Disclosure

of things evolutionists don't want you to know

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Intelligent Life

Is there intelligent life "out there," and if so, why haven't we heard from it?

Last month's newsletter was devoted to the intensely publicized discovery of phosphine gas on Venus, and the possibility that it is a byproduct of life. We showed you the cover of *New Scientist* which announced a "Special Report LIFE BEYOND EARTH" and "The discovery on Venus and the race to understand it." We reviewed the research paper that reported the discovery of phosphine, and told you what *New Scientist* and *Science News* thought about it.

If you looked closely at that cover of *New Scientist*, you might have noticed it also said, "Why we will (probably) never make contact with intelligent aliens." We completely ignored that topic last month because we wanted to address it this month.

What are the Chances?

Astronomers have been using the Drake Equation to calculate the probability of extraterrestrial life for a long time.

> To estimate the number of intelligent civilisations capable of transmitting or receiving radio signals within the Milky Way, we often fall back on a formula drawn up by astronomer Frank Drake in 1961. The Drake equation multiplies seven variables, starting with the rate of star formation in the galaxy, the fraction of those stars with orbiting planets and the fraction of those planets that are habitable. … But the calculation also contains other biological variables. Here, we can do little more than guess. What is the probability that, given a habitable world, life gets started on it? And if life does arise, what are the chances that it becomes intelligent?
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> As things stand, these terms in the Drake equation are so poorly known that the calculation as a whole can end up spitting out numbers that suggest we are alone in the galaxy or instead that our civilisation is one of millions. It all depends on what you put in. [1]

A computer model will tell you anything you want to know, from the probability of extraterrestrial life, to the effects of climate change, to the spread of COVID-19, depending upon what data is input to the model. How do you know if the correct data was used? Well, if the computer tells you what you want to hear, it must have been correct. ☺ Otherwise, you fix the error

[1] Dan Falk, *New Scientist*, 3 October 2020, "Is anybody out there?", pp. 36-40, https://www.newscientist.com/article/mg24833020-600-why-were-in-for-a-long-wait-to-hear-from-intelligent-aliens/

by entering "corrected" data and running the program again.

It all comes down to confirming your gut. If you believe that there are innumerable planets out there, and it is inconceivable that we are alone in the universe, you can pick the Drake equation parameters which estimate a high fraction of planet habitability, a short time for life to evolve, and so on. The Drake equation will tell you there are lots of other civilizations in the Milky Way. On the other hand, if your gut tells you that we are unique, you enter estimated parameters which will make the Drake equation produce a much lower number of possible civilizations. The technical term for this method of fudging the data is "Bayesian statistics."

> Bayesian statistics takes its name from 18th-century mathematician Thomas Bayes. He came up with a way to calculate the probability of a future event based on what has come before by constantly updating the odds as new information becomes available. Roughly put, probability depends not only on the data you have, but also on your prior assumptions. So Bayesian statistics provides a clever way to calculate probabilities from limited data.
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> Prior beliefs, or "priors", are crucial. In this case, they involve our beliefs about how quickly life appeared on Earth after its formation and how quickly intelligence followed. Once we select values for these priors, we can draw conclusions about the relative likelihood of these processes playing out again – either on Earth, if we turned back the clock, or on other similar planets. [2]

Computer programmers are very familiar with GIGO—which stands for "Garbage In Garbage Out." If your beliefs are garbage, the computer model will confirm your garbage. Unfortunately, most people don't realize they are unconsciously entering garbage data. In the quoted section below, David Kipping believes that he has totally eliminated his prior bias; but he clearly has "expectations" which influence his analysis.

> Now, David Kipping, an astronomer at Columbia University in New York, has found a way to perform the calculation independently of the choice of priors, promising a more robust result. Roughly speaking, this boils down to betting that the probability of life appearing on a habitable planet and the probability of life evolving to become intelligent both ought to be either close to 0 (meaning it would never happen) or to 1 (meaning it would always happen), but not some arbitrary value in between. "It would be really odd if 50 per cent of Earth-like planets, with the exact same conditions as Earth, ended up with life on them and 50 per cent didn't," says Kipping. "You'd expect that either they pretty much all do or they pretty much all don't."
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> This produces four general scenarios that Kipping argues are more probable than all the others: life and intelligence are both rare; life and intelligence are both common; life is rare, but almost always gives rise to intelligence; or life is common, but rarely gives rise to intelligence.
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> Into this framework, he inserted the numbers. Just as there is some uncertainty about when life first got established, so the question of when intelligence appeared is open to debate. Did it arise with tool-using hominins a few million years ago or with the advance of modern science a mere 400 years ago? Drake himself saw the key moment as the development of radio technology, which happened little more than a century ago. In fact, Kipping points out that the date you take hardly matters: a few million years over a multibillion-year timescale makes little difference to the final result.
>
> ***Uncommon intelligence***
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> Crunching the numbers, Kipping found that the "life is common, but rarely gives rise to intelligence" scenario is about nine times more likely than the "life and intelligence are both rare" scenario. Remarkably, he also found that the "life is common" conclusion follows no matter what priors you take. Ultimately, Kipping concluded that the pair of intelligence-is-rare scenarios are favoured by three to two over the pair of intelligence-is-common ones. [3]

His prior assumption is "the probability of life evolving to become intelligent both ought to be either close to 0 (meaning it would never happen) or to 1 (meaning it would always happen), but not some arbitrary value in between." That's because "You'd expect that either they pretty much all do or they pretty much all don't." It is no coincidence that his calculations prove his prior assumption. Kipping thinks that life is common, but intelligent life is rare, and he found a way to rationalize his preconception. It is a perfect example of innocent, unconscious confirmation bias.

I am not picking on Kipping. I'm just using his example because it is available in the open literature. I can't tell you how many times a manager influenced the data analysis to show that a new weapon met lethality goals, so that the project would be deemed a success, and everyone on the project would get a bonus. Then, almost immediately, the analysis was redone to

[2] *ibid.*

[3] *ibid.*

show that the weapon didn't really work that well, justifying the need for funding a product improvement program. That's not cynicism—it's honesty.

Astronomers, program managers, and politicians disguise their questionable personal agendas as unquestionable "science." I admit, when I was in high school, I wrote a dating program to scientifically produce the best romantic match between the boys and the girls in the school. I was very pleased with the result. ☺ If a computer says it, it must be true! (But, sadly, the experimental data proved otherwise.)

The Time Problem

> In June 2020, just a few weeks after Kipping's study was published, Tom Westby and Christopher Conselice at the University of Nottingham, UK, used a modified version of the Drake equation to estimate that there are at least 36 civilisations in our galaxy. … In that case, the average distance between them works out to about 17,000 light years, the pair conclude, putting a damper on any hopes we might have for back-and-forth communication. "It would take 17,000 years for any signal to reach us," says Conselice. "And even if we're able to understand it, any signal we send back would take another 17,000 years – and then another 17,000 years for them to reply. If there are thinking things out there, we're probably never going to make contact with them." [4]

The SETI (Search for ExtraTerrestrial Intelligence) folks, who are looking for radio signals from space aliens, might assume that there is another civilization that is 17,000 years ahead of us, so we could be hearing their transmissions now. If we answer them now, it will be 34,000 years before we get an answer back. Since nobody living today will be around by the time the signal is answered, what's the point?

The Path to Enlightenment

SETI is looking for intelligent life, not stupid life. The jump from stupidity to intelligence is not easily made.

> In a chapter he contributed to the 2017 book *Aliens: The world's leading scientists on the search for extraterrestrial life*, Cobb points out that there are myriad hurdles to get from simple life forms to intelligence, any one of which might never be cleared if Earth's history played out again.
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> The jump from simple organisms to multicellular eukaryotic organisms consisting of complex, membrane-bound cells with a central nucleus, for example, may have been a complete fluke. It required two simple cells to bump into one another in a particular way, one absorbing the other – an event of "mind-boggling improbability", says Cobb. Similarly unlikely, he thinks, is the development of culture and intelligence. [5]

Intelligence vs. Communication

You need look no farther than the nearest politician to see that the term "intelligent life" is subjective. The *New Scientist* article implies that human beings are the only forms of intelligent life on Earth.

> Take fish. They first appeared about 450 million years ago, but we wouldn't describe them as intelligent life. "They're pretty smart – but they're fish," says Cobb. [6]

What about dogs? When I was in junior high school, my dog learned to turn the key that was left in the padlock to his kennel, use his nose to push the open padlock out of the latch, lift up the latch, and get out of the kennel. Granted, he didn't figure that out all by himself. He saw me do it. We put the padlock on the latch because he had already seen me lift the latch to open the gate. After he had learned to lift the latch and let himself out, he saw me put the padlock in the latch, and watched me turn the key to open and remove the padlock so I could lift the latch and open the gate. After I started taking the key out of the padlock and putting it on a hook outside the kennel, where he could not reach it, he never learned to pick the lock. He was an intelligent dog—but not that intelligent. He just copied behavior.

Once we left him in the house, expecting to be gone a short time. Because of unforeseen circumstances, we were gone much, much longer than we expected. We had left him food and water, so that wasn't a problem. When we got home, he wasn't as excited to see us as I expected. Instead, he hung his head, and slowly went down to the basement. I followed him as he led me to the farthest corner of the basement, where there was a very large, fresh pile of dog-do. He knew he wasn't supposed to do that in the house, and just from his behavior I could tell he felt very guilty about it. Of course, it was our fault for leaving him alone in the house so long, so I just petted him, let him outside, and cleaned it up.

The point is, I know that my dog was intelligent enough to know right from wrong, and felt guilt when he did wrong. Not only that, he knew how

[4] *ibid.*

[5] *ibid.*

[6] *ibid.*

to communicate his feelings of shame and guilt to me. I consider dogs to be an intelligent life form. Actually, any animal in the wild has to be smart enough to find food, and be smart enough to try not to be food for another animal higher up on the food chain.

Is there any form of life that isn't intelligent? An apple seed is smart enough to know when to germinate, and which way is up because it sends the shoot up and its root down. Admittedly, that's closer to instinct than intelligence, but instinct might be a higher form of intelligence than conscious decision is.

Five hundred years ago, humans were intelligent life forms—but they didn't try to communicate with sentient beings on other planets. Even today, ants and bees live in civilized colonies, but are not trying to contact living creatures on other planets. So, the search isn't really for intelligent life on other planets—it is a search for a communicative civilization with the technology to communicate an incredibly long distance.

Why Communicate?

There are four reasons why some people want to find and communicate with life on other planets: 1) Curiosity; 2) Salvation; 3) To prove evolution; 4) To disprove Christianity.

Curiosity seldom kills a cat. Curiosity usually results in an increase in knowledge. Curiosity is a valid motivation for learning. Even if nobody ever communicates with an alien intelligence, the search might lead to an unexpected, unrelated discovery which might be beneficial. It might be a wild goose chase, but you might find a patch of ripe blackberries while you are looking for a wild goose.

Some people look to extraterrestrials for salvation. In the 1960's some people thought we needed to be saved from mutual nuclear destruction, and needed space aliens to come to Earth to teach us how to get along with each other. Now some people think we need space aliens to tell us how to stop climate change, or how to migrate to Mars. They believe extraterrestrials can save us from ourselves.

Some people think that finding life on other planets will prove the theory of evolution is true. Finding life elsewhere simply proves that life exists elsewhere. Yes, it could have evolved there; but it could have been created there, too. Alien life doesn't prove evolution any more than native life proves evolution, so that isn't a valid reason to search for extraterrestrial life.

Some people want to ask an alien, "What do you think of Jesus of Nazareth?" They are expecting the answer to be, "Jesus who?" If Christianity is true, every sentient being in the universe should know who Jesus is. Not knowing Jesus would prove Christianity is false. Imagine their surprise if the alien answers, "Jesus is the Son of God." That possibility probably never has occurred to them.

Of the four reasons to search for intelligent life, curiosity is the best. There is a possibility that something useful might be stumbled upon while searching for intelligent life; but the probability that the search will result in salvation, or proof/disproof of evolution or Christianity is much too small to make it worthwhile.

Thinking Outside the Box

From time to time it has been suggested that alien life might be so different from us that we would not recognize it if we saw it. If that is true, it raises the possibility that extraterrestrial life might have already communicated with us, and we didn't recognize it. The inside the box thinking is that the communication will come by radio waves which have been traveling at the speed of light for about 17,000 years. What if that is a wrong assumption?

Suppose there is other intelligent life in the universe, which has already contacted us, and didn't use radio waves to make that contact. What are the other possibilities?

What if a more advanced extraterrestrial being communicated directly to our minds through some sort of mental telepathy? What would that be like? Some people might have dreams or visions. Is that worth considering?

What if the extraterrestrials beamed down like members of the crew of the starship Enterprise on Star Trek? They might just suddenly appear to someone in need, and then disappear suddenly after the help has been rendered. That's science fiction, of course, but what if it really happened?

There are people who claim to have had dreams or visions which gave them information they needed, and the information turned out to be true. There are people who claim to have been helped by someone who seemed to come from nowhere, and disappeared after help was rendered. They claim to have received help or information from an extraterrestrial life form through prayer.

The irony is that some of the people who are looking the hardest for evidence of extraterrestrial life, seem to be the first to dismiss people who might actually have personal contact with extraterrestrial life.

Confronting Bird/Dino Misinformation

Scientific American *gave a bogus explanation for why birds and dinosaurs are so diverse.*

There are two strange things about the *Scientific American* article reviewed in this column. The first is the timing. It appeared on page 44 of the November 2020 print issue under the title, "How Birds Branched Out" with the subtitle, "Modern birds are incredibly diverse. A new study reveals how they achieved their spectacular evolutionary success." The on-line version of the article was titled, "How Birds Evolved Their Incredible Diversity" with the subtitle, "An analysis of 391 skulls shows that birds evolved surprisingly slowly, compared with their dinosaur forerunners." The on-line article was dated August 24, 2020. [7] Why was the print version delayed until November? Perhaps it wasn't good enough to make it into the August issue, and they needed some filler for the November issue. (Honestly, we wouldn't have addressed it if we weren't one page short this month. ☺)

The second strange thing was placement. The printed version of the article (which failed to show how birds evolved) was filled with misinformation. This placement was ironic because it immediately followed a set of five articles in a section titled,

> **Confronting Misinformation**
> Viral lies, overwhelming uncertainty, and leadership that amplifies falsehoods and fear: no wonder we feel anguished by our information environment. [8]

That set of five articles, which had to do with the election and COVID-19, appeared in the issue just before the American elections on November 3. That makes sense. But why follow that set of articles with an article so obviously full of misinformation?

Bored Birdwatcher

Kate began her article with this explanation:

> This past May, when it finally sank in that I was going to be stuck at home for a very long time because of the pandemic, I took up a hobby that had never especially appealed to me before: birding. [9]

Here's what she "learned" watching birds.

> Birds are dinosaurs, the only lineage to survive to the present day. They arose in the Jurassic period, between 200 million and 150 million years ago, from the theropods, a group of two-legged carnivorous dinosaurs whose members include both the behemoth Tyrannosaurus rex and the daintier Velociraptor. For tens of millions of years birds evolved alongside other dinosaurs, diversifying into a number of small-bodied, fast-growing, feathered fliers, along with a few large-bodied, flightless forms. [10]

Birds are not dinosaurs. Calling a bird a dinosaur does not make it a dinosaur. The entire narrative of dinosaurs evolving into birds is fiction.

> In any case, the idea was that after the mass extinction, the neornithine birds had the place largely to themselves. Free of competition from other dinosaurs (not to mention a whole bunch of other vertebrates that also perished, including the pterosaurs, those flying reptiles that had long ruled the skies), birds abruptly exploded into a multitude of forms to fill the many newly vacant ecological niches. [11]

How do they know that? (They don't.)

> To investigate, the team carried out a detailed shape analysis of 391 well-preserved skulls from modern birds and extinct dinosaurs using high-resolution 3-D scans of the specimens. The scientists used the results to reconstruct the animals' evolution. …
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> What the researchers found was that dinosaurs evolved 1.5 to three times faster than birds in all regions of the skull. After the mass-extinction event brought the Mesozoic era to a close and ushered in the Cenozoic era, birds branched into most of the major modern groups, from hummingbirds and penguins to birds of prey and songbirds. [12]

It's all misinformation stated as fact! That's why people "feel anguished by our information environment." *Scientific American* should look in the mirror to find the source of the anguish.

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[7] Kate Wong, *Scientific American*, August 24, 2020, "How Birds Evolved Their Incredible Diversity", https://www.scientificamerican.com/article/how-birds-evolved-their-incredible-diversity/

[8] *Scientific American*, November 2020, page 28

[9] Kate Wong, *Scientific American*, August 24, 2020, "How Birds Evolved Their Incredible Diversity", https://www.scientificamerican.com/article/how-birds-evolved-their-incredible-diversity/

[10] *ibid.*

[11] *ibid.*

[12] *ibid.*

by Lothar Janetzko

NASA Exoplanet Exploration

https://exoplanets.nasa.gov/

Planets Beyond Our Solar System

The website review for this month looks at the NASA EXOPLANET EXPLORATION website. This website provides a great deal of information about NASA's next big challenge, finding potential life-bearing worlds among the stars.

On the top of the home page of the site you will find links to: 1) What is an Exoplanet?; 2) Explore; 3) News; 4) Multimedia; 5) More; 6) For Scientists; and 7) Search. Another way to explore the site is to follow the links provided under the title "The Search for Life" which include the following topics: 1) Exoplanets 101; 2) Habitable Zones; 3) Life Signs; and 4) Inventing the Future.

In case you are not familiar with the term Exoplanet, from the glossary which you can find on this site, it is "a planet orbiting a star other than our Sun." As of October 29, 2020, NASA claims there are 4,296 confirmed Exoplanets from 5,632 NASA candidates.

Following the link on Habitable Zones you learn that "Discovering thousands of planets beyond our solar system counts as a 'eureka' moment in human exploration. But the biggest payoff is yet to come: capturing evidence of a distant world hospitable to life." The 'habitable zone' around stars is where it is not too hot and not too cold for liquid water to exist on the surface. An exactly right planet would be about 1-2 times the size of Earth.

There are 5 ways used to find planets: 1) Radial Velocity, Watching for Wobble, 821 planets discovered; 2) Transit, Searching for Shadows, 3269 planets discovered; 3) Direct Imaging, Taking Pictures, 51 planets discovered; 4) Gravitational Microlensing, Light in a Gravity Lens, 101 planets discovered; and 5) Astrometry, Minuscule Movements, 1 planet discovered. Interesting videos are presented on the site which illustrate these different methods used to find a planet.

The ultimate goal of NASA's exoplanet program is to find unmistakable signs of current life. "How soon that can happen depends on two unknowns: the prevalence of life in the galaxy and how lucky we get as we take those first, tentative, exploratory steps." NASA scientists believe "unless we get lucky, the search for signs of life could take decades. Discovering another blue-white marble in the star field, like a sand grain on the beach, will probably require an even larger imaging telescope".

On the website you can also learn how spectroscopy is being used to analyze the light shot by a star through the atmosphere of a planet to determine the constituents that are present in the atmosphere.

On the More link of the website you will find a FAQ (Frequently Asked Questions) link that will guide you to answers to questions you may have about this NASA program. You can use the Search link to find additional information. There really is a lot to explore on this site and the graphics on the site are highly informative.