



If we're going to have an alien intervention theory of human origins, let's make it a good one

Andrew R. Gallimore & Graham Hancock



Editorial Comment:

In issue 17 of UFO Truth Magazine I published an article by Steve Mera dedicated to the work of researcher Lloyd Pye regarding the controversial theory of alien intervention.

Unbeknown to me Graham Hancock (photo right) and his research colleague Andrew Gallimore (photo left) read a copy of the magazine and decided to send me a thought provoking written response to it.

*It is clear that Graham's and Andrew's article was written based on the fact that they believed the author of the article to be Steve, indeed as I did, however after contacting him for clarification it turns out that the actual piece was written by Lloyd Pye a short time before his untimely death. What follows now is the response article by Graham and Andrew followed by Steve's explanation regarding the circumstances of the how the article came to be. **Gary Heseltine, Editor, UFO Truth Magazine***

Whether it's the acquisition of sophisticated symbolic language, the development of novel hunting technologies, or the explosion of artistic creativity expressed in parietal cave art preserved in sites such as the Chauvet-Pont-d'Arc in France, the advancement of our human forebears in the last 50,000 years or so is nothing short of remarkable, leaving our ape cousins behind and becoming, by far, the most cognitively and technologically endowed species on the planet. Collectively known as the Upper Paleolithic Revolution, the dramatic nature and apparent rapidity of these advancements has prompted many to question whether they can be entirely explained in terms of Darwinian natural selection alone. More specifically, some have proposed that our unique human qualities are the result of the deliberate intervention by genetic engineers not of this world, often popularized as the 'ancient astronaut' theory. Arguably the most vocal proponent of such an idea is the late Zecharia Sitchin, author of 'The 12th Planet' and numerous other titles in which he lays out, in exhaustive detail, his arguments for such a scenario. For others, it isn't that human life can only be explained by intergalactic intervention, but the origin of Earthly life itself. Perhaps the seeds of life, in the form of spores or primitive bacteria, were scattered to the galactic winds, eventually to settle on the barren plains of our young world and set in motion what Richard Dawkins, several billion years later, would call the Greatest Show on Earth. Alien interventionism as an explanation of human origins is certainly controversial, but it isn't crazy

and it isn't unscientific. A growing number of scientists contemplate it in complete sobriety. However, this is only true as long as such ideas are amenable to rigorous analysis and testing, taking into account well-established and well-tested models of biological and evolutionary processes.

The article, 'Did UFO Visitors Create Life and Manufacture Humans?', published in the January/February issue of 'UFO Truth' magazine, presented arguments in support of the alien intervention theory of human origins. Unfortunately, however, the discourse is so confused and littered with basic errors regarding the nature of evolutionary theory, and biology in general, that we feel this article may endanger the credibility of interventionist theories on the whole, the scientific value of which we make no judgments about here. However, if we are going to have an interventionist theory of human origins, it's essential that we make it a good one. Whilst the author claims to be presenting an argument for alien intervention, his treatise is largely a rehashing of ideas developed by highly dubious and, some would say, scientifically illiterate 'intelligent design' (ID) theorists, most notably by evolutionary crank, Michael Behe. The author barely disguises this:

"The Intervention Theory agrees to a large extent with Intelligent Design..."

Well, this author's version of intervention certainly overlaps almost perfectly with ID theory. In fact, it's practically indistinguishable from it. Alien intervention ought to be just that – the intervention of an alien intelligence, at some point in Earth's history, to either establish life in the first place or to modify life once it had established itself by natural means. The first type of intervention, in which life was somehow seeded by an alien intelligence, could provide an explanation for life's origins (on Earth at least). The second type, in which one or more species is modified to some end (presumably the engineering of a pre-hominid to form a human), might explain the rapid expansion of technological and cognitive sophistication of our species. However, both of these scenarios must stand up to careful and rigorous scientific scrutiny. Interventionism is clearly very different from intelligent design, which asserts that an intelligent creator designed all life on Earth. If the distinction between these is not clearly demarcated, interventionism will be forever lost in the increasingly thronged hall of the ignorant and unschooled. As we will show, the interventionism presented is actually nothing more than intelligent design with the added caveat: *"But it was aliens!"*

It is not our aim here to deliver a detailed critique of ID theory, but to make clear how this thinly veined presentation of ID does nothing to advance the alien intervention theory of human origins. In fact, we believe quite the opposite to be the case.

Any robust interventionist theory must possess at least two characteristics: Firstly, it must make clear exactly when in Earth's history the intervention took place, in what form, and to what end. Without such clarity, it's extremely difficult to defend such a radical proposal. Secondly, it must provide explanations for phenomena not readily explicable in terms of standard evolutionary theory. Otherwise, it's simply redundant. This author's interventionism fails these most basic of tests.

The author of the article seems to have a problem, not just with mainstream explanations for the origin of life on Earth, or with human advancements during the Upper Paleolithic, but with Darwin himself. In fact, he has a problem with the development and evolution of life at all stages in Earth's history. He begins his exposition by generalizing all "Darwinists" as believing that life began as a "primordial soup" that was struck by lightning. This is immediately alarming, since it foreshadows that the author will base large parts of his argument on one of the most fundamental errors in any critique of Darwinism: confusing evolution with abiogenesis. Darwinism has nothing to say about the origin of life itself from non-living components (i.e. abiogenesis), only how life evolves once established. This is an error commonly made by amateur ID proponents and outright Creationists, but is not something we should expect from any half-decent scientist. Furthermore, the lightning strike theory is but one amongst many (including deep ocean thermal vents, for example), and there is no basis for saying that scientists "typically" believe in this particular model. The author discusses the oft-cited Miller-Urey experiments that used simulated lightning and a mixture of water, methane, ammonia, and hydrogen, in an attempt to replicate the conditions of the early Earth. Despite his claims to the contrary, the Miller-Urey experiments were not designed to create life in the lab, but merely to show that the energy from lightning could have produced organic molecules (the building blocks of life, but certainly not life itself), such as amino acids, from simple inorganic molecules plausibly present (at least according to the prevailing scientific thinking of the time) in the early atmosphere. In that sense they were successful. To claim that the experiment was a failure because it failed to produce life is either disingenuous or totally ignorant.

The author appears to maintain the thoroughly outdated view that the only alternative to the intelligent design of living cells is to insist that they formed by the completely random and spontaneous assembly of their component parts:

"Organic molecules do exist. However, in nature they don't spontaneously reassemble into ever more complex molecules..."

Actually, the self-organization of simple components into larger and more complex systems is well-described in both organic and simulated systems. It's a conceptually challenging and emerging subject, drawing on both the physical and mathematical sciences, but to dismiss such processes off-hand like this is facile and shows a complete lack of appreciation of the current state of the science. Complexity theorists, such as Stuart Kauffman and Christopher Langton, for example, have done a commendable job of explaining how

such complexity may arise in biological systems, unguided by an intelligent hand, and no scientist of any merit is seriously suggesting that the cell suddenly and spontaneously appeared fully formed in all its machinic glory. Of course, the origin of life remains a challenge to explain, but relying on outdated and ill-informed ideas about abiogenesis does nothing to bolster the argument for alien intervention.

Having dispensed with abiogenesis, the author moves onto the earliest organisms (single-celled prokaryotes – bacteria) in the fossil record:

"The first life on Earth should be quite small, biologically simple, exist only in one form, and appear when the Earth was cool enough for molecules to spontaneously combine and hold together. Prokaryotes defy all that. They first appear in the fossil record around 4 billion years ago, when the Earth was newly formed."

Since fossilisation is itself a rather rare and difficult to achieve process, it's pretty remarkable that scientists have even been able to identify bacteria in the fossil record at all. However, the author is referring to a special type of bacteria known as cyanobacteria – the blue-green algae. These bacteria possess a number of properties, including a thick cell wall and the propensity to form extended layered structures, which make fossilization possible. It's really unsurprising that any earlier life forms failed to leave a fossil record, and the fact that this particular group of bacteria did ought to be seen as an endorsement of the bacterial nature of early life, and thus evolution, rather than as an argument against it. However, this is one place in the discussion where the author had the opportunity to identify a potential time-point at which alien intervention could have taken place.

It is certainly conceivable that life could have originated from the deliberate seeding of the early Earth with single-celled organisms. This is known as 'directed panspermia', and was originally proposed by Francis Crick, one of the discoverers of the DNA double helix, and chemist Leslie Orgel in 1973. Although this idea remains on the fringes of scientific discourse, it is taken seriously by a number of scientists, including Milton Wainwright and Chandra Wickramasinghe of the Buckingham Centre for Astrobiology, who continue to work on this hypothesis using the scientific method. Unfortunately, the author fails to follow this up in any meaningful way, and this potentially lucrative line of thought is lost in the stream of regurgitated ID rhetoric.

It is only after the earliest life forms have been established, whether from an Earthbound or extraterrestrial origin, that can we leave abiogenesis behind and start discussing evolution proper. Perhaps the first problem for evolutionary theorists to solve is the development of the more sophisticated eukaryotic cell from its prokaryotic predecessor. All complex, multicellular organisms, including humans, are composed of eukaryotic cells, most easily distinguished from their simpler prokaryotic cousins in holding their DNA inside a nucleus. However, eukaryotes also achieved a number of other specific advancements that enabled them to form larger, more complex, multicellular structures.

One of these that the author alludes to is the mitochondrion, the subcellular structure responsible for the production of ATP, which is the major energy currency of the cell. Acquisition of mitochondria enabled cells to produce far larger amounts of energy than was possible using the more primitive fermentation-like processes available to prokaryotic cells. The mitochondrion is an unusual subcellular structure in that it has its own DNA (mitochondrial DNA) that is completely separate from the nuclear DNA of the host cell. This unique feature tells us that mitochondria were once autonomous bacteria that lived independently of their host eukaryotic cell. The largely accepted, and completely sensible, explanation for their current residence inside eukaryotic cells is one that the author takes issue with:

"Academics suggest [eukaryotes] arose when larger Prokaryotes ate smaller ones, then they all somehow agreed to live together symbiotically. It is beyond unlikely Eukaryotes arose when larger Prokaryotes began eating smaller ones."

It's hard to understand why he finds such a proposition "beyond unlikely". In fact, it makes perfect sense: having been engulfed by the larger cell, the mitochondrion receives both protection from outside threats and a source of nutrients. In return, the host cell receives a bountiful supply of ATP, which it can use to drive more and more complex functions, eventually enabling sophisticated, multicellular organisms to form. It's a beautiful example of symbiosis – in which two organisms cooperate with mutual benefit – found throughout the biological world. The suggestion that symbiosis requires some sort of 'agreement' between organisms is worrying, since it betrays a lack of understanding of basic biology. This part of the author's discussion is important, because it's perhaps the clearest indication that his "interventionist" theory is not really an intervention at all, but pure intelligent design. Not only does he dispute the more conventional explanations for the origins of the earliest prokaryotic bacteria, which is certainly an open topic for discussion and might be explained by alien intervention via panspermia, he also takes issue with explanations of how these bacteria evolved into more complex cellular forms. So, this raises the question: when exactly does the author propose this alien intervention took place? Did the aliens seed life with prokaryotic bacteria or did they engineer such bacteria to form more complex eukaryotic cells? He appears to be arguing for both. In fact, as we will see, he seems to be arguing for a sustained intervention at all stages of the development of life for the last 4 billions years. This is 100% intelligent design.

Quite predictably, and like all ID theorists, the author continues his assault on evolution by erroneously asserting the distinction between "micro-evolution" and "macro-evolution":

"[Darwin] postulated that if small changes can occur within a species over hundreds or thousands of years, perhaps over tens or hundreds of thousands of years one species may adapt, or "evolve," into an entirely different species... Darwin knew no clear example of [macro-evolution], but assumed those who followed him would find many. In over 140 years of trying, they have none. Microevolution is real but Macroevolution is not."

Micro-evolution, or evolution within a species, is no

different from macro-evolution, except that the latter gives rise to new species. It's all just evolution. Assuming sexual reproduction, a species is defined by the ability of two individuals to produce fertile offspring. If two populations of the same species are geographically isolated from each other for an extended period of time, owing to a lack of interbreeding between the two groups and differing selection pressures between the two habitats, they will eventually evolve to become distinct species. So, if the two populations are reintroduced to each other, they will not interbreed. Speciation has been observed and documented in Galapagos finches, cichlid fishes, and the Faeroe Island house mouse, to give just three notable examples. This completely spurious distinction between micro- and macro-evolution is one ID proponents use to claim that, whilst evolution might happen within a species, it can never give rise to new species, thus justifying a need for an intelligent designer. Well, it can and it does.

As we're treated to a flurry of typical ID fare, there is very little to remind the casual reader that the author is describing the hand of an alien rather than the hand of God. However, the author digresses briefly to the Earth's ancient megalithic structures to suggest that the alien hand didn't concern itself only with its biology project, but also spent time fashioning some rather fancy stonework:

"[It's a] blatantly obvious fact that the world's megalithic structures could not be built by simple humans hands, much less by the primitive people of antiquity who supposedly did so..."

Unfortunately, this is nonsense. In Indonesia, for example, there are extant cultures that are still creating megalithic structures today, and that have no difficulty quarrying, dressing and moving megaliths of 20 tons or more over distances of several miles before their final erection to honour deceased members of the tribe. These tasks are accomplished with simple tools, human labour (no alien technologies deployed) and persistence. Indeed "simple human hands", including those belonging to historical cultures that left copious records, have been quarrying, moving and erecting megaliths for thousands of years – witness, for example, the incredible achievements of the Romans or of the ancient Egyptians who were competent to move blocks weighing several hundreds of tons over great distances (including across the Mediterranean Sea in the case of several ancient Egyptian obelisks brought to Rome by the Romans).

The possibility remains that lost human technologies and abilities were deployed in the creation and raising up of the largest ancient megaliths, and this is a worthy field of inquiry. But nothing in the megalithic works of antiquity manifests the level of technology required to cross interstellar space. On the contrary, to give just one example, the Great Pyramid of Giza is perhaps the ultimate megalithic structure; it's total weight exceeds 6 million tons and the immense granite beams weighing up to 70 tons that form the floors and ceilings of the so-called 'relieving chambers' have been lifted to heights of hundreds of feet above the ground and placed exactly in position.

Yet the Great Pyramid contains errors. Its side lengths are not equal but vary by up to 7 inches,

and its alignment to true north, while excellent, is still 3/60th of a single degree out. If yours is a technology so advanced that you can cross interstellar space to navigate your way with spot-on precision to the pale blue dot of the Earth, and if you feel compelled to build a pyramid once you've arrived, or to teach the locals to build one, then why would you permit such inaccuracies? Surely they are much better explained by human error in a work that nevertheless is stunningly sophisticated and 'ahead of its time'. In summary, all the megalithic anomalies pointed to as evidence of extra-terrestrial involvement are better explained as the legacy of a lost advanced, but very much human, civilization.

It's only in the latter parts of the article, following an unlettered and ID-motivated critique of the punctuated equilibrium model of speciation and the Cambrian explosion, that we finally reach a discussion of human origins, and where the author turns his attention to our pre-hominid ancestors. He exploits a number of morphological and cognitive differences between apes and humans to argue against the idea that we have a common ancestor. This portion of the article contains several examples of his failure to fully grasp even the most basic principles of evolutionary theory. This might seem like a rather harsh assessment of his ideas. However, during his discussion of the development of humans from pre-hominids, he claims that Darwinists regard such advances as resulting from "Pure Chance". This is an inexcusably flawed misapprehension of evolutionary theory – random processes are indeed essential for generating genetic diversity, but the selection pressures that drive evolution are anything but pure chance. But the following statement is perhaps the most atrocious:

"The overall evidence would suggest the apes are much more evolutionarily developed than humans. Therefore, to have come from apes, we must have not only de-evolved but gone under serious redesigning allowing apes to remain much better in many ways."

Evolution is not a teleological process, with some super-advanced goal towards which species are drawn. There is no such thing as being "more evolutionarily developed". This pervasive misunderstanding is one normally dispensed with in high school, such is its ubiquity. Evolution isn't a process of advancement. It's a process of continual adaptation to the environment and ecology, driven by genetic variation and selection pressure. For the same reason, "de-evolution" is also a nonsense term. Humans are more intelligent than apes, so one might say their intelligence is more advanced than apes, depending how one defines intelligence of course, but that doesn't mean that humans are more highly evolved than apes. Likewise, specific conserved traits observed in apes that appear to be superior to those of humans (such as increased muscle mass) do not mean that apes are "more evolutionarily developed than humans", and to suggest this merely betrays a total lack of understanding of the basic principles of evolutionary theory.

Although the author provides a number of specific differences between non-human primates and humans that he claims cannot be explained by natural selection, none of these are particularly

convincing. For example:

"All primates can swallow and breathe at the same time. Humans cannot due to our lengthened larynx. However, that also allows us to break guttural primate sounds into far smaller pieces to make words. How could such a complex array of small parts be slowly reconfigured in piecemeal fashion over millions of years? How could each 'improvement' be recognized as such and be genetically conserved for later generations?"

Improvements are "recognized" if they happen to improve reproductive fitness (i.e. if those variants of a species possessing the improvement are more likely to reproduce). This is precisely how adaptive traits are "genetically conserved" by evolution. It's not difficult to understand how gradual changes in the throat that allowed an ape to make more and more sophisticated sounds would be advantageous – by expanding the repertoire of vocal calls with specific and distinct meanings. Just because it's not always straightforward to trace the exact series of changes at first glance doesn't mean it didn't or couldn't happen. An appeal to design here also seems tenuous. There is a very common, deadly, and uniquely human, consequence of the loss of our ability to swallow and breathe at the same time – choking. Surely, an intelligent engineer, alien or otherwise, would have avoided such a lethal design flaw in its reconfiguration of our throat.

The author lists a number of other distinct differences between humans and primates, including light skin poorly adapted to sunlight, reduced muscle mass, and weaker bones. Whilst these might be convincing to many readers, all of them can be reasonably dealt with using standard evolutionary mechanisms, and indeed most of them have been. No matter how hard he tries, no amount of pointing to physical differences between humans and apes is going to convince any sensible biologist that we need to invoke an alien interloper. To his credit, it is during this discussion of human evolution that the author specifically mentions the type of intervention he is proposing (at this stage of history anyway) – the genetic engineering of a pre-hominid to form the human species. This is the second opportunity for him to discuss in detail exactly when and how this intervention might have occurred. Unfortunately, it is mentioned only in passing and is not expanded upon. Instead of wasting time on poorly rendered evolutionary arguments, and relying on morphological peculiarities to evidence his interventionist position, he could have turned to the DNA itself, since it is within its code sequence that the evidence for any historical genetic engineering of humans would lie embedded. The author dedicates his article to the late Lloyd Pye, the American author and paranormal researcher who took possession of a strangely shaped skull that came to be known as the Starchild skull. Pye believed the skull could have belonged to an alien-human hybrid, initially based on its bulging crown and flat oval eye orbits. However, Pye was smart enough to know that such morphological peculiarities alone would never convince the scientific community that his unusual skull was anything other than that of a deformed human. Pye understood that the only convincer would be found in the Starchild's DNA, an analysis of which was undertaken. Although the presence of standard X and Y chromosomes seems to conclusively indicate that both parents were

human, the Starchild project point to specific irregularities to dispute this. Further DNA analysis is ongoing. If the author seriously believes that aliens genetically engineered humans, then it's obvious that the DNA is the first place we ought to be looking for evidence of this. The human genome sequence is publically available if he wants to have a go.

In summary, throughout this article, the author argues against the development and evolution of life at all stages in Earth's history. He doesn't subscribe to mainstream models of abiogenesis, he disputes speciation by standard evolutionary mechanisms, and he scoffs at the idea that humans evolved from a common ape ancestor. So what exactly is he suggesting? He seems to be proposing that aliens not only seeded life on Earth with bacteria, but then guided and controlled every stage of "evolution" from that time onwards, even to the point of genetically engineering humans towards the end of this process several billion years later. That's not an intervention, that's a 4 billion year agricultural programme. In fact, it's intelligent design, pure and simple.

Andrew R. Gallimore and Graham Hancock

Editorial Comment:

Here now is Steve's response to their article.

Gary Heseltine

Dear Graham,

I believe there may have been some confusion. The article in question was not compiled by myself. It was written and constructed by Lloyd Pye around his ideas and subject of interest which was certainly a controversial one. He had compiled the article and sent it to me before he passed away after struggling with Cancer.

The article was designed to commemorate his work and that he had passed away two years back in December 2013, and thus appeared in the January 2016 edition of the magazine. In dedication to his work and for those that follow his often questionable theories the article was constructed with some pictures I had obtained and sent to UFO Truth magazine.

I'm sure you'll agree its not the first time such articles have appeared in magazines causing debate and equal interest... which is what all magazines hope to generate. In my defence, as stated in the title... I am questioning its contents as a ufologist. I have never been a biologist. I did read through the article again to see if I had in some way caused the readers to think I was a

biologist, but could not find anything, thus I take it was a simple assumption.

I am aware of your dedicated work within this subject and have been a fan for many years, since meeting you in Sheffield during the 1990's when lecturing on Monuments of Life (Egyptian Pyramids) and numerous other times that followed.

Since then I have followed your work regularly. I found your response fascinating and would love to see an article of your own appearing in the magazine with regards to the factual areas of this subject, rather than Lloyd's viewpoint.

As a ufologist, my knowledge of such things are certainly limited. I have for many years listened to the arguments in support and against and to be frank, it can be somewhat confusing. Though I do believe in the possibility of panspermia and that numerous ancient civilizations may have had knowledge passed to them from an unknown source. A source that seems to be often referred to throughout the many cultures that span the globe.

Be it Zitchin's unknown accuracy of Sumerian interpretation of tablets, Eric Von Daniken's opinions or those that are devout believers in the intervention theory. For myself I am not one to conclude on such matter without significant evidence, however I believe it is healthy to present all sides of the argument on occasion, generating interest and to not forget those that have spent many years trying to find answers.

A very professional and factual response Graham. For many, they will believe any claims without asking for evidence. I am unaware of how much evidence Lloyd discovered with regards to his findings, or if they were somewhat fashioned to assist his cause.

I'd like to take this opportunity in thanking you for your response and pointing out the significant lack of supporting evidence of Lloyd's work. A confusing subject that is still often discussed within ufology.

Best regards,

Steve Mera, BSc.

Editorial Comment:

Albeit in somewhat bizarre circumstances I want to thank Andrew and Graham for their excellent and informative clarification article.

Gary Heseltine, Editor, UFO Truth Magazine

