.

Analogy: You and a friend both turn in an essay. The professor accuses the two of you of cheating because each of you used the words “strictly,” “timbre” and “sawtooth.” Sure, it is kind of odd that the two of you would include all three of those words in the same class assignment, but you didn’t use them in the same place or in the same way. Plus there are also 143,000 pages on Google that have all three of those words.

Based the above, it would not be reasonable to conclude that the two of you were cheating.

Segments of viruses are a lot like that. By identical logic, the “made by humans in a lab” hypothesis did not hold up. Almost-matching sequences of 20-30 letters are scattered all over the genomes everywhere. So we couldn’t definitively *disprove* that the COVID-19 had HIV insertions artificially engineered by humans. It’s just that the hypothesis in this particular paper was not supported by our findings.

Still, after exploring this for several weeks, another thing did become blazingly obvious to me. Something started to seem very familiar. *I’ve seen this movie before.*

I noticed that when you compare different strains of viruses – for example if you compare the original SARS virus from 2003 to COVID-19, they have LEGO-like differences that are very distinct. Other parts are identical. The two are not different purely because of a bunch of random copying errors or gradual accumulations of small changes. The differences are *modular*.

Yet the virus literature I was reading never could explain this in a way that made sense to an engineer.

This was precisely how I had been feeling about “standard” evolution 15 years ago – which eventually led to the book *Evolution 2.0*. Present explanations of virus evolution are as primitive as the “standard evolution” explanations we were reading in textbooks 15 years ago. Today we know those were woefully inadequate, more wrong than right. Virus evolution is 15 years behind regular evolution... which is about 30 years behind where it should be!

So virus evolution needs a 45-year update.



In the previous issue of this newsletter, I explained that Stage 3 or 4 cancer patients are no better today than in 1930. This is because *cancer is cells evolving out of control*. Since we don't understand evolution, we don't understand cancer either. And guess what:

We don't understand virus evolution any better than we understand cancer evolution.

The explanations you read in most textbooks about cancer are wrong. Their explanations about how viruses evolve are wrong too, for the same reasons!

The bottom line is that *nobody actually understands how viruses evolve*. We know very little about virus origins and their evolutionary pathways. What is clear is they don't evolve some haphazard way, as most people in the medical community insist.

The reason we are in the middle of a ten trillion dollar pandemic is, we're still ignorant about evolution.

Almost every genome you can imagine is available on the internet, uploaded to some database somewhere. You can subscribe to genetic analysis programs, compare and analyze to your heart's content. Yet most cancer research focuses on analyzing *one gene or one protein*. It's very granular, like staring down a single blade of grass in your back yard.

But Henry Heng, one of the scientists presenting at the Cancer & Evolution Symposium, is looking at cancer from more of a 1000-foot view, or even a 10,000-foot view: *the chromosome level*. A chromosome is a giant assemblage of genes; humans have 46 chromosomes. What Henry sees is entire chromosomes making massive meta-level architectural rearrangements in cancer. The cancer cells are not just pushing a couple of buttons to evolve. They are doing major rearchitecting.

We were studying SARS, COVID and MERS, all in the same family. I began seeing something analogous with coronaviruses. We began looking at the differences and started thinking, "They're trying to stretch an old school evolutionary explanation onto viruses, and it's not working. Like cancer cells, viruses are not just punching a few buttons when they evolve. Serious high-level rearchitecting is happening somewhere – and we don't know where."

If you're interested in reading further, check out pages 144-147 in my book *Evolution 2.0*, where I discuss "The Five Blades of the Evolution 2.0 Swiss Army Knife." Through analysis of these five blades we know evolution is fast, not slow. It's organized, not accidental. It's adaptive, not purposeless. And it happens through Natural Genetic Engineering, not Natural Selection.

But mainstream scientists are still approaching virus evolution like it's slow, accidental, and purposeless.

We need to find out how it does work, because COVID-19 will not be our last rodeo to deadly pathogens. We are trying to understand the mechanics of virus evolution, and we're using COVID-19 as our primary reference point. I believe this will produce significant scientific papers and could even open up a whole new genre of evolutionary research.

I had a Zoom call with one of my wonderful researchers, Bill Miller. (I interviewed Bill on the Evolution 2.0 podcast a few months ago.) I said, "I can't find anybody who's asking these questions." And he said, "I think that's because nobody is. Let me go looking around and find out."



He came back a few days later and said, “Well, there’s one needle in the haystack over here... and there’s another over there. There are a handful of researchers asking *some* of these questions, but nobody has pulled all this together. We definitely need a unifying framework.”

What kind of questions are we asking? I'll give you an analogy, but first let me explain the conventional thinking around viruses.

Viruses are considered parasites. Dangerous. Things to be avoided. They're also considered non-living. After all, they're just strands of DNA and RNA covered by a protein. It's believed that they float around until they encounter a cell, then they trick the cell into doing all the work. It is also believed that they mostly evolve through random copying errors and something called “genetic recombination.” Well that’s probably half true.

But imagine you’re sitting around the campfire with your friends. One of them pulls out a guitar and starts strumming the Beatles’ song “Hey Jude.” After a verse, your friend starts messing around with the song. He starts changing some words. Maybe he does a “mash up” with another song like “You Can’t Always Get What You Want” by the Stones. Everyone laughs about Jude not always getting what he wants.

The next day you’re all driving in the car and someone starts singing the mashup. Now they’re adding harmonies and singing in a faster tempo. Then your friend grabs the fast-tempo mashup, records it and uploads it to YouTube. A bunch of people listen to it. They “like” it and it gets a bunch of views.

Question: Is “Hey Jude” *alive or dead*?

What is a song, anyway? Is it a piece of sheet music with notes? Is it ones and zeros on a compact disc? Is it vibrations coming out of your speakers?

In all of those forms, it’s lifeless. But as soon as a song gets inside somebody's head, it's a living organism. I believe it was Carl Jung who said “People don't possess ideas, ideas possess people.” Same with songs.

To complete the analogy, I believe viruses are just like songs. Dead when they’re lying on your kitchen table. Alive once they merge with a host.

Consider the English language. It’s not technically a “living thing”... yet in a particular way, it definitely IS a living thing. It's changing constantly. It affects and infects other languages. People in many countries are “forced” to learn English so they can function in the world.

Language is a network effect phenomenon. The more people who learn English, the more other people have to learn English. There have been anti-English crusades in places like France and Germany and Quebec where they’ve attempted to stop the viral spread of English into their “host” language.

Back to the mix up of “Hey Jude.” Who did the mutating? The “virus” or the “host”?

Well it wasn’t the song itself. The *host* did it. But the host couldn’t do it without a song. Symbiosis.

The same with biology. The hosts are doing most of the heavy lifting when it comes to virus mutation.



Picture the coronavirus. All of us have seen the image. Now imagine it comes floating in and hits the right part of a lung cell and latches on. All of a sudden, an extremely complex process kicks off.

There are many places in nature where viruses have become an absolutely essential part of the organism. There are bacteria that can't resist other viruses unless they have this one *other* virus. There are mice that can't resist that bacteria unless they have yet another virus in them. As far as we can tell, the placenta of mammals was built from code stolen from viruses! About 8% of the human genome consists of viruses that have been co-opted for new purposes.

You may know that in the software world, there are open source sites like SourceForge where you can get software routines and free Linux programs. Viruses are the world's open source repository of genetic code.

There are at least ten and possibly 100 viruses for every cell or bacterium on earth. And there are one million bacteria in a cubic centimeter of water! Most of the time viruses are innocuous. But sometimes they hijack cells and start proliferating, churning out other viruses that infect other cells. Other viruses inject themselves into cells and then they ride along as parts of the DNA.

Just like the "Hey Jude" mix up, nothing is ultimately "random" about this process. Your friend who was arranging "Hey Jude" was following rules. Rules of tempo, harmony, chords, melody, verse, bridge. And the words in the song had to follow the rules of language, like grammar. They may not be rigid rules. But they are structures, patterns and principles.

Nature follows similar structures and patterns in viruses, organisms and genomes. What our ragtag team is looking for, in a manner of speaking, is evidence that viruses are engineered much like music is arranged. Not just through genetic recombination and copying errors. We seek to understand the real rules of virus improvisation.

When I began prying the lid open on virus evolution, I quickly concluded that models of virus evolution are 10 to 30 years behind the theories of cellular evolution. *Déjà vu* all over again. The world is starting to catch on that regular old evolutionary theory has completely changed. The edifice is crumbling.

Yet the narrative for *virus evolution* is pretty much the same old evolution narrative. That fortress has yet to be assailed. How does organism evolution translate into the virus world?

We are examining elements of viruses that, so far as we can tell, hardly anybody else is looking at. We're asking, "Why does COVID-19 have these particular differences compared to SARS or MERS?" I don't believe you can really even comment on the question of whether a virus was engineered or just occurred naturally *until you actually have an accurate understanding of how they do evolve naturally*. We're not there yet. It could be that if we fully understood virus evolution, developing a vaccine might be incredibly easy. We just don't know enough to know.

So everybody's terrified of viruses with good reason. But that's not the full story. I believe COVID-19 will become a widespread nuisance instead of an occasional lethal thing. It'll probably just mutate into a serious flu. Why? Because killing your host isn't a good long-term strategy for a virus.

We need to be asking questions like, "Why does a host *want* to help the virus evolve?"



That's a crucial question. And in order to solve genetics problems and virus problems and cancer problems, we must ask “silly” questions like this. Who knows... maybe we'll hold a Virus Evolution Symposium in 2022.

Solve racism? Cancer? Viruses? I know these sound like outlandish goals. But our understanding of evolution really is one of the great blades that will slice through the Gordian Knots of our time. Our researchers, geneticists, biologists and symposia cost money. Send what you can to help. Every donation gets matched 100%. Speaking of help...

What Can You Do Be a Part of Evolution 2.0?

Evolution 2.0 is me, my personal assistant Lorena Ybarra and volunteer Sam Bart. Plus a few other precious volunteers to contribute hours here and there. **We can really use your hands-on assistance.**

Another thing you can do to help is fund our virus research. It's 501c3 not for profit, so you can go to evo2.org and make a tax-deductible donation.

We could also use some volunteers.

We need people who are skilled in...

- **Administration and project management**
- Finances
- Scientific papers, research, and projects
- Film (documentary screenwriters, editors)
- **All** forms of marketing: ad copywriting, buying Google, YouTube and Facebook traffic, writing blog posts, shooting videos, podcasts, publicity angles, news media
- Project management

If any of the above piques your interest, please reach out and let us know. Email evolution@evo2.org and let us know what your skills are and how you might like to help.

This is world-changing work. I believe that in 100 years everybody is going to acknowledge how important this is. I believe that down to my toes.

But it's not easy to get people to see how far-reaching this is. Most people can't see past their next Facebook post. But we are shifting the foundations of civilization. We are moving the foundations of science. We're shifting the foundations of medicine.

And we could potentially save millions of lives. Maybe the life of someone you love. Maybe *yours*.

Carpe diem - Seize the day.

Perry Marshall

