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USING THE CHARGE FIELD TO INFLATE EVOLUTION THEORY



Alfred Russel Wallace

by Miles Mathis

But white men believe everything is dead: stones, earth, animals, and people,
even their own people.

And if, in spite of that, things persist in trying to live,
white men will rub them out.

That is the difference between white men and Human Beings.

—Thomas Berger , *Little Big Man*

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This is my first real paper on Evolution. I have made some limited commentary on Evolution in my [paper on Atheism](#), but here I will have much more to say of a physical nature. There I had little or nothing to add to the theory, but now I do.

Those who have read that paper will know I am not anti-Evolution. I think Darwinism (or, as I like to call it, Wallacism) is a decent start. It points us generally in the right direction, and is roughly correct about some things. It just doesn't have much content. Large parts of it are tautological (or circular), which would explain why they make sense. Tautologies are always true. But when it gets right down to it, Wallacism has very little explanatory power. It doesn't begin to explain this, for instance:



That's a stickbug, of course, and is a perfect example of mimicry. As in everything else, Wallacism gets us started on the question, but doesn't get us that far in. Evolution gives us a rough-and-ready general outline of possible genetic mechanisms, but at the end of the day, it simply can't get us to the stickbug. Chance mutations can't give us a stickbug, and most people seem to realize that. And by "most people" I don't mean your average Walmart shopper. I mean professionals in the field of biology, genetics, and Evolution. When pressed, many or most of them will admit that current and historical theory can't produce a stickbug. If they could, we would get a pretty gloss of the method on Wikipedia and no one would be curious any longer. But they can't. That's why various forms of Lamarckism keep getting proposed to this day (although not by that name, of course). Everyone can see that there is some sort of feedback mechanism between the environment and the organism, and if the feedback mechanism isn't inheritance of acquired traits, it must be some other feedback mechanism. The example of the stickbug tells us quite unequivocally that the organism is responding very precisely to its immediate environment, and that it *isn't* responding just with accidental mutations. So how is it responding?

This is where my charge field comes in. The ambient charge field at the very least gives us a direct means of communication between the organism and its environment, a means of communication Wallace and Darwin weren't aware of, and which mainstream biologists still aren't aware of to this day.

For those just getting here, the charge field is a real field of photons that exists everywhere in the universe. This field is denser in galaxies and even denser around stars. On the surface of planets like the Earth, it is quite dense indeed, since it is recycled through the planet on defined paths. The Sun emits a stupendous amount of charge out into the Solar System, and all the planets and moons channel that charge into their bodies at their poles. It is the spin of the sphere that allows them to do this. The charge photons then channel through the interior of the bodies and are re-emitted, most heavily at the equator. The faster the body is spinning, the more charge it recycles, and the more charge it emits at the equator as a fraction of the whole.

This charge field is neither new nor theoretical. Mainstream science knows about it, generally, though they haven't incorporated it into the unified field theories in the right ways or discovered that it is channeled in this way. It is the same charge field that exists in quantum mechanics, represented by the plus on the proton and the minus on the electron. That charge is the same as this charge. They also know about these photons, though they usually dismiss them as heat. Heat is now defined as molecular motion or ionic motion, but it is actually a function of charge density. It is a function of the photons present, not of the ions or molecules. For more on this, you may read [my other papers](#).

What this means for our current problem is that charge is moving through and around any organism we could be studying. It extends beyond that organism like a magnetic potential, and links that organism

to everything around it, including organic and inorganic matter. What is more, that charge—being real photons—carries information with it. Just as visible light carries information to your eyes, invisible photons carry information to all your cells. Therefore, in some sense, your cells can “see” everything around you. An organism doesn't need eyes and a brain to know things about its environment, and we already recognize that from the lower organisms, which have neither. The simplest organisms respond to their environment, since the cell has ways of doing that directly. In many instances, it does that by recycling ions, but of course in my theory, all ions are carried by photons. The photon stream is the stream that ultimately carries all ions. So, again, mainstream science already knows about charge and about the method of communication I am talking about, they just haven't understood exactly (or even roughly) how it works.

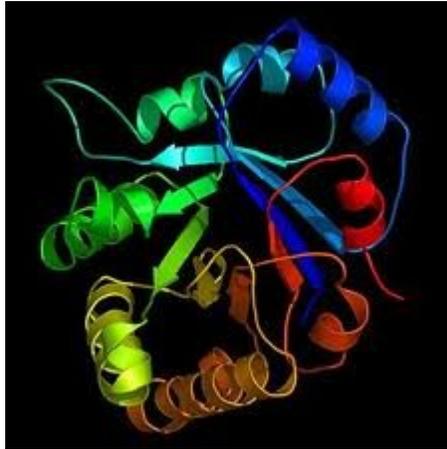
You will say that interior cells in your body can't get information this way, but they can. All bodies are partially transparent to photons and charge. Remember, although the cells may be existing edge to edge, atoms and molecules aren't. Even the densest rocks are full of space, and that is also known. So these charge photons can take their information anywhere in the body directly.

You can already see how that will help evolutionary biologists, by giving them a means of communication between the organism and its environment. Once you have this communication, you don't have to explain every response as an accident.

For example, we know that the shape an amoeba takes at any one time is not an accident. It can take a retreating shape or an engulfing shape, in response to an immediate need. It does that with no eyes and no brain. We do not try to explain the shape of an amoeba based on accidental or statistical response, do we?



At an even lower level, we know that enzymes respond to their environment with no eyes, no brain, and no cells. Enzymes are just groups of amino acids, but somehow they are able to do environment-specific tasks in the cell. From our point of view, it seems at a glance that enzymes must have a basic intelligence, since they seem to make choices. Somehow they move where they need to go very quickly, and catalyze reactions without being consumed by those reactions. We cannot explain the “life” or shape of the enzyme based on accidental or statistical response.



If we do not base the action of the amoeba or enzyme on accidental or statistical response to the environment, why would we try to explain the response of a higher organism in that way? The current theory of Evolution treats the body of a stickbug as an entity with no possible intelligence, not even the sort of intelligence the enzyme exhibits. It is assumed—and this assumption is kept well hidden beneath the theory—that the only animal intelligence the stickbug could exhibit must reside in its nervous system, educated by its sensory system. But we know that isn't true. Since we know the stickbug as a whole doesn't have the intelligence to “decide” to look like a twig, and since we know it doesn't have the ability to make that happen even if it did decide to, we assume nothing remotely like that is going on.



Logically, that should make us remember the chameleon, which somehow *does* decide to change, and has the ability to do so. Is that a sort of immediate and temporary evolution? If not, why not? Is temporary mimicry really different in kind from permanent mimicry? All we know for sure is that one can change at will and the other cannot. But the *mechanism* for change may be the same in some important way.

To get us started on this, let us look at the chameleon more closely. It is doubtful the chameleon actually *decides* to change color. It is much more likely the chameleon changes for the same reason and in the same way that the amoeba changes shape. In other words, the chameleon doesn't have to see a color in his environment, decide that is the color he would like to be at that moment, then send that color to his body. It isn't through the eyes and brain that this change happens. Even if the chameleon had that sort of intelligence, how could he *will* himself to change color?

You may be interested to know that mainstream science can't answer this one. They know that chameleons have chromatophores in their cytoplasm, but who or what tells these chromatophores what

to do? It is a mystery. As I said, it would appear to be an “automatic” response, by which I mean the chameleon's body is changing without the chameleon's knowledge or input. And again, we see a rather large change with no mutation necessary. Since the change is a reaction to *light* in the immediate environment, we have confirmation of my previous suggestion. If a chameleon can respond automatically to visible light photons, any organism can respond directly to charge photons.

I beg you to notice that chromatophores exist in the cell cytoplasm, not in larger structures. This should confirm that the detection and response is happening at that level, not at a higher level. Also notice that chromatophores are sensitive to photons, not ions. This is of profound importance in this current paper—since charge is photons—but it is also crucial data for my charge theory as a whole. A central part of my charge theory is that the charge field and the electromagnetic field are separate and separable. The charge field underlies the electromagnetic field and causes it to do everything it does, but the two fields are not equivalent. I have shown in dozens of papers that this difference is fundamental, and that its significance has been lost since the time of Maxwell in the mid-1800's.

You may say, “Well sure, some organisms can change color, but they can't change shape!” I think you are forgetting about metamorphosis.



That's a very fast change of shape, with no mutation necessary. A huge change in the phenotype with no change in the genotype. And again, it is an automatic change, with no decision made by the organism. The caterpillar doesn't *decide* to become a butterfly.

Metamorphosis also proves that genotype doesn't determine phenotype. The butterfly has the same DNA as the caterpillar, but looks nothing like him. If we go to the DNA for legs in this organism, what do we find? How about the DNA for antennae or eyes? Apparently, the enzymes can catalyze almost anything they want with the DNA here. Could they catalyze something else besides caterpillar, pupa, butterfly? Why not? If they can do no legs, 16 legs, or 6 legs from the same leg-DNA, they could do anything they wanted. They can do short fat legs, long skinny legs, or anything in between. *By itself*, gene suppression gives the enzymes an array of possibilities to work with, and no one is yet admitting that. They also aren't admitting that gene suppression is much more complex than it looks at a glance. Gene suppression necessarily implies a large number of capabilities that aren't normally used, but that *may* be used by the enzymes in a pinch. We will look more at that later.

Some may think I am trying to resurrect orthogenesis here, but I'm not. Orthogenesis is just as squishy as the rest of evolutionary theory. I am trying insert some mechanics into evolution, not insert a variant fudge.

What I am suggesting is what I have been suggesting all along—it is what I suggested in that Atheism

paper in passing, and what I have suggested to biologists every time I met one (only to be ignored with a wave of the hand, of course). The first time I read of the process of building DNA, I saw that the role of enzymes was being passed over. Here were tiny structures, made only of proteins, which were acting like little angels in the architecture or ghosts in the machine. Even according to mainstream theory, they seemed to be making choices. They were able to suppress genes seemingly at will, self-locomote, and catalyze just about anything from any given set-up. Beyond that, they were able build and unbuild DNA, which is a very useful skill no matter how you look at it.

Given that, I could not see why any mutation would be seen as accidental. In other situations, it was admitted that enzymes could change DNA sequences “at will.” So in the case of a mutation, why was it assumed the change was accidental? The enzymes were still there, so why not assume they were making the change on purpose, for some real reason?

For the latest data on this, I send you to “[RNA interference](#),” which used to be called gene suppressing, gene silencing, or gene quelling. In this latest theory, they tell you it is the RNA molecules that are doing the work, but they forget to tell you that as with the DNA, the RNA have to be manufactured by the enzymes. They have to be catalyzed and *composed*. The RNA don't just drop from the sky or compose themselves. The enzymes compose them.

Again, I ask, ON WHAT PLANS? We are told the cells and body know what to do because the DNA tells them. But what tells the enzymes how to build the DNA and RNA? How do they know where to go and when and why? Choices are seeming to be made. How are they being made? What is the mechanism? It clearly isn't an accident. And it isn't automatic, either, because if it were automatic, the enzymes would have to do the same thing every time. They don't. Nothing the enzymes do looks automatic to me. Why is this so thoroughly ignored?

I will be told enzymes are encoded in the genes, but that just means instructions for *producing* the enzymes are coded there. Where is the set of instructions for the enzymes' *tasks*, which are legion? All the things that get done by these enzymes can't be accidental or happen by chance. DNA replication happens in less than an hour, with a speed of 1,000 nucleotides per second! [I have heard it claimed](#) that the correct molecules bond to the enzymes by chance, but surely no one believes that. Specific complex tasks like this do not get done by chance, especially at a rate of thousands per second.

In my opinion, this is where the focus of study should be. In mainstream theory, these enzymes are acting like little gods, and if I were a theist, I wouldn't insert my god in the sky, I would insert him at the level of the enzyme. If I were a theist, that is what I would do, because that would infuriate the mainstream biologists the most. I assure you that mainstream biologists are praying that no one will do that, so that is what I would *rush* to do.

In fact, I am not a theist and that is not why I wrote this paper. But I do like to cause trouble, so I am giving the theists the hint. If there is one thing that irks me more than self-satisfied theists, it is self-satisfied scientists. Evolutionary biology hasn't become dogmatic and immobile due to the influence of the former, but of the latter. It is so immobile someone like Richard Dawkins doesn't even feel like he has to spend his time working on it. He spends almost his entire time jetting about the world polishing his own head and building walls and debating other bloated public-relations entities. All these guys know they have all the time in the world: whenever they return to the field it will not have moved an inch from where it was when they left it.

It is ironic to see Evolutionists purposely stopping progress in biology, to suit their own careers.

Evolutionists preventing evolution in science. As we have seen again and again in physics, if the handful of top theorists don't discover it or propose it themselves, they don't want anyone else to discover it or propose it. So they squelch all new theories and dissent and allow only a few at the top of the field to have ideas. Since those at the top of the field in any field rarely *do* have any good new ideas—since new ideas threaten their old positions—we continue to have what we have always had: immobility.

I will prove I am not a theist (not an atheist, either) by pointing you in the direction of solving this enzyme problem. As we solve the enzyme problem, we will also see how to solve the mimicry problem, which will show us how to solve the entire problem of Evolution. As I said, these enzymes would seem to be making decisions based on nothing, which is scary to everyone concerned. We can see why the biologists don't want to get involved with this question. They don't want to assign either that intelligence or that power to the enzyme. So they just assume all this is automatic and refuse to look closely at it. But I have shown that we don't have to assume the enzyme is making any decision *based on nothing*. Yes, the enzyme is making a decision, in a way, but only in the way the amoeba is making a decision: it is responding to real input. That enzyme is in a charge field, remember, so all the molecules in the enzyme are being bombarded by photons coming from all around it. Not only that, all the nuclei in those molecules that make up the enzyme are recycling some of those photons. The nucleus is recycling photons just like the Earth is and the Sun is and the galaxy is. Information can be processed both from the bombardment and the recycling. We only have to give the enzyme enough intelligence to respond to its environment, and I have just shown you part of the mechanism for that: the charge photons carry the information.

But you will ask how an inanimate collection of spinning spheres can respond to information, even once we have that information at its door. That is less clear, but we know it happens. At our level, we have no problem admitting it happens, because we think the information is processed by a brain. Although at the fundamental level a brain is just a larger collection of spinning spheres, we think brains can process information, but enzymes can't. However, I have just reminded you that most processing by organisms doesn't happen through senses or brains. As with the chameleon or amoeba or enzyme, it happens at the cellular or sub-cellular level. With the chameleon and amoeba, it wasn't clear at exactly what level the processing was occurring, but once we get down to the enzyme, it is clear the processing must be taking place at the molecular level. Information is being processed directly from the charge field. The enzyme is somehow “reading” the photons directly, and apparently a collection of amino acids can read them just as well (or better) than five senses and a huge brain.

That shouldn't be a surprise, since there has never been a hard and fast division between “animate” and “inanimate” anyway. According to current theory, you are only animate at the level of your entire organism. At the level of your proteins or enzymes, you are no more animate than they are. Or, I should say, you are *exactly* as animate as they are. If “animate” means “able to process information,” it would appear they are just as animate as you are, at any level.

Of course, historically, “animate” has meant something more along the lines of “ensouled,” or at least “aware.” We have seen that both amoebae and enzymes have a sort of awareness, in that they can respond to their environment. Does that make them both ensouled? I will leave that up to your own religion or science. But in my opinion, either both you and your enzymes are animate, or neither are. Take your pick.

Once we have all that under our belts, we can return to the question of mimicry. It looks to me like the enzymes can respond in several ways to the environment. If the incoming photons indicate that the

best reaction is a temporary but immediate change, the body can achieve that without tweaking the DNA at all. That is, if the body is the body of a chameleon or octopus, it can achieve it that way. But most bodies don't have that option. If they want to change, the enzymes have to get busy with the DNA. In that case, the change is not temporary. It is fairly immediate, since the enzyme can make the change immediately in the DNA as a "mutation," and the next offspring will have it. If the enzyme is in a moth, for instance, we only have to wait for that moth to have offspring, which won't be long. So the eons of Darwin aren't really necessary. Enzymes work fast.

What about the caterpillar? The caterpillar doesn't even have to have offspring, unless you want to think of the butterfly as the asexual offspring of the caterpillar. So how is that miracle achieved at the genetic level? The enzymes don't rebuild the DNA, or mutate it, they simply re-interpret it, by gene suppression and overwriting. They overwrite it with RNA wherever they want.

But if the enzymes can do that with a caterpillar, it implies they could do it with an elephant if they wanted to. They could do it with you. Why don't they? Because it isn't finally a matter of what the enzymes *want*. It is a matter of what is necessary in response to the environment. While there is a good reason to metamorph the caterpillar into the butterfly, there isn't a good reason to morph an elephant. The elephant is perfectly able to mate in its original or "eating" form. The caterpillar isn't. The caterpillar is very good at some things and very bad at others. It is so bad at one of the things it *must* do, the enzymes have no choice but to morph it.

You will say, things like worms don't have to be morphed halfway through their existence. So why do caterpillars? Simply, because caterpillars aren't worms. They don't live the same lives. They don't eat the same things or have to deal with the same predators. Yes, the lives are similar in some ways, but not all ways. The differences obviously matter.

So what does this say about the theory of Evolution as a whole? Well, it allows us to keep very large parts of it. For instance, in most cases, the enzymes would change the DNA as little as possible in response to some change in the environment. We may assume this is why there is so little difference between many species, and why many of these changes don't even create new species. To create a new species, you have to have a change large enough that it causes a cross-breeding problem. In a time of environmental semi-stasis (non-catastrophe), most changes wouldn't be large enough to do that, so new species would be rare.

This all goes to say that mainstream biologists are correct to assume that the mechanism—which I am giving to the enzymes—isn't one of caprice or whim. The enzymes don't just jack with the DNA for their own amusement, or to create variation for the sake of variation. They respond to actual environmental input, and probably do so in the most efficient way. This would mean that great variation would be a sum of lesser variations, and would normally take long periods of time. This confirms one of the foundations of current theory.

However, given great changes in the organism's environment, there is no reason the enzymes couldn't or wouldn't produce great change in the organism, all at once. Catastrophe in the environment could easily lead to large immediate changes in the organisms. If the enzymes can transform a caterpillar overnight into a completely different creature, what is to stop them from doing this in other instances, and doing it in the DNA?

Therefore, in most cases, we would see long, slow change. In special cases, we would see much faster change. In fact, this is what we know from data and history. Biology gives us both, which up to now

has been confusing. It has created the long-running and ongoing argument between Darwinists and catastrophists (like Cuvier or Velikovsky). But now we can see that both sides have been right: it is not Darwinism *or* catastrophism, it is *both*.

Another thing that indicates my analysis is correct is the enzymes' use of metals. Several of my readers who know more about enzymes than I do wrote in to remind me that many or most enzymes involved in DNA and RNA manufacture use various metals, though no one has ever been able to figure out exactly why. Well, if the enzymes are reading the charge field—or using it in other ways—we can see why they would want to make use of metals. Metals channel the charge stream in the most efficient manner. To see what I mean, consult my important [paper on through charge in Period 4](#) metals like Iron, Cobalt, and Nickel. It is very likely the enzymes are using the metal nuclei to increase charge channels in given directions. They may even be using the charge streams for locomotion.

My theory also agrees with the mainstream in disproving Lamarck. By my mechanism, it isn't acquired characteristics that are normally inherited. For a permanent change, the change does have to take place in the germ cell. To make the change, the enzyme doesn't change the body or the phenotype, it changes the DNA directly, by a purposeful “mutation.” But this means that *in some cases*, acquired characteristics *could* be inherited; but only if the enzymes became aware of the characteristic and purposely encoded it into the germ DNA. That would rarely happen, since most acquired characteristics would not be seen by the enzymes to be crucial to survival. Besides, if the characteristics are so easily acquired, there is no need to encode them. Your enzymes don't need to encode pimples in your genes, for instance, because you acquire them without the genes. If pimples suddenly became useful to you, the enzymes wouldn't have to do anything: you get them anyway. In general, enzymes need to encode things that *aren't* acquired, *because* they aren't acquired, which obviously blows Lamarck out of the water.

It also means that a characteristic doesn't even have to be acquired to be inherited. Many desired traits *can't* be acquired by the organism during its lifetime. So the enzyme doesn't have to weigh an acquired trait against the environment, choosing to encode it or not encode it. The enzyme can weigh a *potential* trait against the environment, choosing to encode it. It seems the enzyme would have to be very intelligent to do that, but it wouldn't. It would only have to be capable of recognizing a gap between its own organism and the environment. It could do that just by reading the charge field. The charge field tells it how the environment is and the enzyme already knows how its own organism is, since it built it. Amoebae appear to make decisions like that everyday. I can't begin to tell you how they do it, but we know they do, so it is best to admit it and use the fact in our theory of evolution. Pretending that everything is automatic is perverse, when we know good and well it isn't. The logical thing to do is admit that it isn't automatic or accidental, and then try to discover how it works; not to *demand* that it must be automatic because we can't explain the mechanism.

But back to Lamarckism. We have already seen proof against Lamarckism, since if Evolution were explained by the inheritance of acquired traits, an organism would *have* to first acquire the trait before it could be encoded. That would never work. The most necessary and famous traits couldn't have been acquired, and we know they weren't. Lamarckism never had a chance of explaining giraffes, for example, since no animal can stretch its neck just by looking up at high leaves. No animal can change color just by wanting to change color, or grow larger or smaller via a wish (unless the enzymes *first* encode that ability).

So one of the things we have seen is that we should jettison the word “mutation” from the literature, at least by its current meaning. It implies an accidental change, and we have seen that wouldn't explain

anything. Nothing mutates spontaneously. The enzymes rebuild the organism's code *on purpose*, to correspond to information they have received directly from the environment and the organism.

Some will jump in here to ask me how this differs from orthogenesis. Aren't I claiming that enzymes have some purpose in changing the code? Wouldn't this cause linear Evolution? No, because the main purpose the enzymes have is response to the environment, not some teleological or pre-planned goal of perfection. Beyond that, response to the environment would *not* cause linear progression, unless the environment changes linearly. Because the environment does *not* change linearly or teleologically, there is no reason code changes would be linear either. In both ways, my theory is closer to the mainstream than to orthogenesis. I am simply pointing to a mechanism that neither orthogenesis nor mainline Evolution theory have.

At Wikipedia, on the page for orthogenesis, it says:

The hypothesis was generally abandoned when no mechanism could be found that would account for the process, and the theory of evolution by natural selection became the prevailing theory of evolution.

That is true, but it isn't the whole story, since of course no mechanism exists to account for most of the results of the *prevailing* theory of natural selection. Neither orthogenesis *nor* natural selection contain a compelling mechanism. A lot of negative data exists for both of them. So if we throw out orthogenesis for a lack of mechanism, logically we have to throw out natural selection as well. Both theories beg thousands of questions they aren't prepared to answer.

We have just seen how orthogenesis fails, but natural selection fails just as spectacularly. Even the name fails, because it implies selection, but then neglects to show you any mechanism of selection. The word "selection" implies an active choice, but nothing in natural selection is active. The biologists have done their level best to jettison any active choice, trying to explain everything by the passive and automatic. Ask yourself who or what is making the selection in natural selection. Obviously, it can't be a "who" that is making the selection, because that would imply one of two things: 1) the organism is selecting, 2) some other *who* besides the organism is selecting. In natural selection, the organism doesn't select to be mutated or evolved. And any other *who* would imply a deity. So they don't go there. It must be a *what* that is selecting then, eh? Well, it can't be "Nature" that is selecting, since according to mainstream theory, nothing in Nature is equipped to make an active selection. So no real selection can be involved in the theory of natural selection. Mainstream science doesn't allow for either Nature or selection, so the name itself is misdirection.



Remember, everything in natural selection is accidental. The mutation is accidental, but the match of mutation to need is also accidental. That is why it is said to take so long: it is just a matter of statistics. Eventually, a mutation will accidentally match a need, and will persist. No selection there. No *nature*, either, since if everything is just a matter of statistics, nothing can be either natural or unnatural. In natural selection, the term *nature* has lost all descriptive content.

It must also be said, *chance* is not a mechanism. Statistics is not a mechanism, it is the *lack* of a mechanism.

In this way, natural selection fails by its own definitions, since if we apply statistical analysis to it, we find it consistently goes against odds. This is impossible. A theory that relies completely on statistics cannot consistently beat the odds.

Amazingly, the mainstream admits natural selection beats the odds, since we are told Evolution is unentropic. Well, entropy is completely statistical. By definition, entropy always follows the odds. Therefore, if Evolution is unentropic, it must be beating the odds. If it is beating the odds, it cannot be based purely on chance. To beat the odds so consistently, someone must be making some good decisions, based on good information. I have just shown you it isn't any gods making those decisions. It is simply the enzymes, based on information they get from the photons. To beat the odds of chance, you don't need gods, teleology, plans for the future, or alien intervention. *You just need enzymes doing their jobs.*

Obviously, this would also give us a mechanism for acquired traits that *are* passed on to offspring. I reminded you in my paper on Atheism that it is now known that acquired traits can be inherited, and often are. Remember the poor mice learning to be afraid of certain colors. This proves Lamarckism in a limited sense, and gives us a mechanism for it. Supposing the enzymes find this acquired trait important to survival, they can encode it in the DNA. So acquired characteristics don't *have* to be inherited, but they *can* be.

As you have seen, my theory gives a potential mechanism for both orthogenesis and natural selection. With the ambient charge field as the information field, and with active response by the enzymes, we have a logical and mechanical way to explain the communication between the organism, the environment, and the DNA. We then have to revisit orthogenesis to see if it fits the new field better than mainstream theory. In most ways, it doesn't, simply because the enzymes don't appear to be following any orthogenetic plan. We must leave open the question that the enzymes may be following some longer-term patterns they are able to read in the field, but if those patterns exist, they don't appear to be linear or teleological. Although life appears to be becoming more complex, it is not clear it is becoming more perfect. The complexity is not itself an argument for perfection, and is actually an argument against it. The complexity could just be—and probably is—an outcome of an increasing number of code changes, stacked over the eons. And perfection shouldn't be complex by definition. If there is in fact a more perfect life form, it seems the enzymes would have just created it to start with. If they can read and push the code any way they like, why waste any time on middle and imperfect species?

No, they don't appear to have that kind of power or intelligence. I have given them what we already know they have—the ability to respond to input. But I don't wish to be misread that I am implying they have some sort of godlike abilities, by which they do whatever they want. It is doubtful that the little enzyme has the knowledge to select and build a chosen future; or the creativity to manufacture a world on artistic principles, either.

Some will say, “But the power you have already given enzymes in this theory is incredible. You have given them a sort of volition. Any time you go past automatic responses, you have already inserted a sort of theism—a ghost in the machine.” No, not at all. You have volition and yet you are not a god. All I am giving the enzymes here is a non-automatic response to stimuli, of the sort we already know we have from data. None of the data we have from higher lifeforms, from lower lifeforms like amoebae, or from enzymes themselves indicate automatic responses. An automatic response is like a simple switch, or series of switches, and that isn't what we see at any level in Nature. It is best to admit that. What we see is an educated response of some sort, based on a reading of incoming data. By “educated”, I mean no more than that: based on an array of incoming data. Not just an automatic response to a selected input, or even a sum of those automatic responses. No, what we see in all of Nature is a considered response, even from an enzyme.

Mainstream scientists who think this considered response implies intelligence—an intelligence we cannot assign to enzymes—are enwrapped in a contradiction. They cannot give the enzyme intelligence, but they can give themselves intelligence. And yet their science is ultimately one of automatic or statistical responses. If enzymes are automatic and Evolution is automatic, then these scientists must also be automatic. Some of them *do* go that far, thinking of themselves as a series of robot switches, but it is doubtful they actually believe it even as they assert it.

Again, logically, either both you and your enzymes are intelligent, or neither are. Since your body is a sum of its parts, and its parts are these cells and enzymes and mitochondria and so on, you can hardly be intelligent while they aren't.

This is the problem we get to in the consciousness question: when does the intelligence turn on? At what level of size or complexity does the organism quit being automatic and start having volition? My answer: no level. If intelligence exists, it exists all the way down.

Notice this makes not only my physics but my metaphysics fall outside the lines of the current debate. I have shown that I am strictly a proponent of neither natural selection nor orthogenesis. As in all other questions, I take the unused third path. Even on this question of volition or intelligence or spirit, I am on a third path. Let us ask the question again: *At what level of size or complexity does the organism quit being automatic and start having volition?* Mainstream science would answer: “At no level. Volition is a human construct and does not exist in nature. We all do what we cannot help doing, just as the enzyme is. You are just as automatic as the proton.” The theists would answer: “At the level of humans. Some animals with large brains may have limited volition, but only humans have real intelligence or volition, since only humans are self-aware. Enzymes certainly do not have volition.” I start out the same as the mainstream scientist, but diverge from there. I agree that volition does not turn on at some level. But that is not because everything is automatic. It is because everything has volition. Everything we have studied appears to be able to respond to its environment in a non-automatic way, so it is unscientific to assume automatism. Your assumptions should follow your data: *that* is science. All research points to non-automatic responses in enzymes and cells, and the only open question is below that—are molecules and atoms and photons automatic? Maybe, maybe not. But if we are following data and statistics, the logical assumption is they are *not* automatic. When all your experience up to a certain point is x, you don't then assume non-x, unless you are wildly perverse.

Of course this also allows us to skirt the whole “intelligent design” debate, since if the enzymes are already intelligent, we don't need gods or aliens telling them what to do. We can see the enzymes performing complex tasks, and doing so with complex input from the environment. If that isn't

intelligence, I don't know what is. If this ability is simply an example of how Nature works—rather than a blind and stupid automatism—we don't need to insert a designer. In other words, the intelligent designer isn't *behind* life or matter, designing it or telling it what to do. Rather, matter already has what we would call basic organization skills even at the lowest levels. All matter appears to be able to respond to input, and we simply choose to see that response as intelligent.

I know this won't satisfy many theists, since they will tell me someone or something had to give the enzymes this intelligence, supposing they have it. Even if I am right, and intelligence is built-in from the lowest levels, it still had to be *built-in*. If it is there, someone had to put it there.

Possibly. I leave the question open. That is why I don't call myself an atheist. I am not against the idea of gods or designers. Some sort of design may be the right answer here. But I believe in science, and it is the job of science to try to answer these questions *as far as possible* without outside influence. Whenever there has been a hole in theory in any field in the past, many rushed to fill it with design, gods, or something similar. We know by now that was often a mistake. It prevented us from discovering interesting mechanisms, gods or no gods. To put it another way, even if there are gods, we learn more about the way the world works by assuming there aren't, and seeing how much we can explain without them. When we find a hole, we fill it in as much as possible with science, and as little as possible with “the gods did it.” Then, even if we find the gods did it, we know more about *how* they did it.

You can see that is what I have done here. I have not disproved intelligent design, or even tried to disprove intelligent design. I have only tried to fill the hole as much as possible with science, giving the designers as little as possible to do. That is the best that science can do, and scientists would be smart to admit it. Most scientists in history did admit it, *including* the scientists of the 19th century working in the time of Darwin. We have seen that if we bake the intelligence in at the ground level, we can almost do without the designers at all. If they exist, they will have hidden themselves almost perfectly. It almost becomes a question of semantics whether you wish to require the intelligence to be baked in by some baker, or prefer to think intelligence is just something that matter comes with, like extension or spin.

I hope you can see that my mechanism also tends to disprove vitalism, rather than prove it. Henri Bergson promoted the idea that Evolution implied an *elan vital*, a non-material life-force that could explain the purposefulness that seemed to everyone to be at the heart of organic existence. Although my theory might seem at first to dovetail into Bergson's theory, I believe it does just the opposite. As I have shown above, my use of the charge field tends to confirm that either everything is animate, or nothing is. But of course if that is true, then the word “animate” loses all meaning, as does the term “vitalism”. If nothing is animate, then vitalism is false. But if everything is animate, vitalism is also false, since the term then has no content. If everything is x, and nothing is non-x, then the descriptive content of x is zero.

This would also apply to the term “intelligent.” If everything is intelligent (in this limited sense), then the descriptive content of the term is zero.

By my reading of the raw data, everything is animate, in the sense that everything has the potential to respond to its environment (beyond just moving when it is pushed). If the “lowly” enzyme can do so, then it would appear anything can. You will say, “What about inorganic material? It can't respond to its environment, even at the level the enzyme can.” True, but we have seen it takes very little to make inorganic matter organic. The enzyme is just a collection of amino acids, and those groupings are only

a little more complex than the molecules in a rock. And if enzymes are so much more than we give them credit for, even rocks and protons may be animate in some way. I leave that question open.

In closing, let us tie up a loose end. I said above that mutations were not accidental. A critic will say, "What about mutations caused by X-rays? Early research indicated X-rays could increase the likelihood of a mutation by many times. What is happening there?" Well, this also tends to confirm my use of the charge field as the mediating field of Evolution and code changes. Currently it is assumed that X-rays and other high-energy rays cause mutations by knocking molecules out of the DNA by a direct hit, or some similar mechanism. It is a sort of photo-electric effect on the DNA strand, whereby a high-energy photon blasts out a guanine (for example) by an accidental collision. But that would assume the enzymes wouldn't notice a big hole in their DNA and wouldn't immediately repair it. I find that mechanism dubious, since enzymes don't normally act like that. They are masters of repair, and it would only take a split second to repair such a hit. Besides that, if Evolution works anything like the mainstream thinks it does, life would have long ago figured out how to deal with such hits in the germ cells. The enzymes in those important cells would have long, long ago been adapted to a constant vigilance, lest high-energy photons totally disrupt all early species.

We also have to differentiate between DNA damage in the germ cells and body cells. DNA damage in body cells may lead to tumors or cancer, but it doesn't lead to mutated offspring since the body cells don't create offspring. Therefore, if we are looking at mutations that would affect Evolution, we can ignore body cells. In the germ cells, we should look at mistakes in replication, not mistakes caused by holes. Mistakes in replication can happen with no holes, so if high-energy photons are causing mistakes in the germ cells, it is probably during the replication process. These photons are affecting replication, so they are probably affecting the enzymes who are controlling the replication. For instance, [the mainstream admits](#),

On some occasions, DNA damage is not repaired, or is repaired by an error-prone mechanism that results in a change from the original sequence. When this occurs, mutations may propagate into the genomes of the cell's progeny. Should such an event occur in a germ line cell that will eventually produce a gamete, the mutation has the potential to be passed on to the organism's offspring.

Notice the "error-prone mechanism". What makes the mechanism become error-prone? They don't say. In mainstream theory, the radiation causes the damage, but what causes the repair enzymes to fail? No possible theory there, since the enzymes can only fail if they are admitted to be active. If everything is passive and due to chance collisions, failure is very hard to explain. Does everything suddenly and *accidentally* start working less efficiently than chance? I hope you see the problem: how does chance become more or less efficient? How does chance fail when it was not failing before?

So it is much more likely that the X-rays are causing misreads in the charge field. Since X-rays are just bigger photons, and since charge is smaller photons, a large number of X-rays are going to pollute the charge field, making it hard for the enzymes to read. Think of the incoming charge field like a book about the environment the enzymes are trying to read. The X-rays are then like big letters superimposed on the pages of the book, overwriting some of the charge letters, obscuring others, and smudging many of the rest. The enzymes get confused, thinking the environment is something it is not. They then purposefully make changes in the DNA in response to this reading, but since the reading was wrong, the DNA changes are also wrong. This is why code changes caused by X-rays and other similar fields are extremely unlikely to work. According to mainstream theory, all mutations are unlikely to be beneficial; but mutations caused by X-rays are even less likely to be beneficial, and that is why.

This is also why pushing mutations in this way can't accelerate Evolution. By the mechanism of current theory (chance), increasing mutations with X-ray bombardment should logically lead to accelerated Evolution. It doesn't. Why? They can't tell you, but I just did. By my theory, this sort of acceleration of code changes only accelerates bad changes. It would actually minimize good changes, since confused enzymes can't be expected to make good changes.

My critic will say, "I don't see how your mechanism is any better than the photo-electric effect in the current theory. Wouldn't both of them cause bad mutations, and wouldn't the DNA be equally unprotected from both? In which case, your point about life protecting itself from X-rays falls apart." No, if you think about it, my theory allows for a much better response than mainstream theory. Given mainstream theory, all these mutations cause bad code changes directly, which destroy the offspring. Since the code changes were made by direct hit in the DNA, nothing can be done. The fatality is permanent and uncorrectable. But if we apply my theory, the damage can be corrected. Supposing the X-ray bombardment ends at some point, we come to a situation where the enzymes are *no longer confused*. Those enzymes can then begin reading the charge field correctly and make repairs to the DNA. If we have active enzymes instead of automatic and passive enzymes, we have a reversible situation. Since this is what we see in historical and laboratory data, this data is more indication of my theory. The current theory of mutations cannot explain the resiliency of life.