NOTES TO THE READER FROM AUTHOR QUICK SAVANT

The most profound questions revolve around our origins. Historical and contemporary answers, illogical, ethnocentric, and without scientific evidence, embarrass us as self-serving myths.

It wasn't until the middle of the 19th century that Charles Darwin published *On the Origin of Species* in 1859 and shocked the religious world. Darwin suggested that life had evolved rather than come from an unknowable God. Finally, science had offered a viable and testable alternative explanation for life. Evolution occurred everywhere, but the origination of life still posed a mystery—perhaps the greatest mystery of all. We seem to know much more about how our universe started with the Big Bang 13.8 billion years ago than we did about the first life.

Genes would not be discovered until seven years later by Gregory Mendel, and DNA a few years later by Swiss chemist Friedrich Miescher. Nobel laureate Francis Crick promoted the radical but admittedly logical idea that DNA did not first evolve on Earth. If true, DNA's alien origin would be one of the most important realizations in all history. According to panspermia theory, life began somewhere off-planet where conditions were more favorable. As a result of the labors of advanced intelligence, and perhaps some skill at hitchhiking, microbes engineered by aliens seeded Earth and probably many other planets.

If DNA originated off-planet, it reflects our beginnings as a form of "alien hybrid" and our possible futures may include merging with one or more advanced civilizations. Indeed, one day we may meet our "makers," or at least some of their descendants.

Decades after he passed away, Crick's insight and intuition were confirmed by convincing mathematical and scientific evidence. A prominent mathematician and astrophysicist published a paper in 2013 in a peer-reviewed journal named *Icarus*, formerly edited by Carl Sagan. *Icarus* is the journal that published Crick's paper three decades earlier, elaborating on the possibilities of directed panspermia, also known as "exogenesis," by advanced civilizations. DNA has been the centerpiece for research on the mathematical nature of biology for decades.



When one of the co-discoverers of the structure of DNA claims it is of interstellar origin, we have to listen to why he believes it is so. The evidence to support his claims is still

mounting. Afterall, we have over 4 billion years of evidence in evolving life to go through.

Perhaps there are a few shortcuts? First, the genetic code in DNA is an elegant mathematical and signatured construct, which suggests it is artificial. Many different forms of complex and powerful mathematics apply to DNA as a mathematical structure and epicenter of the intersection with biology. Second, the Last Universal Common Ancestor, or LUCA, appears to be a newly discovered bizarre giant virus chock full of genes unknown to Earth. Third, numerous experiments with extremophiles confirmed their ability to survive the harsh environments of space and for extended periods. Fourth, the United States government has revealed more and more about UFOs or UAPs (Unidentified Aerial Phenomenon) sightings and materials associated with them, and it says they cannot rule out an alien presence.

This book offers general updates on cosmological data that Crick did not have at his disposal, addresses the subject of the surprising Last Universal Common Ancestor for life that Crick had no knowledge of, and briefly explores our government's about-face on the issue of Unidentified Aerial Phenomenon (UAP), which Crick did not live to see. A close look at three videos released by the United States Navy UAP reveals flight patterns arising from technology that is likely based upon mastering theories of quantum gravity and entanglement, which is something no human has claimed to have achieved

Section 1: Hitchhikers of the Galaxy

DNA and Panspermia



NOBEL PRIZE

In 1962, Francis Crick shared the Nobel Prize in Physiology and Medicine for the remarkable 1953 discovery of DNA's molecular structure, a task that evaded other prominent scientists including the renowned Linus Pauling.

Crick stood as one of the most knowledgeable scientists in the world concerning the structure and function of DNA but surprised everyone with the controversial and overwhelming conclusion that DNA proved to be too complex, too well-organized, too logical, too powerful, and just too perfect to be fashioned from natural selection alone. Furthermore, he stated that it did not likely originate on Earth but arose from genetic engineering from an alien civilization billions of years ago. DNA, according to Crick, reached Earth through a process called panspermia.

Stirring up a potpourri of questions about our very existence and the nature of life, Crick's elaboration on directed panspermia bears implications for life's origins on Earth and humanity's future. We address the probability of intelligent life elsewhere. Second, we debate whether we, in

turn, should be directed panspermists trying to spread our version of the genetic code about the universe.

Directed panspermists imagine unmanned or manned rockets with cargoes of primitive spores organized into life by DNA, including planet Earth as a potential landing and seeding site. DNA could also have hitched a ride on such heavenly bodies as meteors, asteroids, comets, planetary fragments or even cosmic dust. The famous Murchison meteor that hit Australia in 1969 had dozens of organic compounds, including amino acids, and revealed its age at over seven billion years.

Crick addresses survival of the journey, impacting Earth, and staying alive and evolving on the surface. He describes the Big Bang and the nature and expanse of the universe to estimate the chances that life exists elsewhere.

If Crick proves correct, the same ancient alien civilization or civilizations could have spawned life on many planets. Our brothers, sisters, and cousins may be life forms on other planets. Perhaps timely visits by the engineers to planets with an appropriate atmosphere bore life and tweak life further towards advanced intelligence in preparation for eventually increased hybridization would be a good Darwinian strategy to spread one's civilization and genes armed with viable adaptation strategies already in place.

One disturbing possibility for pure humanists and religious folk, not considered by Crick, is that DNA arose from alien artificial intelligence's design and propagation effort.



WHO'S YOUR DADDY?

The Big Bang exploded about 13.8 billion years ago. One hundred million to a billion years later, stars, planets, and other heavenly bodies began to populate our universe. Let's estimate on the conservative side since we have all the time in the world in this case and say that it took a billion years. Intelligent life evolved on Earth in about 3.7 to four billion years, even given that our DNA arose elsewhere. It might have happened

sooner on a planet with a history of more hospitable conditions. Again, let's estimate conservatively and say it took five billion years.

Let's assume that our universe is fourteen billion years old and requires a billion years to get habitable planets. Let's assume that it took five billion years after that to evolve intelligent life capable of interstellar travel.

SPECULATION

If it didn't perish, the first advanced civilization could be as old as eight billion years or even up to ten billion. When it was four to six billion years old, or much sooner, such a civilization could have genetically engineered DNA suitable for space travel and colonization through the microbes associated with directed panspermia. About 4.2 billion years ago, it could have colonized Earth. Science now suggests that Earth received genetically engineered DNA from somewhere else.

Earth was not the only planet that would benefit from DNA seeding. Such seeds could have a planet to themselves, compete, or merge with any existing life on many worlds. Suppose we project Darwinian theory on aliens and assume they would spread their genes and identity as far as possible as a survival mechanism. In that case, another possibility is that the "ancient aliens" observed the life they had cultivated and tweaked to serve their needs, plans, and goals—and still do.

Another possibility is they had and have territorial competition from other species throughout our universe—including Earth.

Imagine technological advancement in one or more civilizations for four to eight billion years. What would they be capable of doing and achieving?

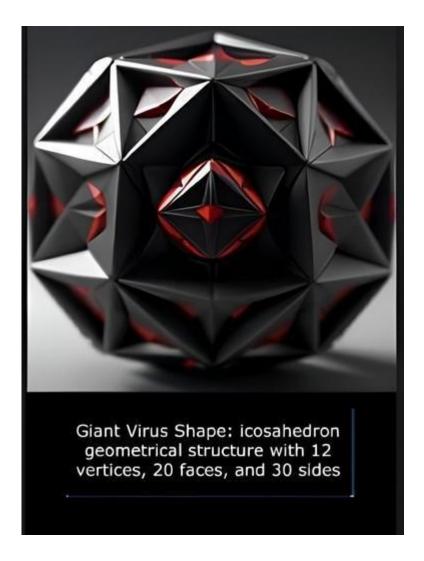
If we project more Darwinian urges, including diversification, onto such civilizations, they will have many engineered physical and interdimensional forms. Many would be infused with sophisticated artificial intelligence. They would have some brilliant robots, androids, and cyborgs.

Would they be peaceful? Let's hope so, or we might find ourselves enslaved. We might also conjecture they can defend themselves for having lasted so long.

This hypothesis is based on the biological and non-biological, namely mathematical, characteristics of DNA.

Comparative DNA analysis between humans and aliens would validate the hypothesis. Further analysis of our DNA might hint at ancient alien components or additional mathematical insight and communications.

Assume ancient alien civilizations could boast eight billion years or more in our universe. Think of their capabilities and adaptive forms, perhaps limitless. It would be natural for many of us "primates," wired for spirituality and religiosity at the expense of truth and logic, to think of them as "gods." We want to follow them, be healed, and learn from them. Religions operate amidst fantasy and delusion, but the advanced alien phenomenon offers actual, physical, and interdimensional "gods" as their technology advertises.



So Where Are They?

Enrico Fermi, the renowned Italian physicist, led the team to construct the first atomic pile for nuclear bombs. Fermi's question updated: if the universe is vast with billions of suns like ours and our galaxy alone has 10¹¹ (a thousand billion) stars, and there may be as many as a trillion galaxies each having at least half a trillion planets, then planets hospitable to life as we know may number up to six billion, and advanced civilizations routinely develop from primordial soup and travel about the universe seeking out interesting and bountiful planets to study, conquer, enslave, form an alliance with, or form hybrids with us, then where are all of the space travelers?

Of course, our government's obvious efforts to cover up or dismiss UFO sightings and crashes, dismiss reports of spotting aliens themselves, or alleged abductions for

decades are another issue altogether. If aliens landed and communicated with one or more world governments, they would not tell us anyway in the interest of "national security" or "preventing panic."

One amusing irony regarding Fermi. The nuclear explosions that he bore partial responsibility for seemed to catalyze a huge increase in UFO sightings, particularly atomic missile sites. Some military personnel claimed their nuclear missiles were all disarmed simultaneously. Fermi and others who perfected nuclear bombs encouraged more alien visits and activity.

The answer to Fermi's famous question? Huh

"Here we are! Stop using nuclear missiles!"

Much of Crick's book is explorer's statements of steps to advancement as a template against which all theories must be compared.

At the time of Crick's book, there was no hard evidence that other stars hosted planets. Now we have proof for estimates of trillions of planets across multiple galaxies.

Crick argued that we couldn't accurately estimate the time frames to develop interstellar spaceships. Some of the steps were painstakingly slow.

Roswell

The truth may be that we have visited numerous times already. Many believe a UFO crashed at Roswell in 1947 during a lightning storm, which had been announced over the radio by the US government and stood to be later confirmed by many witnesses. The story became retracted the next day as a mere weather balloon. "Sightings" of UFOs and descriptions of aliens have been in historical records for over five thousand years, beginning with Sumeria.

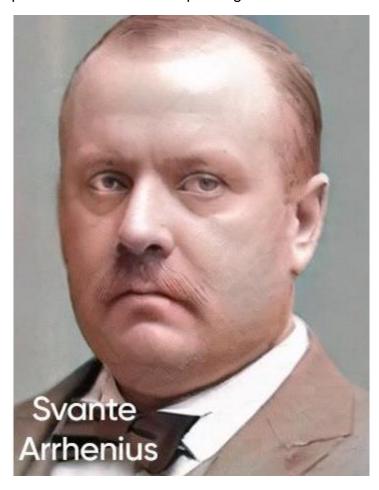
Cave Paintings and Flight Sightings

Some cave paintings, thousands of years before that, depict alien influence. Military personnel reported sightings, particularly near nuclear missile facilities. Consider the US government's release of videos that show spectacular Unidentified Aerial Phenomena, which are still commonly known as UFOs. Considering that the physics of their flight patterns belies a thorough mastery of quantum gravity and entanglement, which still perplexes even our best physicists, they are unlikely to be human creations. However, reverse engineering would be an exception. The US government admitting they possess materials suspected of being "otherworldly" is more evidence. Just look at all humans on Earth and, in fact, all Earthly lifeforms. Tell Fermi's admirers that, if the panspermists are correct, they only need to look in the mirror to see evidence of an alien lifeform on Earth.



Panspermia Theorists

The first recorded Western advocate of panspermia was Savante Arrhenius, a Swedish physicist, who suggested in 1903 that microorganisms served as the first cosmic astronauts. He reasoned they floated naked in space, propelled by the "pressures from light." In 1903, he became the first Swedish Nobel winner when he received the Chemistry Nobel Prize. In 1905, the Nobel Institute appointed him as its director, a position he held until his passing.



Panspermia means "seeds everywhere." However, Crick believes there are problems with his theory: naked spores would bear vulnerability to destruction through radiation.

Crick and cohort Leslie Orgel instead proposed in a paper that the living spores arrived in the head of an unmanned spaceship pointed towards Earth and similar ones towards other planets by an advanced civilization billions of years old. Life, they reasoned, began in the ocean, which would be the place to make a landing and have the most ingredients of a primordial soup. (Modern theory suggests underground is a distinct possibility, too.)

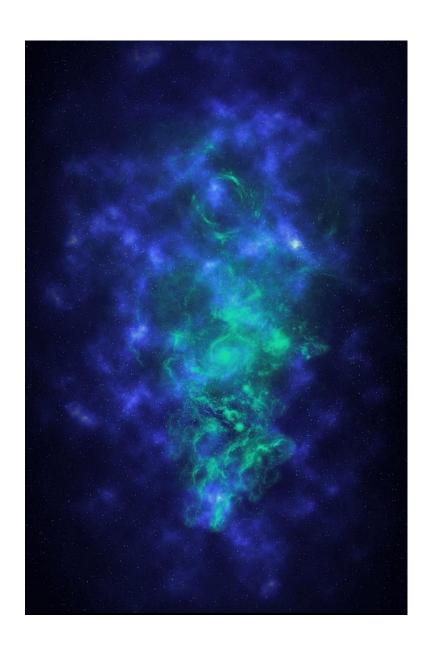
They labeled this concept as directed panspermia.

Now we have solid evidence that extremophiles can travel long distance in space as Hitchhikers on heavenly bodies and would not need rocket ships to colonize planets.

Ironically, their article earned a spot in the Icarus space journal, a periodical edited by Carl Sagan, the same journal that would publish astrophysicist Vladimir I. shCherbaka's and mathematician Maxim A. Makukov's paper claiming an alien signature and coding, including decimalization and an expression for zero and activation codes, to our DNA over three decades later in 2013, the best evidence that Crick's hunch proved correct. A spaceship wasn't necessary to make the trip or transfer if we assume our DNA cosmonauts could live for billions of years in solid rock, as some endoliths promise to do.

Others, such as J.B.S. Haldane proposed this theory as early as 1954. Crick makes the case that we need to understand and discuss the numerous cosmological details of our fantastic universe to discuss the possibilities of directed panspermia at all. Crick seemed eager to tackle these topics for the reader.

Similar to a language or computer code, Dr. Claude Perez's research on the "mathematics of DNA" also suggests that DNA sequences follow specific mathematical principles and complex coding. Such coding cannot be random and implies purposeful design, with DNA operating through structured and information-rich sequences. He found evidence of Fibonacci numbers, fractals, and the Golden Rule of mathematics. His perspective connects the fields of biology, information theory, and genetic engineering and explores the potential for underlying mathematical patterns in genetics.



RADIATION AND EXTREME TEMPERATURES PROVED TO BE NO PROBLEM FOR SOME BACTERIA IN SPACE

For one year, European and Japanese scientists placed Deinococcus radiodurans, an "extremophile" bacteria, outside an International Space Station module. Another group came and put more bacteria there for three years. The experimental conditions exposed the bacteria to the vacuum of space filled with ionizing radiation that would damage most lifeforms and extreme temperature fluctuations that would cook or freeze them.

Deinococcus radiodurans not only survived but reproduced under these harsh conditions. As a result, Deinococcus radiodurans continually replicated its DNA, which serves as an automatic repair mechanism to cope with the effects of potentially damaging radiation.

The tiny extremophiles also formed vesicles on their surfaces as an immediate response. Researchers suspect that the vesicles harbored proteins for DNA transfer, the acquisition of nutrients, and toxin processing.

Deinococcus survived because of its skill in repairing damage quickly and continuously rather than benefiting from some unique shielding.

Studying extremophiles as D. radiodurans relates to the possibilities of panspermia. They would have a better chance of surviving the long trips in space, living inside rocks, and hitchhiking, as part of meteors or comets, to spread microbial life from planet to planet.