Evolution 2.0 Prize

Breaking the Deadlock Between Darwin and Design: Confidential Newsletter & Investor Update January 2017

In Search of the True Renaissance Men and Women

"I do not know what I may appear to the world, but to myself I seem to have been only like a boy playing on the seashore, and diverting myself in now and then finding a smoother pebble or a prettier shell than ordinary, whilst the great ocean of truth lay all undiscovered before me."

-ISAAC NEWTON

When I was ten years old, I wanted to be Thomas Edison. But from 20 on I wanted to be Isaac Newton.

Edison invented incredibly cool *technologies*. When I was nine, I discovered how electricity worked. How you hook a battery to a light bulb, how current travels. I devoured the encyclopedia entry about Thomas Edison. I wanted to be the Wizard of Menlo Park. I obsessed about electricity with my batteries and wires and lightbulbs and flashlights.

In this picture, you see me at Menlo Park in Edison's lab. My dear friends Susan and Brian got me in during the off hours, where we had a chance to see Edison's actual lab equipment and supplies.

Longtime friend Susan Kruger secured a private, off-hours tour for me of Thomas Edison's lab in Menlo Park near Detroit. She snapped a picture of me next to her dad rummaging through Edison's drawers.

And yes, even rummage through Edison's drawers.



But Isaac Newton unearthed the *foundations* of reality that made Edison's inventions possible in the first place.

By the time I was 20, I realized Newton united the micro with the macro. He determined that the forces which explain how apples fall out of trees are the exact same as the forces that cause planets to orbit stars! Oh yeah, and he discovered calculus (which, contrary to what most people suppose, is an *immensely* practical tool for all kinds of things).

By the time I was in college, I understood that in the Totem Pole of Great Human Beings, Newton's flag flies higher than Edison's.

Question: Why was Newton able to spend his days rolling balls down inclined planes? Sitting under trees contemplating falling apples? Why did he have time to ask himself such "silly" questions?

Answer: Because he hailed from a wealthy family and didn't have to spend his days staring at the ass-end of a donkey in a field somewhere, tilling soil every spring and selling bushels of oats in the farmer's market at commodity prices.

Most young men would squander such leisure on street-legal stagecoaches, women, and honey mead. But Newton aspired to uncover the secrets of God's universe, to probe the depths of reality, to work out the most intractable problems of his time... and above all, *to make the complicated simple*.

Few appreciate what a magnificent simplification it was to reduce the mysteries of planets and apples to "F=MA" and F=g M_1M_2/r^2 . This caliber of simplification is the mark of **extreme genius**. Suddenly even high school students could figure out the force exerted on the earth by the moon.

When I was 21 and trying to decide whether or not to become an Amway distributor, I realized a couple of things (assisted by the nudgings of my wife):

1) If I developed an independent source of income, I could become a serial entrepreneur. At the time, I wanted to start a speaker company. Those ambitions would later change, but the point was: If your bills are paid and you have, say, 20-30 hours of uncommitted time, you can start new companies and cover your bills and not force your family to shoulder every risk your business incurs.



This was supremely attractive, because I realized that most people are locked inside of prisons made of mortgages, college loans and health insurance. To the ordinary person, those prisons are every bit as inescapable as Alcatraz or San Quentin or Joliet. Projecting a few years, I could easily foresee being 30 or 35 years old, working at some engineering firm, already trapped for the rest of my life by the regular obligations of a working man. Thus I resolved to solve this with entrepreneurship. As my business friends know, Amway turned out to be a long miserable detour. A real solution would have to be far more clever than that. Nonetheless, the basic idea was still right: *Free yourself as soon as humanly possible*.

2) If I possessed an independent stream of income, I could do what Isaac Newton did. I didn't know *what* I needed to discover; I just knew I needed to open the time and space to discover it.

All during my 20s, I was obsessed with the looming threat of becoming trapped by The System. I feared selling my dreams for small desires. I remember my mom getting in an argument with an associate pastor of her former church about something – some skirmish, I don't recall what – but he was following orders and towing some party line. Trying to get her to conform.

Everyone knew those who disagreed with *his* boss, the big cheese, soon lost their jobs. I thought to myself, "He's only taking that position because he fears losing his health insurance." Losing your health insurance at age 53 can be disastrous indeed. He didn't want to lose his.

I didn't want that to happen to me. Not at age 50 or 40. Or even 30 if I could help it.

That's why I was racing against the clock. Trying to get myself financially unencumbered before we even had kids. Laura and I were married seven years before kid #1 came along. Laura's yearning for kids started by year three, so we had fights about that. I kept putting it off because getting trapped by diapers and formula scared me. Didn't want to get caught forever in the rat race.

As you know I have so far achieved a happy medium: not financially independent per se, but certainly enjoying the freedoms that an entrepreneurial life affords. *Not* trapped by a 9-5 j-o-b.

Laura and I chose early on to tackle the **hard** problems. In the 1990s, the hardest problems I could find were sales and marketing problems. If somebody would pay you \$10,000 to solve their engineering problem, they might pay you \$50,000 to solve their marketing problem.

Why?



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Because nobody else knew how. And it *had* to be solved, or none of the engineers got to eat.

Fresh out of college, it took me about three weeks working as an engineer to realize the biggest problems faced by my new employer were not product design problems, they were people communication problems.

Once I asked a recruiter if there was a hybrid between a marketer and an engineer, someone who does both. He said, "Absolutely not. However, there are former engineers who are now product marketing managers, and the engineering department develops products to *their* specs."

Anyway, the point was: To make huge discoveries in the world, you have to secure a measure of freedom. Now this is very important because as I've looked around at *all* the various camps in the "creation evolution" debate, **every single position is shackled to a money supply that has more inertia than the science itself.**

Ken Ham and the Young Earth Creationists – and all his kin – are chained to conservative supplies of money who give their money *for the purpose of combating evolution and "millions of years."*

Richard Dawkins and Bill Nye and the atheists – and all their kin – are chained to a book / conference / video / seminar circuit ecosystem which relies on the merchandising of Fundamentalist Atheism in order to perpetuate its peculiar version of science. A version which is two-thirds wrong and 70 years out of date.

It appeases the media's appetite for simple explanations, but is actually a non-explanation of anything. Bill Nye isn't a science guy. He's a fundamentalist atheist evangelist who's teaching lame science to achieve his mission.

The Discovery Institute – A.K.A. the Intelligent Design think tank in the United States – are the folks behind the famous Dover Trial in 2005. The Discovery Institute is fueled by a variety of money sources, primarily evangelical Christians who are skeptical of an evolutionary narrative and averse to material explanations.

The mainstream science establishment in the United States is chained to the National Science Foundation, NASA and the Department of Energy. Research in the U.K. is similar. Science in the US is beholden to the peculiar views of the funding chiefs. Science maverick Lynn Margulis called academic fundraising "advanced begging."



Numerous smaller groups are likewise tied to specific funding sources all of which are more resistant to change than the organizations themselves.

No one working in these fields can alter their position without financially slitting their own throat.

If Ken Ham wakes up tomorrow and decides the universe really is 13 billion years old, he's liable to get ejected by his board of directors, discarded and labeled a heretic.

If Richard Dawkins decides to usher himself into the 21st century and embrace the last 50 years of molecular biology, his "Selfish Gene" story, and the atheistic narcissism that hitches a ride with it, goes out the window. His firebrand atheism suffers a huge setback.

Truth be told, recent discoveries in science re-ignite problems that most people assume Darwin solved in 1859. Turns out we haven't even begun to solve them.

Will the money that pays off Dawkins' NetJets card jet follow him if he changes course?

Not on your life.

What if the Discovery Institute embraces full-tilt macro-evolution? They'll lose half their donors. And be forced to lay off half their staff. (Even if they retain their belief in a wider, more general design principle, which I personally agree with.)

And before London 7-9 November 2016, nobody dared stand up at a mainstream scientific meeting and announce that the current evolution model must be radically revised if not trashed entirely. But that's exactly what happened. A historic event. The driver of that conference was Dr. Denis Noble, Emeritus professor of Physiology at Oxford University. He organized the three-day meeting.

Same guy who figured out the cardiac rhythm. His research made pacemakers and heart medications possible.

Noble is not funded by evolution research. He's funded by heart research. The folks who make pacemakers and heart medications care not one whit what Noble's views about Darwin are. They only care that the pacemakers and medicines work.



Oxford Professor Denis Noble, pioneer in Systems Biology, leading the crusade to bring old-school Darwinism to a happy end. Noble is a Fellow of the Royal Society and holds the title "Commander of the THIS INFORMATION IS NOT A SOLICITATIO British Empire" from the Queen of England.



And, being an Emeritus professor, Noble need not worry about the political correctness requirements of a particular department at Oxford. (Though his department is supportive.) Thus Noble was able to fearlessly take on the den of lions - the current good ol' boys club of evolutionary biology. More about Dr. Noble in a minute.

A couple of months ago, my Evolution 2.0 Newsletter described the Royal Society evolution meeting in London. It was a revolution, a conference that could have *never* taken place five years ago. A conference whose very existence was vigorously opposed by Ye Olde Guarde.

What I did not mention in that newsletter was that *most* of the leading lights of the Third Way – the "New School" of biology that stands radically in contrast to Old-School Darwinism – *most* of those people are fiscally independent or hitched to <u>alternative</u> money flows.

Barbara McClintock, who won the Nobel Prize in 1983 for discovering "jumping genes" was initially laughed at in the 1950s. Her colleagues could not fathom that plants might edit their own DNA in real time. She managed to secure basic research funding for 20 years without having to publish the results of what she was working on.

James Shapiro, at the University of Chicago who repeated McClintock's discovery for bacteria instead of corn in 1968, said in an interview with Suzan Mazur, "I faced a major decision in 1984. I could spend all my time on the road, or I could stay home and get some work done. I decided it was better to stay home than to spend my time on the road. It wasn't necessarily the best decision professionally but it was a decision that suited me at the time."

Translation: Abandoning the old school for uncharted territory wasn't the path to institutional advancement – nor did it make the department heads happy. But it was the only way to get to the truth.

As my colleague Ari Galper says, "Get to the truth, not the sale."

\$8 million of "new" evolution research money backed presenters at that conference, including a team headed by Kevin Laland. It was supplied by the Templeton foundation, a decidedly un-orthodox funding source.

Lynn Margulis, before her death in 2011, revealed how evolution history has been fueled by innumerable merger-acquisitions and partnerships, *none* of which conform to the old-school Darwinian model. Her landmark paper on symbiogenesis was initially rejected by 15 journals.



She raised the "merger-acquisition" model of evolution from the dead and introduced it to the west, where it had been unknown. The Russians had completely worked it out by 1924!!!

James MacAllister, the volunteer archivist for Lynn Margulis Archive at the University of Massachusetts Amherst Libraries, sent me this:

Lynn's early work was funded by NASA. She and James Lovelock were two of NASA's earliest PIs. She also won various prizes that had cash awards. When she applied to National Science Foundation Cell Biology for a three-year grant for \$36,000, to study cytoplasmic inheritance. Lynn Margulis's grant officer called her up. "...and he says 'I'm sorry to tell you we've turned down your proposal...I haven't read the proposal but let me tell you that there are some very important molecular biologists who think your work is shit."

She had a few stalwart colleagues that funded some of her research until her death. I think that funding was confidential. Many of her book projects had publishers, but were funded to a very large extent by Lynn Margulis from her own pocket. She once told me she had spent \$75,000 on the publication of her first edition of *The Handbook of Protoctista*.

She did get funding from the Lounsbery Foundation until it took a conservative turn post 9/11. She funded much of her lab and research with her speaking fees.

I can relate! My own direct costs of writing the book *Evolution 2.0* and forming Natural Code LLC (*not* including the prior marketing efforts of Cosmic Fingerprints, or the Google traffic or any of the rest) approached \$100,000. Funded by my own speaking and consulting fees.

I say this *not* to complain about the price of being a maverick, but simply to point out mavericks require funding and fundraising, extensive sacrifices, and loyal supporters.

The one traditional source of funding for Margulis was Nasa's Exobiology program (= "life forms in outer space" research) which provided modest support for several years. Margulis resurrected an absolutely *pivotal*, *vital*, *non-optional* piece of the evolutionary puzzle. Symbiogenesis had lain dead in its tomb for 50 years.

Eva Jablonka, who has likewise resurrected a 200-year-old theory from Jean Baptiste Lamarck, hails from Israel where the evolution debates are much more sane and less polarized. I doubt she would have fared as well in the U.S. or the UK.



Lamarck said learned traits are genetically passed to children. A child conceived during a famine would have a slower metabolism than a regular child. This turned out to be exactly the case, and shown to be the case in the Dutch Famine of 1944. But Lamarck was scorned and expunged from the academy for the entire 20th century.

Again, Jablonka resurrected Lamarck. It turns out genetic fine tuning of offspring *by* the parents, based on innumerable environmental factors, has been going on everywhere all the time, possibly for as long as life has been on earth!

Are you noticing that science could have embraced all this 200 years ago or 50 years ago? And if it had, today we would be 50 to 200 years ahead of where we are now... if it weren't for the detours.

Notice the role of women in making these pivotal contributions to science. When I say Neo-Darwinism is a good-ol-boys club, I do mean *boys*. I can scarcely think of an old-school militant Darwinist who is female.

The other day David Ralph interviewed me for his podcast "Join Up Dots." He asked me "Who do you consider to be the greatest scientists to be? Who is greater than Darwin?"

"Barbara McClintock and Lynn Margulis," I replied. "Both made greater contributions than Darwin ever did. Darwin's book *Origin of Species* didn't actually deliver on its title. Nothing Darwin tells you in his book actually gets you a new species. He didn't figure that part out. But McClintock and Margulis worked out *how you actually get the changes*. MUCH more useful.

Evolutionary theory has been hobbled by groupthink for 70 years. **No club in all of science has been more opposed to the** *evolution* **of their own field than "evolutionary biologists."** This might sound insanely ironic, until you begin to notice how human beings *really* work.

Most of the time, whatever somebody brashly *proclaims* they do is a 'tell.' A subtle signal that they're lying. So for example if you go to a real estate seminar and a guy pontificates about "the integrity of these people behind the stage," it means they're all a den of thieves.

If some guy gives a talk about flipping properties and pauses in the middle and says, "I just want to give credit for my success to my Lord and Savior Jesus Christ," it means he's a psychopath and he's getting ready to pick your pocket.

It's Google whose motto *used to be* "Don't be evil." Now they *are* evil. I've been teaching entrepreneurs to fight against Google's "stupidity tax" for 15 years! "Don't be evil" is a *tell*.



So when a mob of mannerless Neo-Darwinists bemoans the sad state of science education in the United States because 40% of people still don't believe in evolution, they're covering up the fact that they too sell religion to the public, not science, every single day of their life. It just happens to be their *secular* religion.

Which brings us back to Dr. Denis Noble. Dr. Noble, the scientist I mentioned earlier who's

spent his career doing heart research. Noble figured out because of his heart research that

standard evolutionary theory couldn't possibly be right.

The Old Schoolers had a completely wrong conception of gene because in his heart experiments, he started knocking out gene happened wasn't anything like the Darwinists said would happ questions... then more... pretty soon hunks of Pandora's box v

At the London conference I approached Dr. Noble and asked for I was seeking a panel of scientists who can attest to the validity Furthermore, if a winner is found, we will need scientists who hundreds of other researchers so that further investigations can

After a couple of long conversations, he came on board as a m Evolution 2.0 Prize.

So while we are still ironing out details (this news is not yet fo is in the hunt with us. This is an important development, so ple about him.

He's an Emeritus professor at Oxford's Balliol college and in the Department of Physiology, Anatomy and Genetics. He was designated by the Queen of England as a

"Commander of the British Empire." This designation is given to an elite group of people who have made contributions to the arts and sciences, work with charitable and welfare organizations, and public service. Honorees get "CBE" after their name, which is used as a title, much the same as "PhD."

He's also a Fellow of the Royal Society ("FRS"), is the oldest scientific body in the world, founded in 1660. Isaac Newton's Death Mask is on display in the lobby there, along with his spectacles. All this certainly ranks Noble among the 100 most prominent scientists in Great Britain. He's author of *The Music of Life*, the first book about Systems Biology to be written in "lay" English. This book is very simpatico with *Evolution 2.0*.



BIOLOGICAL RELATIVITY

DENIS NOBLE

He's published over 500 scientific papers. He's 80 years old and reminds me of my fave-rave professor from college, Dr. Robert Knoll. His brand new book *Dance to the Music of Life: Biological Relativity* is currently being released.

He's editor of the Royal Society's journal *Interface Focus* which spans many branches of science. When they asked him to become editor, he objected that he didn't have a wide enough range of expertise. They replied, "Well, if you can suggest anyone else as widely read and qualified to edit an interdisciplinary journal than you, tell us and we'll hire them instead!" He ended up taking the position.

Oh, and he's a performing musician. Plays classical guitar with the Oxford Troubadours.

Noble espouses a view of evolution that not only is radically different from the old-school, *it actually is compatible with good ol'fashioned common sense*. Denis explains in his books that living things are interactive, interdependent, highly complex **systems** and there is no one single starting or ending point for anything.

To explain Noble's insistence that there is "no privileged level of causation," let me give you an analogy. Imagine you're flying in an airplane and you look out the window and you see buildings, factories, parking lots, streets, highways, power lines, stores, rivers and restaurants below. You say to yourself, "Wow, there's a vast economy going on just beneath my airplane window. Just think of all that economic activity."

Now imagine that you beam yourself down into a restaurant. A guy is buying himself a slice of pepperoni pizza. The moment you arrive, you see him giving the cashier three dollars and the cashier is giving him a piece of pizza on a paper plate.

There is no single starting or ending point to the purchase of that piece of pizza. Those dollars came from someone else, which in turn came from someone else. The pizza and cheese and the pepperoni all came from somewhere, which also involved more exchanges of dollars. The lights in the restaurant are on the electrical grid. The heating equipment in the restaurant is connected to an entire system of heaters and blowers and a natural gas company. That money will disperse in many directions after it hits the cash register drawer.

There is no one sole exclusive reason for why the guy bought a pizza there instead of buying a bagel next door. There is no simple exact reason for why he is there now instead of 15 minutes earlier. There is a particular set of people who showed up to work today at the pizza parlor and they have supplies they ordered today, inventory that arrived today. The causes and effects connected to that one pizza purchase are a *network*. The economy in which that purchase was made is vast.



Everything *comes from somewhere* as it is *going to somewhere else* and there is no single *where it's coming from*, no single *where it's going to*. Cause and effect are very complex and this is just one of a billion such transactions on this one single day, beneath the wings of this airplane you were flying in. There is no single level of causality that trumps all others. Not even Donald Trump.

Similarly, a single cell is extraordinarily complex, and a mere colony of cells – a human heart – is as complex as an entire economy. Nobody's "just so explanation" about billiard balls banging around in the universe is adequate. This is no 'happy chemical accident.' All these systems exhibit purpose on *many* levels, not just one.

Denis notes that the old, impoverished view of biology has damaged medicine; economics; the relationship between science and religion; and the humanities. Old-school Darwinian theory has been dragged into *all* those fields, sucking them into quagmires, obscuring cause and effect, and rendering them lifeless.

Noble points out that until 1946 the University College of London even had a "Eugenics" department. We all know what a disaster Eugenics was – the idea that we could cleanse the human race of undesirables by commandeering human reproduction. Darwinism has also retarded cancer research and our antibiotics arms race with bacteria. We've underestimated the intelligence of both.

Old-School Neo-Darwinian evolution is useless. It teaches you no practical skills. It's just a clever way to distract people from asking the hard questions. And con them into believing certain questions have been answered, when they have not been answered in any way, shape or form.

All the people I've mentioned so far are OUTSIDERS. None hail from standard, "approved" evolutionary biology.

Industries become incestuous as they age. They resist change because change threatens the status quo. Since all professions are run by good ol' boys clubs, innovations almost never come from the inside. For example, Bill Gates was a complete outsider to the computer business. Larry and Sergey, founders of Google, were newcomers to the search engine game.

Fred Smith, founder of Federal Express, was a virgin in the shipping industry. Ray Kroc of McDonald's wasn't a restaurant veteran; he was a milkshake machine salesman. Lou Gerstner, who engineered a turnaround at IBM, had come from Nabisco and American Express. Before Jack Welch transformed GE, he was a chemical engineer.



Mathematician and quantum physicist Barbara Shipman, a University of Rochester researcher, noticed that the shape of the honeybee's dance closely mimics something in physics called the flag manifold. Bee experts had never noticed this before a physicist came along.

Benjamin Franklin, a printer and statesman, discovered that lightning comes from electricity. George Simon Ohm, who discovered "Ohm's law" of electricity, was a schoolteacher. Charles Darwin was a medical school dropout studying for the ministry when he took his famous trip to the Galápagos Islands on the HMS Beagle.

Novel approaches usually come from outsiders. All these people had an outsider's point of view that enabled them to see something to which insiders were blind.

Evolution is the mother of all interdisciplinary subjects. It's not just *inter*disciplinary, it's *transdisciplinary*.

I had a conversation with one specialist who got his bachelor's degree in the humanities before studying genetics in graduate school. His views have differed sharply from the rank and file all his career. I asked, "Does your unusual path have anything to do with your unusual views?"

"YES!" he exclaimed. "They never got their chance to teach me what I was not allowed to think."

Triumph of outsiders. Triumph of entrepreneurial thinking.

We are lining up our weapons. In 2017 we'll break above the radar with major announcements from Evolution 2.0 and Natural Code LLC. We'll announce the prize to the worldwide press and we will seek even more Outsiders to join us in this quest.

Every New Renaissance is ushered in by outsiders. We are renewing the world.

Seize the Century.

Perry Marshall

P.S.: Prize backing is up to \$6 million. Goal \$10 million. I'm holding one seat for an institution. Only three individual seats remain and a couple of people are considering those now. Email me perry@perrymarshall.com and jump on board.

