

# How Can We Take the Intelligent Design People Seriously?

“Or, how I learned to stop asking awkward questions and learnt to love religion.”<sup>1</sup>

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## Introduction

Over the years there has been a disturbing trend, lead primarily by the Christian Fundamentalists, to cast out Darwin's Theory of Evolution from schools. Religion may have served some purpose in early societies with a primitive, ad-hoc moral code, but advances in Western epistemology and philosophy ask us to question and not to take things on faith. Witness through the Ars-nova, the Renaissance, and the Enlightenment the progress in the human condition on all fronts: morally (save wars and avarice), wealth-wise, and health-wise. It is fair to say that where religion has been taken seriously, disastrous consequences have arisen—people divided along lines of race, creed, and class usually with civil unrest and wars as the end point.

Intelligent Design is dangerous on many fronts then; the replacement of reason by superstition, the denial of the scientific method, the replacement of the democratic structures of scientific enquiry by fiat and decree. I'm sure more examples could be thought! Insidiously the end point for this agenda in our schools is the destruction of rational, secular, democratic society and the installation of a Theocracy.

However, does it all have to be negative?

Could anything come out of the Intelligent Design program? The answer, shockingly, is yes. . .

In this essay we shall see through reason, application of Laws of Physics, *reasonable extrapolation*, and statement of present facts that ironies of ironies the *Darwinists are just as bad as the Creationists!* They too require several acts of faith. To give a quick flavor before you switch off mentally—breeding, genetic modification, and the construction of artificial life is Intelligent Design!

So at least we must *claim back* the name “Intelligent Design” from the Divine. The outcome of this enquiry seems to extend the concept of Evolution and surprisingly keep both Creationists and Darwinists happy in a framework that can fit both concepts—one just has to insert the Divine spark or random chance. It also, constructively and magnanimously, gives the Creationists a chance to design experiments to prove their point (even though some of us wouldn't even entertain it).

This essay came out of a discussion on an e-mail list server noted for its bonhomie and thought-provoking discussions. Primarily my thoughts are presented, extended, writ-

ten down properly, and given some exposition. It is not an attempt at a research paper in the academic sense with proper citations, but something of a starting point if I had the time to do it. It may grate people that similar things have been said over the years but as I say, this is not a research paper but a personal essay.

May I add thanks to the list server moderator Bill Beaty (“vortex-L”) and his list, which has been a gathering over the years of real experts down to amateurs who are given a democratic forum to discuss pretty much anything. The Internet and all its forerunners and associated technologies, protocols and signalling, networks, bulletin boards, UUCP, email, FTP, Archie, file formats, and HTTP is a truly wondrous invention and a boon to mankind despite what the usual luddite crowd say. As a Westerner I believe passionately in free speech and may our acts of thought shine light on dark areas of the human condition of which this current topic is one.

## The Scope of the Argument

I wish to construct an argument ranging over geological time, the definition of life, civilization and technology, and the Laws of Physics to construct an argument based on reason to show that Darwin's theory gets in knots and the only way out of it is to admit an element of Intelligent Design/Accidental intervention, not by God but by advanced technological cultures. To give a hint, we've been doing Intelligent Design for millennia through breeding and now we are beginning to manipulate life at the genetic level. On the cards too is the creation of artificial chemical life. What if we'd been the result of such processes ourselves, “no” you say then are you sure that is applicable to every life system you find throughout the universe? We find the biologists guilty of lack of imagination in not applying the very principles they espouse, and also of loose definitions of concepts.

## Act of Faith #1: What is Life? Is a biologist the correct person to ask?

Most biologists feel sure they know what life is: it is chemical in basis, came about by random chance, evolves by

Darwinian Natural Selection, has genetic code (indeed has generations), and probably exists throughout the universe by the same general mechanism. However, feelings are not good enough when it comes to science and a more rigorous definition needs to come from Information Theory<sup>2</sup> (the application of thermodynamics to computing and information), as probably originally announced by Erwin Schrödinger in his treatise “What is Life.”<sup>3</sup> This was a result of the ideas current at the time, not least the elucidation of the structure of DNA.<sup>4</sup>

Life seems to contain information necessary for its construction and propagation that persists against the general trend of entropy increase in the universe.

This seems a rather dry definition endowing computer viruses and self-repairing/replicating robots with life? Take a look at “real” viruses and prions. A person from the mathematical sciences or engineering background is often impressed by the “machinery” of the cell—the DNA/RNA system and three base pairs coding for amino acids. “It looks like a computer program!” Further to this, some groups are creating chemical life from scratch not using the DNA/RNA system.

Why do we ask “What is Life?” Surely for a philosophical debate one must get the definitions correct before proceeding? By the end you might find yourself questioning whether you are artificial—even if one base pair is altered in your parents germ-line in an “artificial” manner you are artificial. You cannot be a little bit pregnant.

A similar problem arises from trans-genomic animals or plants—at what point is it a plant or animal, or you for that matter if such treatment was done on you? Unaltered people might *feel* they are “normal”: “I wasn’t created or altered, I evolved.” Are you sure? How do you know, where you there viewing for all geological time? Are you certain your experimental methods could detect any non-random alteration no matter how subtle?

### Act of Faith #2: Did life start here on Earth or was it seeded from without?

Some biologists want all life on this planet started here and this is the *fashion* for some still. The famous S.L. Miller<sup>5</sup> experiment with electric discharges in a simple atmosphere leading to complex molecules seemed to light the blue touch-paper. Others argue that clays and natural zeolite could act as templates and catalysts for RNA precursor.

Space travel has given another fashion of seeding by meteorite of essential precursor organics. Some even entertain the idea that life could have occurred elsewhere and was seeded here *by chance* by meteorite. We might entertain that it was done by *intelligent life*. Excluding intelligent life from doing this is an act of faith, as why should all intelligent life evolve to the same time sheet, that is if we can comprehend intelligent life elsewhere. . .

### Act of Faith #3: The Laws of Physics apply universally.

Astronomy is done almost exclusively by observation. We can observe, for instance, spectra and infer the same laws apply throughout space. Although eminently reasonable, one must be fair and say that Cosmology requires an act of faith, as to some extent must all science in the *reasonable*; if

I turn my back on the tree in the quadrangle, it is still there!

We could conclude then that the universe should be teeming with life and some of it might be intelligent if life or some things we are used to calling life is just chemistry. We need to construct artificial chemical life from first principles to drive this home, but most right thinking people know the outcome.

### Act of Faith #4: All life in the Universe must start in the same manner.

Die-hard Darwinists want the same mechanism for the ab-initio start of life, random chance. However complete, viable life could be seeded (intentionally or un-intentionally) on a planet. *Random chance is not the general case*. What if astronauts (from our planet?) in the year 2300 put an artificial bio-chemical life-form on a sterile but fertile planet? That would buck the idea. We could travel through space and find planets with wide and diverse fauna and flora but we couldn’t conclude that it hadn’t been created.

### Act of Faith #5: Every step of a life-process’ progress through time is governed by Darwin’s Natural Selection *only*.

In the Darwinist view, natural selection is the process of determining which organisms are fit to survive by trial of the environment. Thus, resource availability and genetic fitness is important in this simple scenario.

Once again the problem is one of definitions, what is “natural”? We have seen already that artificial life could be created (even non-chemical) and would that be natural? What if the environment is pulled and played around with by another organism—say oxygen producing bacteria in the Cambrian—is that natural? What if the environment was altered by *intelligent* beings, is that natural?

Also, what of the selection process producing the fittest? What of the English bulldog lovingly made a freak over the generations so that it cannot be birthed naturally without the assistance of another (natural?) organism?

What if we accept a broader definition of life and make it intelligent to pull at our heart strings. However, this life-form is so robust it can repair itself so well that it doesn’t really need to replicate, unless damaged in such a severe way that total reconstruction is the only option—it is a robot. The natural selection pressures are nowhere near as harsh as for a chemical rather than electronic life-form. It seems this central tenant of the Darwinist approach is straining at the seams.

### Breeding, Genetic Modification, and Artificial Life is Intelligent Design

The ancestor by 10,000 generations of a Pekingese is a wolf. Even the most delicious of apple trees started off as a crabby, small apple and most domestic versions can’t even reproduce, they need grafting. Needless to say, the penny has dropped and you’ve realized that this activity is Intelligent Design. I’m sure a few varieties of plant or animal have come about by Accidental Intervention too by a human activity such as leaving a door open or mixing up a batch. This isn’t pure natural selection by the environment yet we *feel* it to be natural. How would a long haired Persian cat prone to mat-

ted hair and fur balls fair in the environment? Just what is natural about this? Surely we need to extend the definition of natural selection—what is “natural” and what is the “selection”—clearly not the fittest in every case.

This human-mediated intelligent design has been going on for a long time. Breeding at least uses the existing machinery and is a bit like writing a program with a compiler. Genetic modification is then analogous to hand-crafting the machine code of the compiler output. Artificial life must be like writing for a non-custom processor, perhaps at a level even lower than micro-code but individual gates like a gate array. In short, we’re getting better at it.

### The March of Technology, the Rise and Fall of Civilizations, Ex-technological Detritus, and Geological Time Scales

Consider now a little tale about this planet but you could generalize it to anywhere in the universe (if conditions are conducive) because as a fair bet, the same laws apply elsewhere.

About 10,000 years ago mankind settled down from a nomadic existence, domesticated animals, and started to grow crops. We discovered that cities were good things as was writing, numbers, an education system, and technology. Much progress has occurred in the last 300 years by a succession of brilliant thinkers not necessarily because we have grown any cleverer but because there are so many people to think, living long lives. All this positive feedback comes from the technology. Could any futurist predict the technological state of the art in 10,000 years?

Unfortunately, disease and war sometimes get the better of us and set us back into a dark age. We splendor at magnificent Egyptian, Greek, and Roman ruins and marvel at Chinese science, that they could drill for oil and gas and distribute it 3,000 years ago!

Only now is our species taking another great step comparable to all the other great technological eras of past—we have learnt how to manipulate the stuff of life itself by genetic modification. We may even make artificial chemical life from scratch. Just as the Romans have left the Coliseum, we will leave our mark by technology, a pollution layer, and *genetically modified organisms*.

In our little tale we fast-forward 10 maybe 100 million years into the future where there are no humans anymore and our strata of activity has been deeply buried. However, on the surface lurks life all mixed in with our *genetically modified pollution*. A new race of intelligent beings is evolving (laws of physics again) and they have their “persons” who domesticate animals, invent the wheel, discard Geo-centralism, discover Newtonian Mechanics and Evolution.

This new race of intelligent beings unfortunately have invented religion too and they are giving their “Darwin” a hard time: Their Creationists say: “I’m too important to be mere chance.” And, their Darwinists say: “I’m too important to have been created.”

In their quest to bring order to the scheme of things, their place in the cosmos, and their trumped-up importance, they couldn’t entertain the idea that they *might be part evolved and part created*, as we know from all the created *genetic pollution we left behind* (in our tale on geological time scales). . . What is clear is that both camps have degenerated into a religion, both require acts of faith. The irony here is that their

Darwinists just can’t see it. Between these two extremes there lies the truth.

### Act of Faith #6: How do you know for sure that at least part of you is not a GM organism? Ironies of ironies, the Darwinists are just as bad as the Creationists!

Back to our time and current predicament—do we really know the following without an act of faith?

—Can we say for sure that life emerged here by random processes?

—Can we say for sure that we know the planet wasn’t seeded?

—Can we say for sure that seed was created by a random process?

—Can we say with certainty that life on this planet has not been changed by intelligent beings throughout history?

You may laugh to the last point but it is reasonable to think that the same laws of physics apply throughout the universe and that over geological timescales 10,000 or 100,000 years is a blink of the eye. We have seen the exponential growth in technology of the human species over the last 300 years and only a fool without scientific training or imagination would say that colonization of space would be impossible. We have seen many things thought impossible mastered—take heavier than air flight, fire, or smallpox. It is reasonable to assert that there are non-earthly advanced civilizations throughout the universe because the laws of physics apply and why should we all be on the same progress chart.

Can you say definitely that part of you (or all of you if the initial seed was not random) is not the result of GM pollution? Going back to the first discussion, does that make you feel any less natural if you are part artificial?

We might scientifically find a “smoking gun,” say something that gave rise to a precursor RNA molecule, or interplanetary exploration might find that the initial seed on Earth came from Mars, say.

But, just how is that the case *applicable to all life systems* in the universe? It is just not logical to say that every bit of life in the universe was started by a random process and evolved by pure natural selection according to Darwinian articles of faith 4 and 5 respectively. No! In the year 2050 we might *contaminate* Venus with artificial chemical life and find that in one billion years time that intelligent life evolving from this insists it wasn’t created!

So, not Divine Intervention but Intelligent Design/Accidental Intervention and Evolution Processes together seem the most general and statistically likely (over geological time scales).

If you don’t believe it, we’ve been doing it for millennia—breeding animals and plants and now we’re just beginning with genetic modification.

### A More Complete Statement of Evolution

Darwinism as taught ascribes selection pressures to “simple” things like resource potential (food, water, and climate) and genetic fitness. This might be called type 1 or 1st order natural selection.

A type 2 effect would be the environment being modified

by other organisms. An example is bacteria in the Cambrian time setting a bias now for oxygen breathing life on Earth.

Type 3 effects would be symbiotic life forms like gut bacteria in ruminants where in a sense they are picking one another. This is beginning to look like un-natural selection, though what is natural?

Type 4 effects—Intelligent Intervention or Design. These should include the possibility of intelligent organisms modifying life itself or creating artificial life. The act may be intentional or the result of accidental contamination.

The last includes the possibility of extra-terrestrial seeding even God over the traditional random process of rationalist thought, if an experiment can be designed and data gathered to prove it. Still the God question, immaculate conception/divine intervention, denial of the fossil record, and literal reading of the Bible comes down to faith and a matter of opinion. The comedian Bill Hicks had it that God was fooling with us when he put fossils in the ground!

Though some people aren't born with the knack to do science, scientists have a fair amount of faith in what they know and have seen only: "I've never seen a pink elephant, ergo pink elephants don't exist."

## Conclusion

We have seen Darwin's Evolution Theory get into knots in the light of modern developments in technology and science and the right to make totally reasonable extrapolations. To begin, the biologist's definition of life is so slack (being based on *feelings* of naturalness) that a germ-line engineered person could find themselves defined as unnatural if the concept of life couldn't include things right on the borderline of a life process, such as viruses and prions or even man-made chemical life and electronic life.

Knowing what we do about the laws of physics and their lack of bias for time or place, we can conclude that the universe must be teeming with life and intelligent life too. Even if we could prove that our little piece of rock, called Earth, was pure with life initiated here by a random process, it

would not be the general case for life-systems universe wide. To that we must add an element of Intelligent Design/Accidental Intervention (from poor quarantine or genetic pollution) to the mix of Evolution.

Even then the central tenet of Natural Selection by the *environment in a simple manner* must be modified to include fed-back effects of environment change by life-processes, symbiotic regimes, and the modification of life itself by Intelligent Beings. Thus, Darwinists should embrace Intelligent Design or Accidental Intervention by intelligent beings as part of the general picture with Divine input at any stage of the life process (initiation, main sequence, and death of a genetic line) as a matter of opinion probably unprovable by experiment and hence not scientific.

## References

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