



# “The Mathematical Impossibility Of Evolution” Debunked



Added genetic information

## Mathematical Impossibility?

I was recently presented with [this link](#) in a debating group. I started to go through it and comment point by point but instead put the debate on hold and told my opponent I would get back to her with a freshly written article looking at all the points put forward and debunk each individually.

I am sure most readers will be familiar with The Creation Institute(ICR) promotes itself as having a 3 pronged mission, research, education and publication. I delved into groups like this in my first article for [www.answers-in-reason.com](http://www.answers-in-reason.com), [Logic, reason and pseudo-science](#). ICR are starting with a conclusion there is a god and evolution doesn't happen and they formulate “hypothesis” and articles in that way. this is the opposite of scientific. Really creation science is not science at all.

Here is the link for the article they vomited out and in that article there is a link to a .PDF which is what I am working off. [The Mathematical Impossibility Of Evolution](#). Lets dilly dally no more and have a look at what makes evolution “impossible“....

*The Mathematical Impossibility of Evolution According to the most-widely accepted theory of evolution today, the sole mechanism for producing evolution is that of random mutation combined with natural selection.*

Not quite, here the good people at ICR try to over simplify the mechanisms of evolution and leave out several to suit their needs. Here we can see other mechanisms listed. Withholding the truth is the same as lying!! [Mechanisms: the processes of evolution](#)

*Since random changes in ordered systems almost always will decrease the amount of order in those systems, nearly all mutations are harmful to the organisms which experience them.*

Again here ICR are not telling the truth as we can be considered as living in a closed system due to the energy given to us by our sun. Applying the 2nd law of thermodynamics to evolution doesn't work as they would portray it. Relying on people being wowed by a scientific term.

“This idea has been put forward by many people to try to prove that evolution is impossible. However, it is based on a flawed understanding of the second law of thermodynamics, and in fact, the theory of evolution does not contradict any known laws of physics.” Source is an article by Cornell University astrophysics dept which can be [read in full here](#).

*Nevertheless, the evolutionist insists that each complex organism in the world today has arisen by a long string of gradually accumulated good mutations preserved by natural*

*selection.*

Above comment is now moot.

*No one has ever actually observed a genuine mutation occurring in the natural environment which was beneficial(that is, adding useful genetic information to an existing genetic code), and therefore, retained by the selection process.*

Above statement is not true, nothing surprising there really. True to form. Also ICR do not attempt to define genetic information and rely on ambiguity to convince their readers.

Most people lose the ability to digest milk by their teens. A few thousand years ago, however, after the domestication of cattle, several groups of people in Europe and Africa independently acquired mutations that allow them to continue digesting milk into adulthood. Genetic studies show there has been [very strong selection](#) for these mutations, so they were clearly very beneficial.

Most biologists would see this as [a gain in information](#): a change in environment (the availability of cow's milk as food) is reflected by a genetic mutation that lets people exploit that change (gaining the ability to digest milk as an adult). Creationists, however, dismiss this as a malfunction, as the loss of the ability to switch off the production of the milk-digesting enzyme after childhood.

For some reason, however, the idea has a certain persuasive quality about it and seems eminently reasonable to many people—until it is examined quantitatively, that is! For example, consider a very simple putative organism composed of only 200 integrated and functioning parts, and the problem of deriving that organism by this type of process. The system presumably must have started with only one part and then

gradually built itself up over many generations into its 200-part organization. The developing organism, at each successive stage, must itself be integrated and functioning in its environment in order to survive until the next stage. Source: [New Scientist](#).

*Each successive stage, of course, becomes statistically less likely than the preceding one*

The point of the article presented by ICR was to show evolution as **being impossible**, not less likely. The floundering begins!!

*A four-component integrated system can more easily “mutate” (that is, somehow suddenly change) into a three-component system (or even a four-component nonfunctioning system) than into a five-component integrated system.*

Perhaps so but doesn't mean it doesn't or cant happen. They are supposed to be showing it is impossible – Remember? It seems ICR have forgotten this.

*If, at any step in the chain, the system mutates “downward,” then it is either destroyed altogether or else moves backward, in an evolutionary sense.*

And natural selection takes care of the system if it is not able to survive in environment, not all changes are beneficial. This is one reason we have extinctions

*Therefore, the successful production of a 200-component functioning organism requires, at least, 200 successive, successful such “mutations,” each of which is highly unlikely.*

But not impossible... There is now a running theme in their article!!

*Even evolutionists recognize that true mutations are very rare,*

Citation please ICR and a definition of "True mutation" would be great also!!

*and beneficial mutations are extremely rare*

But do happen none the less.

*-not more than one out of a thousand mutations are beneficial,*

But still occur. FFS ICR.....

*Thus, the probability for the success of each mutation is assumed to be one out of two, or one-half. Elementary statistical theory shows that the probability of 200 successive mutations being successful is then  $(\frac{1}{2})^{200}$ , or one chance out of  $10^{60}$ .*

Probability shows what is likely or unlikely but is not necessarily a true reflection of what actually occurs. Probability does not bind outcomes like a law(which we now see breaks in in the quantum realm).

*"The number  $10^{60}$ , if written out, would be "one" followed by sixty "zeros."*

Stick 10 more zeros on ICR, actually add 15 more, it still doesn't make it impossible as you claim. Your incredulity at zeros is not a logical argument by the way guys and gals.

*What possible conclusion, therefore, can we derive from such considerations as this except that evolution by mutation and natural selection is mathematically and logically*

*indefensible!*

We can conclude also that there still is a chance and this is probability and not an actual study of its frequency.

Discussion. There have been many other ways in which creationist writers have used probability arguments to refute evolutionism, especially the idea of random changes preserved, if beneficial, by natural selection. James Coppedge devoted almost an entire book, *Evolution: Possible or Impossible* (Zondervan, 1973, 276 pp.), to this type of approach. I have also used other probability-type arguments to the same end (see, e.g., *Science and Creation*, Master Books Science and Creation, Master Books, pp. 161–201). The first such book, so far as I know, to use mathematics and probability in refuting evolution was written by a pastor, W. A. Williams, way back in 1928. Entitled, *Evolution Disproved*, it made a great impression on me when I first read it about 1943, at a time when I myself was still struggling with evolution. In fact, evolutionists themselves have attacked traditional Darwinism on the same basis (see the Wistar Institute Symposium, *Mathematical Challenges to the Neo-Darwinian Interpretation of Evolution*, 1967, 140 pp.).

*While these scientists did not reject evolution itself, they did insist that the Darwinian randomness postulate would never work. Furthermore, since the law of increasing entropy, or the second law of thermodynamics, is essentially a statement of probabilities, many writers have also used that law itself to show that evolution on any significant scale is essentially impossible. Evolutionists have usually ignored the arguments or else used vacuous arguments against them (“Anything can happen given enough time”; **“The earth is an open system, so the second law doesn’t apply”;***

It is a closed system so the 2nd law doesn’t apply:

A **closed system** is a system where only energy is transferred or exchanged with its surroundings. Matter is not part of this exchange. An **open system** includes the transfer and exchange of both matter and energy with the system's surroundings. All of the systems on Earth are classified as open systems. However, the Earth system as a whole is considered a closed system because there is a limit to how much matter is exchanged.

[Source](#)

“Order can arise out of chaos through dissipative structures”; etc.).

*Snowflake and sedimentary rocks layered by the sea heavy to light <===== In the real world of scientific observation, as opposed to metaphysical speculation, however, no more complex system can ever “evolve” out of a less complex system*

Actually:

*The second law states any isolated system will increase its total entropy over time. An isolated system is defined as one without any outside energy input. Because the universe is an isolated system, the total disorder of the universe is always increasing.*

*With biological evolution however, the system being considered is not the universe, but the Earth. And the Earth is not an isolated system. This means that an increase in order can occur on Earth as long as there is an energy input – most notably the light of the sun. Therefore, energy input from the sun could give rise to the increase in order on Earth including complex molecules and organisms. At the same time, the sun becomes increasingly disordered as it emits energy to the Earth. Even though order may be increasing on Earth, the total order of the solar system and universe is still decreasing, and the second law is not violated.*

## ***Misapplication of The Second Law***

*To claim that evolution violates the Second Law of Thermodynamics is also grounded in a misunderstanding of where the law applies. Nobody has ever figured out how to apply the second law to living creatures. There is no meaning to the entropy of a frog. The kinds of systems that can be analyzed with the second law are much simpler.*

*A living organism is not so much a unified whole as it is a collection of subsystems. In the development of life, for example, a major leap occurred when cells mutated in such a way that they clumped together so that multicellular life was possible. A simple mutation allowing one cell to stick to other cells enabled a larger and more complex life form. However, such a transformation does not violate the Second Law of Thermodynamics any more than superglue violates the law when it sticks your fingers to the kitchen counter.*

*There are many examples of order arising from disorder in nature. Research conducted by Ilya Prigogine<sup>1</sup> and others on systems far from equilibrium has shown that order can spontaneously arise in systems that are driven in the right way.*

*so the probability of the naturalistic origin of even the simplest imaginary form of life is zero. The existence of complexity of any kind is evidence of God and creation.*

*Nope, a sure sign of design is simplicity ICR*

*So as a quick summary ICR showed evolution through mutation is improbable but failed to show it is impossible. They use ambiguous terms and leave out information and at times either lied or were just perhaps just ignorant of the science they were addressing.*

*“Lift up your eyes on high, and behold who hath created these*



*things, that bringeth out their host by number: He calleth them all by names by the greatness of His might, for that He is strong in power; not one faileth” (Isaiah 40:26). Blah blah blah*

Woo woooo train is now departing, all aboard!!

*I’ll kill you and your dreams tonight, begin new life. Put your arms around me let your bloodline feed my youth – [Slayer, Bloodline 2001!!](#)*

St Patrick’s Day 2016 approaches so Happy Paddy’s Day to my fellow Irish men and women. Raise a glass to the godless!!



Addendum of notes supplied by my colleague at [www.answers-in-reason.com](http://www.answers-in-reason.com) Colin Jones:

- “mutations leading to less order”  
There is a related fallacy that often occurs here. We are existing at a time and usually a place where a great deal of adaptation has already occurred. (At least to the casual observer. It takes a biologist to find where this isn’t the case). This is like a jigsaw where all the pieces fit snugly. Any variation to a piece will take it away from an optimal fit.  
The analogy of course is a species in a niche.  
Go back a few billion years and you get poor fitting pieces. Any variation has a much greater chance of being a better fit than before. So we see changes to species these days and they are more likely to be “bad” mutations- “defects”.
- “not more than one out of a thousand mutations are beneficial”  
And here we see ICR engage in the fallacy I mentioned above! This is completely dependent on how well adapted a

species is to its environment.

- To consider for a conclusion is to take the fight back to them: any probability argument needs to be compared with the alternative.

Theists always forget to consider the probability of God existing in the first place.

What are the odds, eh Colin? Many thanks for your fantastic input to the article

P.S.

Another addendum thanks to Đặn Thỗmps□n from the Richard Dawkins Group, Đặn Added:

You talk about a puzzle with all the puzzle pieces fitting together, but that's not the greatest analogy, unless you point out that the puzzle shape is bending and flexing, which require the pieces to change if they want to continue fitting, or they will fall out. In a stable environment, say the deep ocean for instance, there is much less evolution than a more chaotic environment – most land masses with changing seasons or weather patterns, for instance.