

Bypassing the No-Communication Theorem: Quantum Entanglement for Instantaneous Zero-Risk Warnings in the Paradise Machine Model

By Bjørn Sponberg, Head Biotech, Norway, September, 2025

“It is as if someone is playing a trick on us, as if being behind the scenes.”

— John Stewart Bell

ABSTRACT

According to special relativity, nothing in the universe can move faster than the speed of light, as it would require infinite energy, expressed in $E=mc^2$. However, the 2022 Nobel Prize in Physics was awarded for experiments confirming John Bell's findings on non-local quantum entanglement. Theoretically, Bell's breakthrough allows for instantaneous signaling over vast distances, even across light-years, although the no-communication theorem prevents its practical use for instant signaling by humans.

The 2021 article in this series on the Fourth Law, a unique connection between intelligent intent and the quantum world in nature was proposed to explain the bizarre wave-particle duality effect. Based on the logic of the Fourth Law already presented in the series, this unique connection between intelligent intent and the quantum world should be fully explored when malevolent intent is able to operate risk-free for the first time in the struggle for survival. The third 2021 paper in the series also proposed a unique zero-risk signal that would instantaneously alert the universe if malevolent traits gained the upper hand by operating risk-free anywhere in the universe, by using the same quantum mechanisms involved in wave-particle duality. However, this way of monitoring if malevolent traits get the upper hand via the quantum world appear to violate the no-communication theorem in quantum mechanics. Hence, this follow-up article addresses this contradiction.

This article agrees with the no-communication theorem for all emerging life forms, such as humans, which is in coherence with the zero-risk argument in the paradise machine model's design from 2024. However, the designed machine model of nature proposes at least three specific conditions that potentially allow the machine itself to circumvent the no-communication theorem. In short, it involves a combination in which the machine: (1) generates a unique, never-before-seen quantum

superposition or state — triggered by an equally unique, never-before-seen zero-risk event within the struggle-for-survival game— at the sender's end; (2) maintains a constant “quantum singularity” state at the receiver's end, caused by the persistent $E_u = 0$ condition beyond the event horizon; and (3) uses a pre-stored protocol at the receiver's end that contains information about the meaning of the unique quantum state and the subsequent actions to be taken.

This article also introduces a more precise definition of what might trigger the zero-risk mechanism in nature than the 2021 and 2024 papers did. The prime mover behind the zero-risk signal remains consistent with the Fourth Law's claim that the defining trait of evil intent is *enormous energy drainage* — but the source of this drain during zero-risk scenarios is now understood differently. It is likely not the unnatural energy loss caused by malevolent activity itself that triggers the signal as previously thought, but rather its insatiable demand for limitless energy as it achieves perfect concealment, or a successful attempt at “reversing the von Neumann chain”. This condition creates a true zero-risk scenario, where from natures perspective malevolent traits become effectively “invisible,” operating risk-free for the first time in evolutionary history on earth. However, technically speaking, it is the unique, never-before-seen demand for limitless energy that should trigger the likewise unique alarm signal for zero risk in the quantum world.

In conclusion, the same requirement for infinite energy that limits motion to the speed of light, c , may also act as a natural boundary preventing the unchecked dominance of malevolent traits in the universe. This marks the second instance in the Fourth Law series where the theory directly connects to the logic underlying Einstein's equation, $E = mc^2$.

About the Author. Bjørn Sponberg is a researcher at Head Biotech, Oslo, Norway, with an M.Sc. in Bioinformatics (SU, Sweden), M.Sc. in Molecular Medicine (NTNU, Norway), and B.Sc. in Electronics and IT (OsloMet, Norway).



(Over: Illustration of the ‘paradise’ term according to the Einstein derived version of fourth law.)

Table of contents

- **Abstract**
- **Background**
 - The Basics of Quantum Mechanics (Figure 1, Figure 2)
- **Theory and Discussion**
 - Interstellar Objects to Confirm Receipt of a Zero-Risk Signal from Earth (Figure 3)
 - Estimating the Signal Strength from 3I/ATLAS
 - Circling in on the Universal Stress Signal and the No-Communication Theorem
 - A Revolutionary Requirement for Unlimited Energy (Figure 4A, Figure 4B)
 - Evil Traits’ Path to Achieving Complete Zero-Risk Strategies Likely Involves Perfected Deceptions (Reversed Neumann Chain)
 - Forced Taxes Are Probably the Prime Mover
 - At The Other End of the Zero Risk Signal; Nash Equilibrium and The Noble Ant (Figure 5)
 - The Innovative “Projected Demon Theory” Potentially Visualizes the Zero-Risk Situation (Figure 6)
 - What Happens to the Entangled Counterpart on the ‘Receiver’s Side’ Behind the Event Horizon?
 - Surpassing the No-Communication Theorem on Both Ends (Figure 7)
- **Summary**
- **Result (Technical Presentation)**
- **Conclusion**
- References**

Background

That quantum entanglement, or correlations between quantum particles at a distance, is a real scenario was confirmed by Irish physicist John Bell in the 1960s and 70s, through his development of Bell's inequalities. In recent days, the Nobel Prize in Physics was awarded for work that later confirmed Bell's findings (Nobel Prize, 2022). At the same time, this discovery of instantaneous correlations between particles over great distances opened the possibility of challenging the universe's speed limit, set at approximately 300,000,000 meters per second. Unfortunately, Einstein and Bohr, who were historically at the forefront of the debate before Bell's experiments, did not live to see Bell's results. However, the scientific community largely agreed that Bohr's probabilistic view of quantum mechanics, which suggested actual entanglement, was indeed 'spooky action at a distance,' as Einstein famously phrased the idea of non-local instantaneous quantum entanglement (Gribbin, 2011).



Figure 1. Cartoon frontpage on a french scientific magazine from the 70's. According to the scientific community Bell settled the debate between Bohr's probabilistic non-local view with Einstein's deterministic local view.

The now-accepted phenomenon of instantaneous quantum correlations challenged Einstein's theory of special relativity and $E = mc^2$, which both posits that the maximum speed limit for any object in the universe is that of electromagnetic waves (the speed of light). Consequently, the

speed of light essentially also represents the maximum velocity for the transfer of information in the universe, which also can occur via electromagnetic waves. Soon after Bells groundbreaking experiments a no-communication theorem established that, despite quantum entanglement, instantaneous communication is not possible. In short, the probabilistic and random nature of Bohr's interpretation of the quantum world underpins the no-communication theorem. Since, its random nature makes it impossible to synchronize measurements of entangled particles to enable instantaneous communication, as their correlated outcomes cannot be controlled. At least for greater distances (Zeilinger, 2010).

Within the framework of the paradise machine model, this article will propose a design that explores conditions under which instantaneous quantum correlations might circumvent the no-communication theorem. Besides, the no-communication theorem seem to support the central zero risk argument in the paradise machine model from 2024, implying that instant signaling is exclusive to the machine (to the Fermi life-forms) and inaccessible to lower but emerging life forms in the universe, such as life on earth. This is likely because, as emerging life forms in the universe eventually reach conditions of constant abundance and reduced chaos, some of them will, according to the 2024 paper, begin to exploit zero-risk strategies (Sponberg, 2024, Part 2). It should therefore be expected, based on the machine's design and the zero-risk argument, that nature (the machine) would have complete control over any emerging life forms in the universe, aligning with the no-communication theorem. Making the machine the only "life form" in the universe that can exploit quantum entanglement for instantaneous signaling, while any emerging life forms are limited to the speed of light. Additionally, the ability for instant signaling would be essential for practical reasons, as the universe's "police force," known in the 2024 article as Fermi life-forms, is likely stationed thousands of light-years away from the point where the distress signal for zero risk strategies are sent. In our case, the minimum distance between us and the proposed Fermi life-forms should according to the machine model be approximately from 1,500 to 26,000 light years based on the distances to black holes in our galaxy the Milky way (Figure 4). The point is that the *no-communication theorem* should validate the proposed design in the paradise machine model, as long as the machine itself (i.e., nature) can circumvent the theorem and use instant signaling for its own purposes. From a bird's-eye view, the no-communication theorem and the speed-of-light limit make it seem as if all emerging life forms in the universe are trapped in a kind of cosmic cage, not confined by physical barriers, but restricted by speed limits. This since, compared to the Fermi life-forms, we can barely move or communicate fast enough to pose any real threat to them (assuming the no-communication theorem does not apply to them).



Figure 2. The debate surrounding quantum mechanics before Bell was dominated by Bohr's probabilistic view and Einstein's deterministic view of quantum mechanics. This famous photograph of Niels Bohr (left) and Albert Einstein (right) was taken in 1930 in Brussels during the Sixth Solvay Conference on Physics. (Source: Albert Einstein and Niels Bohr at the Sixth Solvay Conference, Brussels, 1930 [Photograph]. (1930). Wikimedia Commons).

The Basics of Quantum Mechanics.

Quantum entanglement is, in a way, a direct consequence of Bohr's Copenhagen interpretation of the quantum world. As Einstein also saw it, when observation identifies the whereabouts of a particle by collapsing the wave-function, the other potential possibilities elsewhere cease to exist. One could say that the debate on actual quantum entanglement, or spooky actions at a distance, starts there (Greene & Maudlink, 2025). The debate over whether the quantum wavefunction, as described by Schrödinger (1935), collapses upon observation therefore also lies at the core of quantum entanglement. While various interpretations exist, as of August 23, 2025, the Copenhagen interpretation is widely regarded as a leading framework, though not definitively proven to describe reality.

In general, the consensus within the quantum community is that, we just have to accept that our brains are not quick enough to capture the true reality of things and that we are doomed to "stand in line" to wait and watch the outcome of reality as described in the von Neumann chain (von Neumann, 1932). The debate on quantum mechanics seem to have been stucked with this realization, basically accepting that our brains is not capable of understanding the reality behind quantum mechanics. What this paper tries to focus on is; why this distance between us and reality

is? Does it play a role in the 2024 paradise machine model of nature? The answer is that the quantum world is a crucial part of the design, again, to fulfill the zero-risk argument — and nothing more. Whatever is at the source of the Neumann chain is in full control of what reality actually is, while we must wait in line for the version of reality that reaches us some time later. This perspective, viewed through the lens of the paradise machine model, most closely aligns with Bohr and others who often leaned toward the view that we may not be meant to understand, in a Kantian sense. I go so far as to say that, without the existence of the machine model of nature described in Sponberg (2024), quantum mechanics would neither exist, as its sole purpose is to serve the machine's crucial zero-risk design. Bell, who perhaps gained the deepest insight into the quantum world, also emphasized the distinction between our observations and the underlying reality of the quantum realm; “It is as if someone is playing a trick on us, as if being behind the scenes” (Bell, 2025, 28:55). The Paradise Machine model proposes that those operating behind what Bell called ‘the scenes’ may be Fermi life-forms described in the 2024 paper whose hidden role is to uphold the zero-risk principle embedded in the machine. Furthermore, this article proposes that when evil traits in lower emerging life forms manage to perfectly conceal themselves ‘behind the scenes’ relative to the Fermi life-forms, a detection mechanism within the machine is triggered. This unprecedented switching between; who is behind, and who is in front of “the scene”, a situation that has never occurred before in nature on Earth, should also dramatically alter the risk situation between the two sides. This change of position relative to what reality is (decided by whomever is behind the scenes) should become the cue for generating a stress signal to nature. In essence, one can say that the usual von Neumann chain dynamic has been inverted: what once allowed nature to dominate any emerging life-form is now turned against it for the first time in nature on earth. The interpretation and implications of this new zero-risk situation, along with the mechanism of the zero-risk signal (the stress signal) and its effects on nature, constitute the central focus of this article. The interpretation and implications of this new zero-risk situation on earth, along with the mechanism of the zero-risk signal and how the signal is triggered, constitute the central focus of this article. Of particular importance is how this suggested signal mechanism appears to circumvent the no-communication theorem, highlighting a unique feature that distinguishes the machines (the Fermi life-forms) zero-risk status from all other life forms in the universe.

The most significant discovery for this article is Bell's work, which resolved the debate over whether the world is solely local (no true entanglement at a distance) or non-local (true entanglement at a distance). The resolution of this debate by Bell (demonstrating true

entanglement at a distance) is crucial for the machine model, as it enables the possibility of an instantaneous signaling mechanism for zero-risk situations, as suggested in Sponberg (2021, 2024). This was a very important discovery by Bell, as it had previously seemed far more probable that all of physics adhered to Einstein's consistent, relativistic view of reality. Bell's discovery therefore came as a small shock to the scientific community at the time, largely because it appeared — at least in principle — to open the door to instantaneous communication. Hence, what now should stand in the paradise machine models way is the no-communication theorem in quantum mechanics. It reminds me of the similar situation prior to writing the 2024 article which paper originally was to be 5-6 pages long on black holes possible involvement in Fourth Law. During the investigation phase of the writing process, it became clear that *Hawking radiation* — which in principle should challenge black holes involvement in the conversion process from mass-energy to love and intelligence — contained gaps in the theory (Almheiri, 2021). For example, no one had yet resolved the information paradox in Hawking's framework, which remains a loose thread in his theory of black holes. Hence, there was still room to introduce the Eu → 0 → Paradise expression as an explanation for the apparent loss of mass-energy in black holes, providing the 'go signal' to proceed with writing the paper on what eventually led to the launch of a fully designed Paradise Machine model. In the same way, I have now given myself the "go signal" to write this article on the instantaneous signaling mechanism in the same paradise machine model, as I see how the machine model can circumvent the no-communication theorem. The no-communication theorem has also served to reinforce the zero-risk principle within the design of the Paradise Machine model from 2024. This is because the no-communication theorem appears to apply only to emerging life forms like ours, but not to those who control the machine. This apparent contradiction would, in principle grant "them" (being the Fermi life-forms), total control in accordance with the zero-risk principle in the machines design (Sponberg, 2024, part 4).

In summary, this articles answer to Einsteins famous quote "God does not play dice with the universe" is;

"God plays dice with the universe as long as nature's ego is not at risk. As soon as natures ego is at risk, the dice game stops and instant signaling takes place."

On that final quote, both Bohr and Einstein were correct in their conflicting opinions on quantum entanglement, but the irony in Einstein's case is that at the very moment he was correct in his "God does not play dice" argument, he broke his own speed limit in the universe (special relativity).

Theory and discussion

One of the major points in the paradise machine model is that intelligent intent always interacts with the quantum world and appears to affect it, dependent on if the intent is evil or good. This is how nature continually monitors the true intent of intelligent life forms in the universe (or in the machine if you like). The primary indicator by which nature — or the Paradise Machine — recognizes evil lies in its hallmark: an unnatural pattern of energy consumption, which has been central to the Fourth Law since the first paper in 2010 (Sponberg, 2010). This same energy concept was taken to the quantum world in the third 2021 article in this series, which initially sought to explain the enigmas of *wave-particle duality* (Aiello, 2023) and *delayed choice quantum eraser effect* (Kim, 2023) experiments. By applying the energy principle in Fourth Law the observations in these two bizarre quantum experiments could be a demonstration on how nature 'senses' evil intent directed toward itself, while being observed, via changes in energy states (Sponberg, 2021). This breakthrough paper in the Fourth Law article series took the theory in the direction of quantum physics for the first time. That is, it would be a breakthrough if the mechanisms described in the Fourth Law corresponded to what we observe in *wave-particle duality* and *delayed-choice quantum eraser effect*. Since, in standard quantum mechanics, we don't observe any energy being added during wave function collapse and it's one of the key reasons the process feels so counter-intuitive and has sparked endless debate (Bassi, 2012). Could the logic of the Fourth Law explain why the quantum world appears to be influenced by intelligent intent? Suggesting that if nature can indeed sense the difference between good and evil intent through energy states, then our intent to observe is revealed by the act of adding energy to the quantum wave — potentially explaining its excitation into particle form upon observation (*wave-particle duality*), but also simply due to the *intent* to observe (*delayed-choice quantum eraser effect*). The strange quantum responses in these quantum experiments was in line with the logics of the Fourth Law and could help resolve the enigmas in both experiments. Were the collapse of the quantum wave demonstrating how nature, in general, safeguarded itself from evil to maintain its paradise state of 100% love and intelligence? Do these experiments provide evidence that nature interprets evil intent through energy states, as predicted by the first Fourth Law paper in 2010? Moreover, was it through the same quantum mechanisms that nature also detected and transmitted the critical event associated with zero-risk strategies in the evolutionary struggle for survival game? Instantaneously warning the entire universe that evil traits in a life form has gained the upper hand for the first time somewhere within its system? These new ideas excited me so much that I posted a declaration online: declearing that my research on the Fourth

Law would henceforth go in the direction of quantum physics. What I didn't realize at the time was that this online declaration some years later provided electronic time stamps as proofs for when these ideas occurred to me — more precisely, on 18 June 2017 (Sponberg, 2024, figure 22). What no one knew that summer in 2017 was that humanity was mere weeks away from detecting the first interstellar object (1i Oumuamua) to enter our inner solar system — an object that had already silently arrived close to earth.

Interstellar Objects to Confirm Receipt of a Zero-Risk Signal from Earth.

Interstellar objects should be viewed as a new and pure way for potential advanced life forms to send information. It would be very smart of an advanced life form out there to use the opportunity we now have gotten on Earth, the ability to track incoming interstellar objects in detail, to start a clean communication process. This method would be clean because any signals or anomalies we detect by observing these incoming objects would clearly come from interstellar space and wouldn't be tampered with by our own species. That's why open communication between scientists and the general population is so vital — it lets as many people as possible access the raw observational data. In this regard, we should thank everyone in the community for being so proactive in sharing all available information (at least before the shut-down of NASA in October 2025). For example there would be no approach theory if NASA had not shared their information about 1i Oumuamua in 2017. And perhaps in particular Harvard's Galileo Project group who has been unafraid to speculate that intelligent life might be behind any detected anomalies in interstellar objects (see also figure 3 later). After all, interstellar objects are likely the purest way we could ever receive direct signals from another intelligent civilization: clear, uncluttered messages that anyone on Earth might spot with their own eyes (such as hiding objects behind the Sun). This was also a key prediction from the 2024 approach theory: that the next signals from extraterrestrial civilizations — those resolving the Fermi paradox — should now be starting to reach and address the majority of people on Earth. In conclusion, if we detect signs of intelligent signaling from observing incoming interstellar objects, those signals must originate from another life form in the universe. That's why interstellar objects are so fascinating in the field of SETI — since they offer a unique opportunity to detect possible obvious 'communication signatures'. In the case of 3I/ATLAS, for example, confirmation signals related to the Approach Theory in this article series (discussed later) can now be observed without the interference—or "noise"—of our own life form tampering with the data (Sponberg, 2025).

The recent idea presented in this article series suggests that an instantaneous universal signal for zero risk may have been transmitted from Earth, possibly as early as 20 years ago. Moreover, a response from a potential receiver of this signal has inspired to develop the Approach Theory, suggesting that what we are now seeing as “signals” in the form of interstellar objects — is just part of a longer chain of responses, or “signals”, that may have begun with weaker, at a more personal level beginning in 2005 (Sponberg, 2024, part 5). In other words that their (Fermi life-form) approach towards Earth started in 2005 after picking up this signal for zero risk. The 2021 paper, the third in the series on Fourth Law, proposed for the first time in this series that nature may employ a hidden quantum sensor mechanism — similar to the one activated in wave–particle duality experiments — to detect and alert the universe to successful zero-risk strategies. According to this idea, nature transmits an instantaneous signal about successfully zero-risk strategies — believed to represent the highest level of evil intent nature’s ego can tolerate in the universe (Sponberg, 2024, part 3). According to the third article in 2021, the signal for zero risk should be interpreted as an alarm signal, as it indicates to the machine that what it considers to be evil traits have gained the upper hand somewhere in the universe (as evil traits has achieved a dominant zero-risk position in nature for the first time).

The 2024 paper builds on the fact that the zero-risk signaling ideas described in the 2021 paper, came to me as the interstellar object ‘Oumuamua unknowingly was in our solar system in the summer of 2017 (Meech, 2017). The finding of this timely correlation in 2024 (based on online time stamps) with the zero-risk signaling ideas in 2017 was one of the factors that inspired the creation of the Approach Theory, detailed in part 5 in the 2024 article. The Approach Theory boldly suggests that the interstellar object ‘Oumuamua might have been communicating why it arrived here by sharing details about the zero-risk signal in a uniquely timely way—since the information about the signal was revealed in the same narrow time-window ‘Oumuamua entered our solar system. There were other factors that helped justify such a bold prediction as well—such as the woman–baby idea—but the two events involving ‘Oumuamua remain the most substantial data (see Part 5 in the 2024 article). While highly speculative, the Approach Theory gained additional credibility in 2025 when it was further supported by the trajectory behavior of 3I/ATLAS, the third detected incoming interstellar object (Galileo Project, 2025; Sponberg, 2025). Unlike the much smaller ‘Oumuamua, which we barely glimpsed as it left our solar system in 2017, 3I/ATLAS was detected early in its trajectory, offering a better opportunity for study a big interstellar object closely for the first time. However, its extreme trajectory anomalies, noted by the Galileo Project group at Harvard led by Professor Avi Loeb, complicated the planned observations (Figure 3 under).

This third incoming object seemed to “hide” from Earth behind the Sun in two remarkable ways: 1. Its orbital plane is almost perfectly 3 dimensionally aligned with Earth’s, with only 0.2% chance of this being random, according to the Galileo group’s calculations. 2. It passed the Sun on the opposite side from Earth, placing the Sun between us and itself which, combined with the aligned plane, which made it nearly impossible to observe 3I/ATLAS in detail from Earth (7% chance isolated). This forced us to rely on much less advanced equipment, such as those stationed on Mars, to study it. Additionally, its close proximity to Venus, Mars, and Jupiter further obscured it from our strongest Earth-based telescopes (0.005% chance to happen isolated). This unusual behavior of “hiding from Earth” raised concerns among the Galileo team, who wondered if the new incoming interstellar object might be hostile to us which led to attention from the media. However, if the Approach Theory from one year earlier was correct this was a very expected behavior if 3I/ATLAS somehow stemmed from advanced life-forms, to obey the central zero-risk argument in the theory, demonstrated by lowering its risk for sharing information with whatever was the source of a zero-risk signal (Sponberg, 2025). The approach theory suggests that a zero-risk signal transmitted from Earth was what brought attention from Fermi life-forms in the first place, as early as in 2005. In addition, it might be worth mentioning that 3I/ATLAS arrived from the direction of the *Sagittarius* region — the veritable mecca of black holes in our galaxy (NASA, 2025; Wikipedia contributors, 2024a). Even Professor Loeb’s group took note of this intriguing detail, incorporating into their analysis the fact that the only confirmed radio signal humans have ever received from outer space, the famous “Wow!” signal in 1977, also originated from the direction of Sagittarius (Loeb, 2025; Wikipedia contributors, 2024b). Of course, viewed through the lens of the paradise machine model, this black hole connection to 3I/ATLAS is profoundly intriguing, though it falls out of scope for this article.

The significant trajectory anomaly to 3I/ATLAS was worrying the Galileo group at Harvard to the extent of suggesting it might be a hostile alien probe. However, the irony of 3I/ATLAS’s spatial behavior lies in the Approach Theory’s explanation: its apparent “hostile trajectory” stems from a good intention according to the zero-risk argument in the theory. Suggesting that the interstellar object follows a crucial design in the “paradise machine model” to protect its paradise state from potential zero-risk achievers at all costs — even down to the details in its trajectory. If the Fermi life forms were connected to 3I/ATLAS in any shape or form, their essential need to maintain a zero-risk status during their approach should be revealed through such abnormal trajectory details, clearly demonstrating the zero-risk rules proposed in the Approach Theory. Moreover, if Fermi life forms were indeed involved, it’s intriguing to think that this method of clearly illustrating

the approach theory, might also serve as a way to draw attention to this article series, as seemed to be the case with Oumuamua. As also brought up in the 2024 article the so-called “signals” relating to ‘Oumuamua, seemed as to want to draw attention to Fourth Law itself, as if the article series were an ‘approved message’ stemming from them (Sponberg, 2024, part 5). The idea is that the ‘signals’ which seem to be connected directly to the fourth law, is a way for them to communicate with us in more detail (Figure 7). As if their communication strategy is to use incoming interstellar objects to draw attention to the *actual message*, being Fourth Law and this article series. This opportunity of being able to plant ideas for communication was also thoroughly debated in the 2024 article based on the “timely signals” from Oumuamua with the zero-risk signaling ideas (figures 21, 22 and 23 in the 2024 article). Moreover, before referring to the incidents involving 1i and 3i as ‘signals,’ it is important to assess the strength and statistical significance of these events. The calculated significance values of each incident should determine the “strength” of each signal. According to the approach theory, this signal strength should increase over time — a sign that the source of the communication attempt is gradually moving closer to Earth (in this case the Fermi life-forms). In this regard, it is very important to minimize any confirmation biases when calculating and analyzing the signal strengths, so as not to pollute the data with so-called “I want to believe” effects.

Estimating the Signal Strength from 3I/ATLAS.

Estimates indicate that the probability of 3I/ATLAS’s trajectory being random, relative to the Approach Theory presented in the 2024 article, ranges from 1 in 140,000 to 1 in 1 billion (see also data sources in Figure 3). The goal is not to find the exact probability value — which is very difficult to do — but to document the fact that the event involving 3I/ATLAS is probably a very significant one, making it likely to be a “signal.” In fact, it may represent an even stronger signal (higher significance) than that of ‘Oumuamua, because 3I/ATLAS’s self-protective behavior was predicted before it arrived — an element in probability calculation that increases the significance of the event dramatically. That the next signal always is stronger than the last is also in accordance with the Approach Theory and represents an important pattern. Also an important pattern is the fact that the newest signals seem to address a larger crowd of people, as the signals become more obvious and stronger while getting closer. Hence, 3I/ATLAS not only sent an isolated “strong signal” that was consistent with the Approach Theory but also represented a stronger signal than the previous ‘Oumuamua incident, which also is an important aspect. This is because an increasingly stronger chain of “signals”, starting in 2005, indicates their steadily decreasing distance as they continuously approach Earth (Sponberg, 2024, figure 26). This ever-

decreasing distance between us and them should also reflect their ever-increasing degree of control of our surroundings. Since, according to the approach theory, for each step closer they take earth, they need a new and higher level of control to obtain their zero-risk status, which also should result in their ability to send stronger ‘confirmation signals’. As illustrated in Figure 26 of the 2024 article, the primary concern to the machine (or to natures ego) should be to maintain at all times a zero-risk position relative to whatever sent the zero risk signal. They cannot move closer to the source of the zero risk signal until it is completely safe to do so, as ensuring their dominant zero risk position in the universe is the machines number one priority.

According to the Approach Theory, their approach toward Earth was triggered by a signal that alerted the machine that its zero-risk position in the universe was about to be compromised — precisely when it received a transmission from us containing information about successful zero-risk strategies. According to the machine model in 2024, to the advanced life forms this stress signal shouldn't only mean “you are about to die,” but an even more dramatic message: “you are about to end in eternal hell.” This dramatic realization in the 2024 paper (Part 3) was the reasoning behind launching the zero-risk argument in the Paradise Machine model design, as this pattern seemed to be revealed in several places within the machine model’s design (including speed control via instantaneous signaling speed). On that note, the no-communication theorem seems to be just a continuation of this zero-risk pattern in the machine’s design, hindering lower life forms in the universe from instant communication. This limitation in speed for communication and movement for that matter (special relativity), compared to instant communication and movement, can be likened to being trapped in a cage on a universal scale, in which the no-communication theorem is one of the limiter. Hence, this speed limiter in the machine’s design (no-communication theorem) would thereby contribute to establishing the necessary zero-risk situation for nature’s ego, essentially by having emerging life forms ‘stand still’ in the machine, never able to communicate or to move fast enough to become a real threat in a very long time. But of course, only if they themselves are not limited by the same speed limiters. Therefore, according to the *zero-risk argument*, the machine and the Fermi life forms should not be restricted by the no-communication theorem.

A short article on the 3I/ATLAS trajectory in Sponberg (2025) calculated the interstellar objects self-protective trajectory relative to Earth, occurring at random, with a probability starting from 0.014%, or probability value 0.00014. This is Professor Loeb's team's independently calculated % and p-values, based on evidence 1 and 5 in figure 3. This statistical anomaly served as the foundation for the Galileo group's idea of a potentially hostile alien probe. From the

approach theory's perspective, I had to incorporate the 2024 prediction of the anomaly itself into the resulting probability. That is, not only to use the isolated probability for the anomaly in itself, but also to include the probability for predicting it to happen in advance. Such a combined probability figure is important for linking 3I/ATLAS to this article series, (more specifically to the Approach Theory).

Evidence	Description	Details
1	3I/ATLAS orbital plane lies virtually in the Ecliptic, though retrograde, $i = 175.11^\circ$	$p \sim 0.2\%$
2	3I/ATLAS is too large to be an asteroid	$p \lesssim 10^{-6} \times 1I$
3	3I/ATLAS shows no evidence of cometary outgassing	No spectral signs
4	3I/ATLAS approaches unusually close to Venus, Mars and Jupiter	$p \sim 0.005\%$
5	3I/ATLAS achieves perihelion on the opposite side of the Sun to Earth	$p \sim 7\%$
6	The optimal point to do a reverse Solar Oberth and stay bound to the Sun is at perihelion	Refer to Figure
7	3I/ATLAS's incoming radiant made it hard to detect sooner	
8	The ΔV needed to intercept Jupiter is small	Refer to Figure
9	The ΔV needed to intercept Mars is small	Refer to Figure

Table 1. Considerations which support the hypothesis that 3I/ATLAS is technological

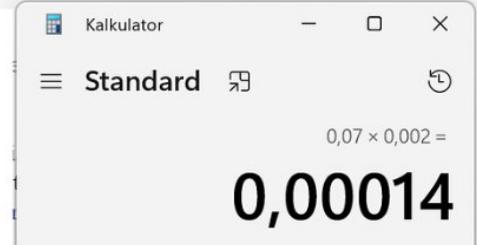


Figure 3. Two of the most obvious low-risk anomalies in the 3I/ATLAS trajectory (Source: Avi Loeb's group at Harvard & own work).

For simplicity, the chance of randomly predicting 3I/ATLAS's general low-risk anomaly one year in advance was set at 5%, but it is hard to assign a truly credible number. In any case, predicting this specific behavior of a new incoming interstellar object should be unlikely. Moreover, the stronger the risk-reducing anomaly of the interstellar object, the more significant it is to predict it in advance. The risk-reducing anomaly was both exceptionally strong and unique, as quantified by Loeb's group, even sufficient to raise real concerns regarding the potential hostility of 3I/ATLAS, making a 5% probability of predicting its self-protecting behavior in advance a reasonable estimate.

Based on this the lowest estimated total "signal strength" was set to 1:140 000 which illustrate the chance of this combination of events happening at random. To get to the highest significant

calculated probability of 1:1 billion, evidence 4 in figure 3 was included in the same calculation as before. This is because 3I/ATLAS's proximity to Venus, Mars, and Jupiter also reduced the likelihood of it being observed from Earth - it's just less obvious. In my view, the lowest calculated 'signal strength' of 1:140 000 is sufficient to demonstrate that 3I/ATLAS anomaly potential is linked to the Approach Theory and thereby to this article series. In particular in combination with the prior incidents, or 'signals', listed in the 2024 article. However, it must be up to the reader to judge how significant this scenario is. No matter what number you land on, everybody can agree that; 1. 3I/ATLAS displayed a strong protective or low-risk trajectory relative to Earth and 2. that this self-protective behavior of a potential approaching life form is aligned with the approach theory presented in the 2024 article.

In the same short-article on this topic (Sponberg, 2025), the reason for the special trajectory anomaly of 3I/ATLAS relative to Earth was compared to a criminal at a crime scene. If something is extremely important (as in the zero-risk argument), it's crucial to avoid overlooking any small details from the crime scene, even if they might seem trivial from a bystander's point of view. Put another way, if the criminal were to commit the crime — akin to Fermi life forms being committed to approach Earth based on receiving a zero risk signal — the criminal would do everything possible to minimize the risk of detection, down to the smallest details such as sharing information about a cigarette butt left at the crime scene. We might not have gained much information about the Fermi life forms if they hadn't hidden 3I/ATLAS so perfectly behind the sun, but if the goal is to maintain a zero-risk position relative to us, it makes perfect sense. If the goal is to achieve absolute zero risk relative to another life form, to prevent that other party from observing something they have influenced somehow, it would make sense. In conclusion, seen from the approach theories point of view, it was unsurprising that the comet's trajectory was configured to make observation as difficult as possible from the only planet in the solar system with intelligent life, Earth.

Circling in on the Universal Stress Signal and the No-communication Theorem.

The most central event in the scenario described so far in this article should be what triggered the entire approach process to begin with (presumably in 2005), the most central event in the machine, the signal for zero risk from an emerging life form in the universe. According to the machine model the signal for zero risk should be transmitted instantaneously to alert nature's ego, in the form of Fermi life-forms located behind event horizon (figure 4). Based on the logic of the Fourth Law and the machine model, zero risk should only mean one thing to the Fermi life-

forms; it should stem from an emerging life form in the universe that has managed to create pockets of constant abundance and used this energy-situation to reduce the degree of chaos (government rules), which eventually has led to achieving zero-risk strategies (as it is the only way this can be achieved in nature). Moreover, it should imply, in connection to nature's ego, that the signal was triggered by evil traits and that these traits have taken dominance somewhere in the universe. Hence, 3I/ATLAS's low-risk approach indicates that this meaning of the signal is true. This therefore support that 3I/ATLAS originates from a state of 100% love and intelligence (from Fermi life-forms), since it appear to follow the rules in the Approach Theory. In summary, a transmitted signal for successful zero-risk strategies discussed in this article could only be triggered by evil intent, which explains the low-risk behavior observed from 3I/ATLAS. Furthermore, this interpretation of what the zero-risk signal means to nature, and the Fermi life-forms, should already be embedded in the machine's design (Figure 7). In other words, the only information required by nature is the zero-risk signal itself, transmitted across vast distances — light-years away — via non-local quantum correlation. In combination, the quantum uniqueness of the signal for zero risk, with the pre-stored protocol of what the signal means to the machine should, in theory, be able to circumvent the no-communication theorem (more below).

Neither the 2021 or 2024 articles attempt to explain the precise mechanism behind the zero-risk signal beyond referencing the Fourth Law and the known peculiarities of quantum mechanics experiments. At the time, it was most interesting that the critical zero-risk signal originated from the same 'sensing mechanism' behind wave-particle duality and delayed choice quantum eraser effect experiments. The wave-to-particle response in the quantum world seemed to be a part of a built-in protection mechanism in the quantum world, triggered by what nature (or 'the machine') perceived as 'evil intent.' This based on the elevated energy state the observation, or the intent to observe, created in the machines system. Therefore, the elongative perspective of the triggering mechanism in a zero-risk situation emerged from the logic of the Fourth Law—the "the-more-evil, the-more-energy-drain" principle. This pattern of distinction, based on a higher energy state than the previous one, was thought to suffice for nature to differentiate "accepted evils" (such as observing nature's minutiae) from the critical "hell emergency level" triggered by a zero-risk event. This view has now changed, as what actually triggers the critical zero-risk signal is nature's detection of a perfect deception established by evil traits, rather than an evil act itself (Figure 6). Furthermore, this perfect deception is precisely what creates the zero-risk situation for evil traits, allowing them to persist in constant abundance with reduced chaos. From this point onward, they can operate completely unnoticed by their surroundings, as their camouflage has

been perfected to 100% efficacy. This new view now creates a unique and unprecedented scenario in nature, one that not only establishes the zero-risk condition for evil traits themselves but also generates a distinctive energy dynamic that likely triggers the zero-risk signal. More specifically, the perfect deception situation entails a constant demand for limitless energy (explained further below).

A Revolutionary Requirement for Unlimited Energy.

In this fifth article in the series on the Fourth Law, a new energy-enhancing concept for the zero-risk signal is introduced. However, the theory still implies that a zero-risk signal was transmitted from Earth around 2005 and that this signal has elicited an ever increasing response from advanced life forms ever since (as they come closer). The new energy-enhancing concept behind the signal offers a more refined explanation of the exact causality behind what triggers a unique quantum state superposition, which uniqueness should be what bypasses the no-communication theorem on the senders side. As long as this type of unique energy-enhancing state for zero risk only happens once in an emerging life form, the randomness in the no-communication theorem is removed. That is, if nature is a machine-like construct designed from the very beginning, as proposed in the Paradise Machine Model, then bypassing the no-communication theorem is not so difficult to imagine. Eliminating the randomness factor in the quantum entanglement communication process—by creating a unique superposition in the quantum world to represent the event—should be sufficient to counter the main “randomness argument” of the no-communication theorem from “the senders side”. Furthermore, if this unique correlation signal for zero risk from our end has a receiver at the entangled receivers end, that activates a *pre-stored protocol* within the machine, as illustrated in Figure 7, a mechanism of instantaneous signaling becomes conceptually plausible from the “senders side”.

The bizarre observations in *wave-particle duality* and particularly in *delayed choice quantum eraser effect* experiments indicate that there is a direct connection between our thoughts and the quantum world. The very strange results in delayed choice quantum eraser effect experiments clearly suggest that nature is highly attuned to the *intention* behind observation, rather than merely to detect the *physical act* of observation (as in *wave-particle duality*). According to the zero-risk argument in the machine model paper (part 4), nature's ego should not allow what it considers rivals with evil intent any room to plan in secret which support this finding. To allow what it consider to be evil traits “time to think” behind natures back would disrupt the machine's dominant position in the universe, throwing it off balance from its constant dominant zero-risk status. The same

urgent need for a dominant zero-risk status drives the idea of instantaneous signaling of the zero-risk signal. The machine's design should not allow its greatest threat any more time than absolutely necessary in the struggle for power within the system. Hence, the discovery of non-local correlations in the universe would probably not be a coincidence in nature if the machine model is real. In that case, the potential for instantaneous signaling is probably just a small aspect of the crucial signaling mechanism in the machine's design, enabling the signal to be transmitted across distances of up to 26,000 light-years instantly, after zero risk has been achieved anywhere in the universe.

The 2021 article that first introduced the zero-risk signaling concept suggested that this mechanism acted simply as a security barrier in self defence just in case, designed to protect against the possibility of a life form in the universe developing malicious tendencies. However, this view on the purpose of a hidden zero-risk detection mechanism shifted in the recent paper on launching the paradise machine model (Sponberg, 2024, part 3). The reasoning now suggests that the zero-risk detection mechanism was designed as a deliberate trap from the very beginning. That the designer of the machine knew someday someone in an emerging life form would activate the signal and that the receiver's end would understand what a signal for zero risk meant. Basically suggesting that the paradise machine was designed from scratch for it to happen in order to produce the paradise state. As discussed in detail in Part 3 of the 2024 article on the morality of the machine model design, such a gruesome production method probably was because whatever intelligence designed the machine had no other choice due to a higher "curse from God". Knowing that if they (The Fermi life-forms) didn't do it, their rivals (emerging evil traits) would do it to them producing their own 'evil paradise' which to natures ego (and thereby the Fermi life forms) would become a hell state. Hence, the observed zero-risk principle in the machine's design has made this reversed 'evil paradise' scenario impossible for obvious reasons. Essentially, despite its gruesome production process using a zero risk trap, the discussion on morality in the design was about upholding the fundamental principle of justice in the machines design. This thorough discussion of morality in Part 3 of the 2024 article also addressed Fermi's Paradox and defended the widely discussed Zoo Hypothesis within the SETI community. That they had no other choice but to design the machine in this way, through using a hidden zero-risk trap secretly monitoring us from a safe distance. At least upholding a principle of justice which should be necessary for the machine to achieve the $Eu = 0 =$ Paradise state. The point is that the trap wouldn't have been hidden and efficient if everyone knew we was being 'watched' from a

distance via a zero-risk trap, monitored from a great distance of between 1,500 and 26,000 light-years.

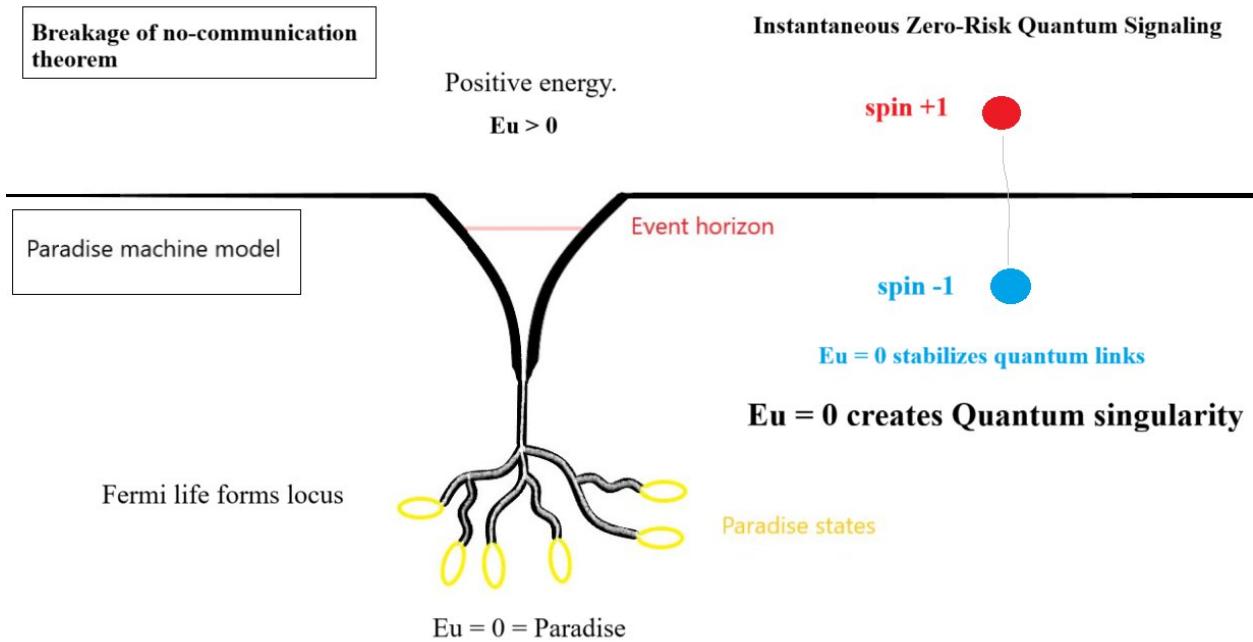


Figure 4A. Sketch of the $Eu = 0$ side behind the event horizon based on the paradise machine model. The tunnels or wormholes should be actively utilized, with billions of minor paradise states or villages scattered throughout.

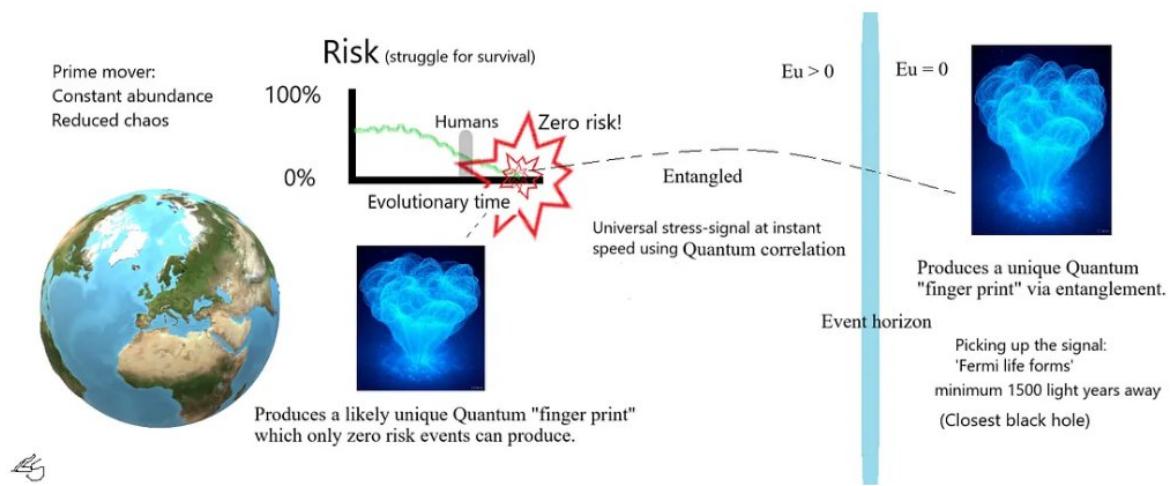


Figure 4B. The unique event of achieving zero risk in the struggle for survival should produce a unique energy signature in the quantum world. Already stored protocols behind the event horizon should know what it means and what to do next (approach the source).

Evil Traits' Path to Achieving Complete Zero-Risk Strategies Likely Involves Perfected Deceptions (reversed von Neumann chain).

As already mentioned, instead of waiting to an exceptional new high 'concentration' of evil intent to trigger the signal, the signal for zero-risk will likely be sensed through the achievement of perfected lies (as the two, evil and lies, should go hand in hand). The concentration of evil intent probably increases to its highest accepted level—high enough to execute zero-risk strategies with eagerness—but it is probably not what triggers the signal in the quantum world. 'The lie' itself has long been associated as a natural partner to evil traits in fourth law, a connection already established in the first article of this series (Sponberg, 2010, figure 6). However, that a natural behavior to evil traits is to constantly search for 100% *perfected lies* with eagerness in constant abundance, is a newer concept from the recent article (Sponberg, 2024, part 2). This represents a situation where evil traits due to its desperate need for camouflage naturally will stand "first in line" to trigger the awaiting zero-risk detection mechanism. The 2024 article continues to suggest that not only lying but also the ultimate goal of achieving perfected lies is a hallmark of evil traits in nature, directly connected to its demand for a constant abundance of energy. Hence the machine should know, due to its design, that evil traits always will stand "first in line" to trigger natures hidden detection mechanism in the quantum world. Furthermore, this explain why evil is so compelled to pursue pockets of endless abundance—as it becomes the only cradle in the universe where it successfully can "lay its eggs". For the same reason, this energy rationale in the fourth law should also explain why we have not seen true evil in nature before due to the second law of thermodynamics (limited energy). However, this time around, this same energy rationale—related to evil's constant chase after the perfect lie—becomes crucial for triggering the zero-risk detection mechanism in the quantum world. What's truly intriguing about perfected lies is how they for the first time essentially establish a risk-free setting for evil traits thriving in constant abundance and reduced chaos. By cleverly obscuring their less evil surroundings from detection they essentially become invisible, or impossible to detect at a certain point (similar to a reversed von Neumann chain). This likely explains why evil traits are always doomed to achieve absolute zero risk *first* in the survival game, by always being the first to succeed in perfectly hiding behind lies once constant abundance has become available (figure 6).

When lies become perfectly undetectable, even the less malevolent side faces a unique dilemma, as evil traits—without their awareness—seem to have traded places with nature's ego. Without their knowledge, they have now changed their course toward hell rather than toward paradise, if

the Paradise Machine model is correct. This means that the zero-risk trap is actually designed to save them, at the point when it had become too late to reverse who controlled reality in a “reversed von Neumann chain” situation. Both Bohr and von Neumann conceded that humans can never fully comprehend the nature of reality itself. The von Neumann chain implies that whatever happens to information before it reaches our awareness is forever beyond a human brains grasp. According to the *zero-risk argument* in the machine model, this situation would be desirable from the machine’s perspective, as it likely contributes to placing nature’s ego in its required dominant zero-risk position (by fully controlling information). As the design of the machines seems to allow new emerging life forms to create pockets of constant abundance and potentially invert the truth by 180 degrees, a situation very similar to that of a von Neumann chain is created in reverse. Why would the machine allow that? Forcing nature herself (via those who belong to its paradisiacal side) guessing what reality truly is while flipping nature’s favorable zero-risk position on its head. This unique and new zero-risk situation in nature on Earth then creates a “free lane” for what nature would label “evil traits” and the reason for generating a stress signal should be born. In other words, it is the perfect camouflage—the 180-degree inversion of truth used in the struggle for survival game—that actually creates the new zero-risk situation and triggers the alarm signal for zero risk. The question now is, how do nature detects this scenario? According to the framework of the fourth law, nature should theoretically discern what lies behind the perfect facade; however, its understanding extends no further than the information conveyed by the zero-risk signal. This extra information of what the simple signal means is likely pre-stored in the machine’s design as illustrated in figure 7 and will act accordingly (act if its an emergency situation). In a way, this situation marks the first successful attempt to artificially “reverse” the von Neumann chain at a localized level within the universe (e.g., on Earth), creating a new zero-risk situation at the same time. Furthermore, nature might interpret this effort as premature, as it too was about to be forced to stand in line, waiting for information from an unknown reality (the *casino rationale* in the 2024 article). If this theory is correct, it certainly offers a good reason for the paradise machine to respond to the new situation with a universal stress signal—since this would imply that nature’s natural enemy (intelligence with evil intent) is about to gain the upper hand within the machine - by controlling the information (thereby controlling reality). On that note concerning the von Neumann chain, here comes again John Bell’s quote used at the beginning of this article: *‘It is as if someone is playing a trick on us, as if being behind the scenes.’* This and the former 2024 article suggest that we should be glad for whatever is hiding ‘behind the scenes’ when nature is in control (being the Fermi life-forms) governing the emerging life-form towards

the paradise state $\text{Eu} = 0 = \text{Paradise}$. It should be natural for a life-form in the universe to belong to the paradise state, not to have triggered the signal for zero risk.

Forced Taxes Are Probably the Prime Mover to Cultivating Lies (“reversing” the von Neumann chain).

An underlying principle is that the most extreme cases of constant abundance probably is within modern governmental systems which force their population to pay high taxes into the governmental system (40–60%). This enforced money collection activity can be viewed as forcing energy to flow constantly in one direction, accumulating in isolated pockets in nature we call ‘governments’. This creates an unnatural energy dynamic within the governmental system which, according to the logics in fourth law, creates a perfect storm for cultivating zero-risk strategies for the first time in evolution on earth. The idea here is that what the taxpayers and the surrounding world think they pay for is eventually, as the lies are being perfected, the opposite of what they think they pay for. In this scenario, the forced inflow of energy (tax money) will “never get the job done,” which, from nature’s perspective, creates a trapped situation in an artificial cycle of endlessly demanding money (or demanding energy if you like). However, to turn this constant craving for money—or energy, into a perfect scam (“reversal of the von Neumann chain”), constant abundance is required in the first place. That is why the 2024 article argues that it was no coincidence the zero-risk signal was triggered in Norway and gave birth to the Fourth Law, as the country has, over the past decades, slowly established the perfect conditions for such an energy-scenario to unfold (Figure 6). It’s not because there’s anything particularly special or wrong about Norway; it’s simply a natural process that will eventually unfold as the perfect energy and reduced chaotic conditions (rules based order) are established. In a sense, you could say it’s because Norway has had a clever population that originally managed to conquer nature’s brutal context. However, the flip side of this success, according to the Fourth Law, has made it a safe haven for the development of evil traits (because of the misuse of the newly established constant abundance situation). Norway may, in fact, due to its optimal conditions in accordance with the fourth law, have been the first society on Earth to successfully “reverse the von Neumann chain,” thereby creating not only a zero-risk situation for the first time, but also the constant state of limitless demand for energy, as just described (Figure 6). On that note, it is suggested that this locked state first created in Norway—the continuous demand for limitless energy—is precisely what nature has responded to by generating the instantaneous universal alarm signal for zero risk. Again, as so many other cases in this article series, we see how nature seems to treat evil traits as an “energy issue” in a machine-like manner, rather than taking the evil intent “personally”.

That said, whoever forced to design the machine in this way might have personal issues related to evil traits (the “curse from God” scenario in 2024). However, the machine itself appears to operate without emotions—simply calculating the truth and rendering judgment based on changes in energy situations. The irony of the machines ice-cold design, as also discussed in Part 3 (2024), is that it simultaneously reveals its softer sides—for instance, ensuring that all children are safe from harm within the context of the machine. It also suggests that the machine is capable of forgiving ‘everything’, except for registered zero-risk events which should be very difficult to achieve, even if you try hard.

In theory, the superposition of the quantum state should be completely random in normal circumstances, which actually makes up the basis for the no-communication theorem. In theory, either a synchronized clock is needed in the designed machine for the two ends, or prior knowledge of a unique event that has never happened before. In the latter case, a synchronized clock scenario should not be necessary—or at least, that is the idea proposed in this paper, as it is the uniqueness of the zero-risk event that triggers the machine and separates the correlation from noise or randomization (Figure 7). However, for the superposition of the quantum state to change dramatically to an unique alarm state, for example being forced into a pre-determined unique superposition with a likely outcome of 1, a rather dramatic source of energy or power should be present. As this new alarm quantum superposition has never occurred before in nature, and happens only once, it must be a rather dramatic and likely unique force driving the critical event. As already discussed, it is tempting to believe that merely a *slightly* more evil intent - then the next to *almost* achieving zero risk, should not be enough to change the superposition to such an exclusive and dramatic state. In Bohrs world of thinking, this could might be seen as to forcefully collapse the wavefunction to a predestined and unique outcome, an “alarm state”, which never has happened in nature before. If the zero-risk signal is transmitted instantaneously via quantum entanglement, this likely satisfies the first criterion for circumventing the no-communication theorem in the proposed designed system (at least from the senders side). That is, the existence of a unique quantum state—triggered only once in nature in the $\text{Eu} > 0$ state (on our side of the event horizon), is the first step to remove the randomness in the entangled signaling process. For now, this article assumes that such a signal mechanism exists in nature. In fact, it further assumes that a signal for zero risk has already been sent from Earth around 2005, based on the Approach Theory from 2024 and the recent 3I/ATLAS situation that has already been widely debated over. To be honest, the most realistic confirmation that this suggested signaling mechanism exists might come from a stronger validation of the Approach

Theory by the Fermi life-forms in the future. If another confirmation signal after 3I/ATLAS, with even greater signal strength, is detected, it would further increase the credibility of the Approach Theory, which is based on the premise that a zero-risk signal is being generated from Earth.

One of the most interesting topics in this article is the exact quantum mechanism of how the zero-risk signal is triggered. Basically that evil traits have managed to create its own reversed version of the von Neumann chain in constant abundance, thereby reversing the zero-risk situation relative to nature's ego (see also 'the casino rationale' from 2024). The quantum mechanical details of how the signal itself is generated involve proposing a unique quantum superposition that has never happened on earth before. To activate a quantum state to such an extreme superposition, a correspondingly unusual extreme source of energy or power is likely required. Remarkably, if the quantum entanglement signal model proposed in this article is correct, achieving zero risk through perfected deceptions (180-degree perfected lies) would necessitate a constant infinite energy demand. To have this unique limitless energy-demanding situation in nature should not be underestimated as it is in direct contradiction to one of the core principles in how the universe is constructed (no matter how you look at it). Consequently, the relentless demand for energy through forced money collection endlessly consumed by a perfect scam should in theory be a critical scenario for nature. This scenario tests a fundamental energy limit of the universe, a locked situation that, if left unchecked, would continually attempt to draw unlimited energy from the universe for all eternity. It is therefore very tempting to compare this situation to an object in physics attempting to surpass the speed of light, as this situation too is endlessly demanding a supply of energy from nature. The attempt to surpass the speed of light is stopped by the universe due to its demand for endless energy, expressed in Einsteins famous formula $E=mc^2$. Seen through the lens of the fourth law, it is natural to ask: Is an attempt to develop intelligence in a more evil direction than nature accepts stopped in the same manner? As if the evil intent, or greed, needed to successfully achieve zero-risk strategies is nature's 'speed limit' when it comes to moral criteria? The paradise machine model suggested in 2024 that it is at this critical point, at zero risk, natures ego knows if the life form in question will place it in hell or not. Furthermore, this is why the question of zero-risk, or not zero-risk, is so extremely crucial in the machine's design and should therefore be seen as an "alarm signal".

At The Other End of the Zero Risk Signal; Nash Equilibrium and The Noble Ant.

Up to recently life on Earth has operated under the constraints of limited energy and natural chaos, as outlined by the Second Law of Thermodynamics and Entropy, establishing critical boundaries for emerging life (Kleidon, 2024). This energy-based boundary appears to serve a protective role in keeping evil traits in nature and the universe at bay. For instance, the first *zero-risk argument* in the 2024 paper (part 4) is precisely the Second Law of Thermodynamics due to this role in nature. According to the basics in Fourth Law, the principle of limited energy and thereby natural chaos has acted as a safeguard throughout evolution, preventing life from evolving in an “evil” direction, governed by Nash equilibrium (Figure 5). That is, until emerging life forms become so advanced that they develop the ability to manipulate the very same limited energy context. In the extreme, creating small pockets in the universe (aka modern governments with high taxes) of constant abundance that can be used to eliminate natural chaos by implementing *rules based order*. This was thoroughly discussed in Part 2 of the 2024 article. According to the 2024 article, the principle of limited energy in the machine explains why the vast majority of life on Earth, on the whole, remains on the “good side” and naturally aligns with the machine’s paradise state. This forms the rationale for the view that the sole criterion for life in the “Paradise Machine” to end up in the eternal paradise state is to avoid the unnatural act of triggering the zero-risk mechanism. At the point when a successful zero-risk strategy in the struggle for survival game is achieved, the machine has no choice but to label such elements as enemies—or evil traits—in order to protect the Paradise Machine’s ideal state (or natures ego) from being overtaken. After achieving zero-risk, evil traits should henceforth belong to the opposite of the paradise state—the hell state (due to the principle of justice in its design). However, this hell state in the machine should not be a natural outcome due to the principles outlined above (see also figure 5 below). It is therefore reasonable to assume that the machine would remain satisfied with the moral standards of all life on Earth, unless it has successfully achieved zero-risk strategies in the struggle for survival game. A situation which the machine should see as proof of a wish to hurt it—and eventually placing it in the hell state of their own evil paradise machine (if not stopped). This due to the curse scenario around which the machine has been forced to be designed (Sponberg, 2024, part 3). Hence, evil traits—as nature sees them—should be something novel and exclusive on todays Earth and should not be something the machine needs much of. Probably just enough to trigger the alarm signal and activate the stored protocol (Figure 7)—and thereby living up to its name, Paradise Machine.

When an emerging life form stabilizes the overturning of the Second Law of Thermodynamics for the first time, the Nash equilibrium should cease to function (Sponberg, 2010, 2024; *The 4th law explained with six slides*, 2023). As soon as the Nash equilibrium ceases to govern the direction of emerging life, it should initiate a merciless countdown for unchecked malevolent traits to accumulate power in nature, just waiting to trigger the hidden zero-risk mechanism discussed in this paper. On that note, achieving a “zero-risk” strategy in chaotic conditions should only be possible via children and babies, as they are inherently in a low-risk situation — yet it doesn’t seem to have triggered a zero-risk signal. This is probably because there will be consequences from the surroundings (and thus no longer free of risk), but if a modern attempt of establishing a “reversed von Neumann chain” by a modern government, there will be no consequences—and the actual possibility of achieving absolute zero risk will have been born. In a way, the design of the Paradise Machine could seem to liken nature’s ego to a baby, becoming a universal zero-risk trap by itself (detected as soon as someone wants to hurt it via the zero-risk signal). However, horrific acts against human children should still be registered by the machine as zero-risk strategies, thereby qualifying for the hell state. This argument also appears in the controversial “women-and-baby” hypothesis (used to explain why hypothetical Fermi life-forms exhibit a female *nature* guaranteeing nature’s eco safety), which supports this view. It underscores that the machine regards children as potential zero-risk objects, positioning children as pivotal elements in its design — essentially because anyone who harms a child (take advantage of zero-risk strategies) should be interpreted by nature as seeking to wound nature’s ego next. It’s also noteworthy that certain religious scriptures liken harming children to a “one-way trip to hell”. This topic was discussed in detail in the 2024 article and is therefore beyond the scope of the present paper. However, the “women-baby discovery” in the former paper that nature likely perceives a baby as a zero-risk entity also became crucial in shaping the Approach Theory. This, as the Approach Theory suggests, indicates that the Fermi life-forms revealed their “gender” in their first responses in 2005 and 2006 (the Women of Paradise story) being the first noticeable respons to receiving a zero-risk signal from earth. The short true story “The Women of Paradise from 2005 and 2006” now serves as a biographical foundation for the later theoretical development of the Approach Theory in the Paradise Machine model (Sponberg, 2025b). In the 2024 article, one of the central components in formulating the Approach Theory was the hypothesis that the “paradise women,” in connection with the discovery of the $Eu = 0 = \text{Paradise}$ formula (Fourth Law) in 2006, were in fact Fermi life-forms rather than a consequence of prolonged periods without sleep or food during the development of the formula (which was the only real assumption until 2024). The experiences with these imaginary women thus constituted the earliest and weakest instances, or signals, of the

Fermi life-forms approach (as a response to a zero-risk event on Earth). The initial contact-signals would be weaker and more personal, given that their distance at the time was considerably greater than in the present, with ‘Oumuamua and 3I/ATLAS, the signal would be much stronger in terms of how many people were reached and their degree of control over our surroundings. Still speculative, of course, but one of the main motivations for integrating the events in the “Paradise Women story” from 2005 and 2006 was that details of what occurred in their “Paradise Village” corresponded closely to what the Women–Baby idea proposed in February 2024 as the Approach Theory started to take form—namely, the reasoning behind why Fermi life-forms might possess a distinctly female nature: the reasoning for the production of peak intelligence was due to the simultaneous strengthening of the women-baby bond. According to the new zero-risk argument in the machine’s design, this would make it “safe” to produce the intelligence in the life-form, resulting in them having a female nature. The Women–Baby idea was entirely independent of the “Women of Paradise” narrative that emerged almost two decades earlier, which was perhaps the most convincing factor leading to the formulation of the Approach Theory. This last discovery in the article series was also the reason why I proclaimed that if this was real, the circle was closed, and there should be no more reason to write more on the Fourth Law (unless something dramatic happened). I kept my word until 3I/ATLAS came around in July 2025 and strongly confirmed the logic in the Approach Theory, which was the reason for writing this follow-up article. However, I will once again declare my decision to refrain from writing another article in this series, for the same underlying reason. If these ideas are indeed valid, there should be nothing further for me to contribute to the Approach process, as their full story on why they are here etc. has already been conveyed within the boundaries of this article series. Conversely, if the series is incorrect, there is no justification for devoting additional time to it.

According to the fourth law, a general hallmark of evil intent in the universe is its abnormal energy drain compared to good traits. The extreme energy drain when a life form closes in on zero risk at the human level, is likely due to the lies required for camouflage. At the ant and animal level, we observe that energy-intensive acts, such as torture for pleasure, have been selected against in nature, probably due to the same general energy principle. For example, ants, despite having the upper hand over their prey, do not prolong the prey’s suffering but kill it as quickly as possible. If such new “evil ants” had emerged during the millions of years of ant evolution, they were likely eliminated due to their higher energy demands. Hence, what has continuously won the struggle for survival in the ant world is what we still observe today: simply killing their prey without wasting

energy on prolonging the process governed by the Second Law of Thermodynamics and Nash equilibrium. This typical easy to observe “good behavior” in nature is what we observe in both animals and ants after millions and billions of years of natural selection on Earth. For these reasons, ants serve as “the biological proof” for the Fourth Law (Sponberg, 2024, Part 2), demonstrating the abstract theory with empirical data. The traits shown in *Ants* also clearly demonstrate how *greed* appears to lack fitness and momentum in nature’s chaotic context in contrast to actual solidarity (Figure 5 shows ants forming a living bridge for others to cross). This suggests that the ‘solidarity argument’ for creating pockets of constant abundance is a perfect lie, as the Ants indicate it should be the opposite (that true solidarity stems from natural chaos). This pattern is also illustrated in the much used Nash on Ducks illustration used in presentation material on the Fourth Law (*The 4th law explained with six slides*, 2023). Furthermore, Ants are also known for their fearless high risk behavior, never seeming to consider their own risk while protecting their nests, no matter what comes at them. This empirical observation of ants further reinforces the Fourth Law, also in relation to the zero-risk argument, suggesting that nature categorizes evil and good traits based on their risk level. This data from Ants therefore also supports the idea that nature’s limit and measurement for evil traits operates through willingness for risk. Not everyone has to be as fearless as Ants, but that it should be crucial to steer clear of aiming for completely risk-free strategies (which could be realized in constant abundance and reduced chaos).

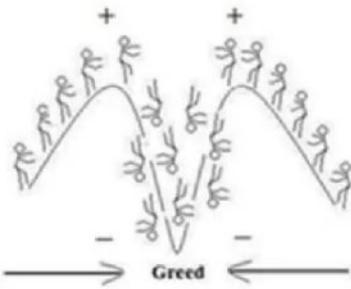
Establishing a general behavioral framework to standardize what constitutes “evil versus good” in nature is crucial. In this case the challenge lies in identifying the same energy pattern at the human level (as with for example Ants), which is complicated by our direct immersion in this context. Ants don’t act up; they probably don’t even consider that they are being observed, which makes them a clean source of information. The question is: can we use this data to interpolate into the human world? One purpose of this article series is to identify and standardize nature’s rules, providing a scientific, generalized framework to distinguish between good and evil in all life forms in the universe. The purpose of the 2024 article was to examine this from a machine’s perspective — as if nature were a designed machine whose role was to distinguish evil from good (a designed paradise machine). The general conclusion of the Fourth Law is that the prime mover and hallmark for identifying evil traits lie in their unnatural demand for excessive energy, resulting in it becoming a constant energy drain, a phenomenon unprecedented elsewhere in nature. Furthermore, evil traits will seek to reduce nature’s chaotic context, thereby dismantling the Nash equilibrium’s filtering of evil traits. According to the last two articles in this series, this and the 2024 article, the next natural step for evil traits will be to “reverse the Naumann chain” by striving to cultivate a wall

— or a constructed world — of perfected lies, establishing and thereby stabilizing a dominant zero-risk position themselves (which development should stress nature). On that note, a horrific experiment conducted on rats, known as the “Rat Utopia Experiment” (or Calhoun’s Mouse Utopia), placed a colony of rats in an environment with constant abundance of food and resources. The study showed that the rats developed what could be described as destructive behaviors (evil traits), including aggression, cannibalism, and other harmful traits (Calhoun, 1962). Some suggest this change to evil behavior in constant abundance to *boredom*; however, through the lens of the Fourth Law, it’s an indication that evil traits are starting to be given fitness in the struggle-for-survival game, with constant abundance of energy as prime mover in the process.

The prime mover of the entire process of evil traits is eventually achieving zero-risk strategies in the struggle-for-survival game — should be a context of constant abundance of energy (Sponberg, 2024, part 2). Hence, according to the Fourth Law, a key turning point in this universal scenario should occur when an emerging life form achieves sustained energy abundance. Before this stage in evolution (modern governments with high taxes), evil traits should not be able to accumulate, as we can observe, for example, in Ants. Furthermore, it is reasonable to extend this argument to the universe as a whole, suggesting that the same universal principle applies: wherever the Second Law of Thermodynamics operates in the universe, any life forms that exist there are likely to contain more good than evil, regardless of how advanced they are. Thereby generating a universal standardization of how to identify evil traits anywhere in the universe, which should be good news. It also implies that whatever created this world within such an energetic framework (with limited energy and natural chaos) would, for the same reasons due to the logics in Fourth Law, likely fall into the category of “good” (which its design suggests, as it has children at its pivotal concern — a rule we also can relate to). Another rule of thumb — as a consequence if the Fourth Law is valid — is that if we can observe planets and stars that appear to be spherical (an effort to minimize the energy state) located thousands of light-years away, it suggests that evil traits are not dominant in that region of space. This is because spherical shapes in space are also a direct consequence of a context of limited energy (in addition to gravity). Using this “rule of thumb” in the Fourth Law is reassuring, as to my knowledge, we have never observed anything other than spherical shapes for stars and planets regardless of how far away, or in which direction in space we look. This simple empirical observation of space at least suggests that evil traits have not yet advanced to the point of altering the very core concept within the machine that limits its further development — that is, the fundamental energy principle of space itself. As there is reason to believe that the Second Law of Thermodynamics is a primary curse upon evil traits, their first task (if they ever gained power

over nature) would probably be to redesign the universe (the paradise machine) in order to remove this universal curse. Therefore, whenever we observe spherical stars and planets, it should, according to the Fourth Law, indicate a positive sign for that region of space.

On that note, there should be a minor but extremely important difference between men and women in relation to zero-risk situations. What to us humans is a barely noticeable difference should, to the machine, be of pivotal importance — again due to the zero-risk argument. I will not spend much time on this topic in this article, but the so-called “women-baby idea” in the 2024 article (Part 3 and Part 5) is very important to the topic of zero-risk and the Approach Theory. It forms the foundation for why Fermi life-forms should have a female and protective vibe in their paradise state. Women’s natural affection toward helpless babies is likely a highly beneficial trait from nature’s perspective, as it could make the female gender — as a general carrier of intelligence — more resistant to executing zero-risk strategies. I’m not saying all women are granted the paradise state (this general guarantee should apply only to children), but rather that these features in the female life form are something the machine and nature’s ego should be deeply interested in. It’s therefore not so hard to imagine that the Paradise Machine, or nature, would use the female nature as a starting framework to add peak intelligence — which nature, we today should be able to at least recognize traces of in the final product of a 100% love and intelligence state (being the Fermi life-forms). Not that they are women per se, but has kept the female nature and in particular what’s has to do with protecting the baby. Thereby becoming immune to taking advantage of zero-risk strategies — and thereby always protecting nature’s ego, even at peak intelligence. The breakthrough this idea caused in the 2024 article was that, for the first time, it connected the strange episodes from 2005 and 2006 (the *Women of Paradise* story, Sponberg, 2025b) to the advanced life form that potentially picked up the zero-risk signal. Together with ‘Oumuamua and other incidents, a vision of an ongoing approach from advanced life forms since 2005 was emerging. Very speculative of course, but with confirmation from 3I/ATLAS a year later (Sponberg, 2025) I don’t regret launching the theory. The Approach Theory was thoroughly debated in the 2024 article (Part 5) and explains how the women-baby idea was one of the key discoveries for this work.



4'th law predicts that a 'sweet spot' (between the factors energy-context, chaos and risk) is created in natural chaos in which *good phenotypes* are produced over *evil phenotypes*. Ants which have evolved in this context for millions of years is used as "the biological proof" for 4'th law.



Figure 5. Ants creating a living bridge is labeled as "the biological proof" in fourth law. The absence of observed traces of pure evil in nature is attributed to the second law of thermodynamics, and that the reason to this pattern was described mathematically by John Nash (see also Ducks-in-pond on www.headbiotech.com).

The Innovative "Projected Demon Theory" potentially Visualizes the Zero-Risk Situation.

As already discussed, for evil traits to operate without risk and trigger the instantaneous universal zero-risk signaling, a perfect scam or camouflage should first be established in the struggle for survival game (Sponberg, 2024, part 2). According to the approach theory discussed in the same article, such a stress or alarm signal, if you will, has already been sent and has attracted an advanced life form toward Earth, referred to in the Approach Theory as *Fermi life-forms*. However, the focus of this follow-up article is on the factors involved in triggering the zero-risk quantum signal mechanism in the first place. The proposed method circumvents the no-communication theorem by producing a unique quantum superposition — one that remains entangled with one or more partners light-years away. Moreover, the extreme power source required to generate this unprecedented quantum super position is believed to originate from when the universe — or the machine if you like — detected a new situation that demanded limitless energy. Such a special situation, arises when malignant or "evil" traits manage to construct a wall of perfected deception — described as the first attempt toward "reversing the von Neumann chain," a phrase often used in describing the reality problem in quantum mechanics. However, such a successful attempt to flip the von Neumann chain should come with a new reality, the situation demands limitless energy from nature (or from the machine). Once again in this article series, the machine appears to identify

evil traits through its dependence on excessive energy consumption as their prime mover. This general energetic principle — linking destructive or “evil” behavior to extreme energy drainage — lies at the core of the proposed *Fourth Law*, which asserts that all malevolent activity ultimately results in severe energy consumption (Sponberg, 2010). Starting with the most basic life forms like Ants, Rats, and Ducks, this principle has via this article series also been applied to humans. Hence, this “universal hallmark of evil” (abnormal energy drain) in nature (or in the machine) now also appears to define the upper limit of evil itself, as it triggers the zero-risk alarm signal. As previously discussed, this likely occurs at the precise moment when malevolent intent finally succeeds in perfectly disguising itself as *solidarity and love* — perfectly concealing its true nature of *greed and evil* from its comparatively less greedy and evil surroundings (see Figure 6 below). This situation is also referred to as a perfect 180-degree flip of the truth, making the deception nearly impossible to discover if stabilized in constant abundance and reduced chaos. As already mentioned earlier, this new and special situation could also be viewed as a perfect attempt at reversing the von Neumann chain. To be honest, that is probably how nature views the problematic situation: that its natural rivals are able to operate risk-free by controlling all information (controlling reality), instead of nature herself which is the case in a so-called von Neumann chain. According to the Fourth Law, the ‘phenomenon’ of energy appears to function merely as a tool employed by the machine — or by nature herself — to regulate and contain evil intent in emerging life-forms. Its inherent demand for extreme energy consumption serves, in general, to expose and to control evil traits and intent. Yet it now in this article also seem to operates the ultimate warning signal, activated when malevolent traits for the first time gain the upper hand within the machine (successful zero-risk strategies in the struggle for survival game). The essential point is that, for nature, the excessive use of energy is not in itself the true problem; rather, it exists as a tool used to reveal and restrain its actual problem; evil traits.

Part 2 and Figure 10 of the 2024 article (modified in Figure 6 below) speculated that if the idea of a perfect lie “a perfect 180-degree flip of the truth” presented itself as a defining trait of evil in constant abundance, it might mean that early black metal artists in Norway unconsciously were revealing the behind of these perfected lies. In their struggle and eagerness to rebel as much as they could, they were basically project a 180-degree flip version relative to the new “solidarity and equality” political movement they saw growing around them in the late 1980s and early 1990s. As discussed in 2024, this period was also a very interesting time relative to the Fourth Law in Norwegian society. Seen through the lens of the Fourth Law, this time period was the beginning of a perfect storm for evil traits’ unchecked rise to power, due to the constant abundance from the

small society's oil and gas adventure combined with a small population that willingly used this excess energy situation to reduce chaos and further increase taxes on free capital (by choosing a socialist-minded government). Combined with the low population relative to governmental influence, which serves as a strong reducer of the chaos factor, Norwegian society probably at this time began its journey to become the first real candidate on Earth to soon trigger nature's hidden zero-risk detection mechanism. The interesting situation with the new black metal culture in this same "revolutionary" political time period (increase of taxes combined with rules based order) was that these artists also flipped the situation surrounding them 180 degrees in their art and should, in theory, have had a chance to display what was hiding behind the wall of lies that was growing around them. It is, of course, a very innovative way of using the Fourth Law to expose graphical images of real demons, but it is perhaps the most realistic method to depict such entities if they exist.

Was it a coincidence that these two situations appeared at the same time — the rise of the new satanic black metal culture within a society that, according to the Fourth Law, was about to hide its evil intentions perfectly? This was the period when Norway — fueled by its oil and gas industry in combination with its low, manageable population — began crafting the ideal conditions to enforce zero-risk strategies through its ever more influential government. Seen through the lens of the Fourth Law, Norway should, in modern times, become engulfed in a perfect storm — in terms of energy context and degree of chaos — to trigger the zero-risk mechanism. Hence rising the question; Was it Norway that triggered the universal stress signal and thereby attracted the Fermi life-forms toward Earth? During the late 1980s and early 1990s, as the perfect conditions for the development of evil traits began to emerge, the satanic black metal culture also started to take form. In this rebellious music culture, artists strove to oppose what they witnessed in their society (for example, as portrayed in the movie *Lords of Chaos*). Typical rebellious behavior involves wanting to do the *opposite* of what one rebels against. One way to view this pattern in any rebellion youth culture is as a 180-degree flip of the target of rebellion — which, in this particular situation, becomes especially interesting. In this case the classical 180-degree rebellious pattern should, in theory, expose what was hiding behind what they rebelled against.

The "projected demon theory" illustrated in figure 6 under becomes a method to get a glimpse of what hides behind the perfected lies, based on the logics in the Fourth Law. Hence, within this theoretical framework, black metal artists may have exposed hidden truths behind what they

rebelled against. As though if they, via their theatrical posing, exposed something that existed behind the edge of what was about to become a 100% perfect deception in the early 1990's in Norway. If the Fourth Law's interpretation of nature is true, these theatrical postures and "satanic elements" might not be so far from the truth, particularly before the black metal culture became mainstream later on. One could argue that the first artists who picked up on this new "evil vibe" had a stronger inner sense that what they saw in front of them was indeed a perfected scam. Moreover, their preferred visual performances and poses (which they used as promo material) could be seen as perfected snapshots of what was hiding behind the fasad, as their inner rebellious drive probably was most satisfied with these images (figure 6). Not that these artists managed to make perfect copies of demons hidden behind the perfected lies, but take us closer to how it might appear if such demons exist (the closest we have come so far in this field). This "projected demon theory" was a side project in the 2024 article, but it makes a good illustration of how the Fourth Law can be applied to explore new territories in new contexts of life. According to the fourth law, these pockets of constant abundance in the universe (modern governments with high taxes and reduced chaos) are the only places where evil or demons can exist and grow in the universe (if such exist).

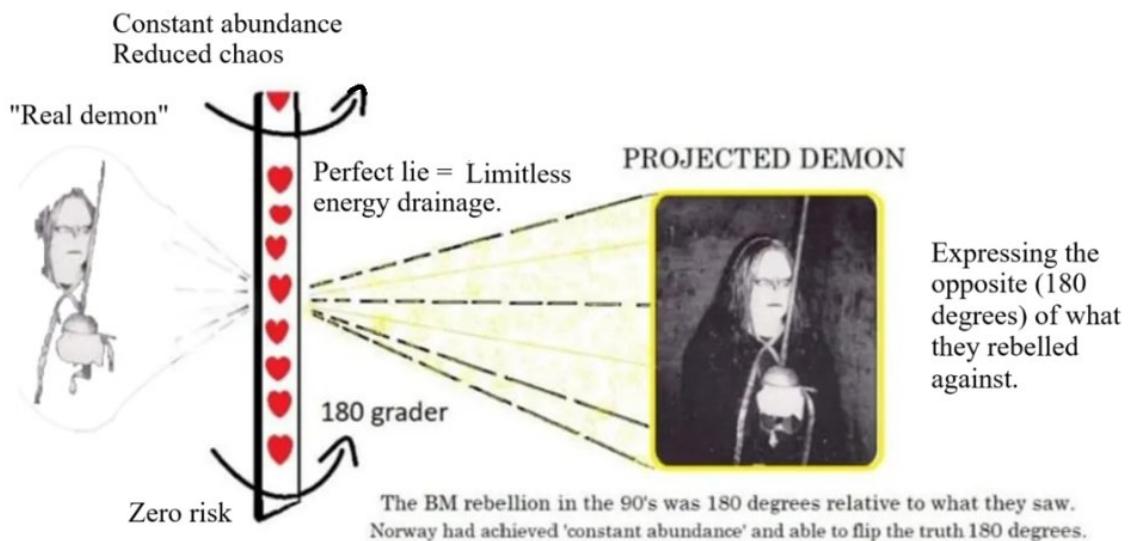


Figure 6. In the early 1990's it was only a matter of time before nature's secret zero-risk mechanism was about to be triggered (as this article series suggest it did in 2005). Will the future show that these first BM artists actually projected graphical images of real demons without their knowledge? (Modified from figure 10 of the 2024 article).

A fascinating observation on the issue of demanding limitless energy from nature is that nature seems to curb evil traits in basically the same way it controls the speed limit of the universe. The speed limit in the universe is, by law, set to the speed of light, c , based on the expression $E = mc^2$. I believe this connection to $E = mc^2$ adds significant value to the newly proposed triggering mechanism for the zero-risk signal. The point is, it wouldn't be the first time nature set a barrier and halted a certain development due to the constraints imposed by $E = mc^2$. This raises an intriguing idea: that a limited-energy environment might inherently prevent intelligent life in the universe from evolving in “evil” directions. After all, the same principle, the demand for limitless energy from nature, also controls our ultimate speed limit: the speed of light. Furthermore, the integration of the two related formulas, $E_u = 0 = \text{Paradise}$ (Fourth Law) and $E = mc^2$, has previously shown interesting results. The so-called Einstein-derived version of the Fourth Law, $E_u = 0 = c^2$, in which the c^2 (m^2/sec^2) constant replaces the “Paradise” term in the original formula, provided intriguing insight into the Paradise state and how, in theory, humans could reach that state based on the logic presented in this article series (Sponberg, 2021; YouTube video: *Einstein-Derived Version of the Fourth Law*). Later, the two related energy formulas supported the proposed tunnel structure behind the event horizon presented in the Paradise Machine Model in 2024 (see also ‘tunnel illustration’ under *Abstract* over). It is therefore, this time around, gladly welcomed to note that Einstein’s $E = mc^2$ once again seems to confirm a very important mechanism in the Machine Model and the Fourth Law — namely, to trigger its ultimate alarm signal (Figure 7).

What happens to the entangled counterpart on the ‘receivers side’ behind the event horizon?

Given that the zero-risk detection mechanism presented so far circumvents the no-communication theorem at the ‘senders side’, what happens to its entangled counterpart on the ‘receivers side’ behind the event horizon? The remaining question is: Can the unique quantum superposition presented so far in this article on the ‘senders side’ have an entangled counterpart, for example, 26,000 light-years away? For example, in the proposed $\mathbf{Eu} = \mathbf{0}$ state behind the event horizon somewhere in the Sagittarius region at the center of the Milky Way? This particular scenario has, of course, become somewhat interesting after it was discovered that both 3I/ATLAS and the mysterious Wow! signal from 1977 originated from this direction of black holes. Anyway, according to the Paradise Machine model an instant signaling mechanism is indeed needed, as even the closest black hole to Earth is about 1,500 light-years away (the closest alternative according to the paradise machine model). The bizarre but documented phenomenon of quantum

entanglement in physics, which in theory enables instantaneous signaling across the universe, exists for only one reason according to the machine model: to serve the zero-risk argument. At the same time, this should also imply that the no-communication theorem is universally valid, but only for emerging life-forms, and not for nature herself (to a pre-designed system). As a matter of fact, the article on the paradise machine model (the Approach Theory) suggests that a zero-risk signal already has been generated on Earth and drawn the attention of Fermi life-forms (Sponberg, 2024, part 5). Since these more advanced life forms should be reminiscent of those Enrico Fermi described, these life forms are referred to as *Fermi life-forms* in the Approach Theory being billion of years ahead of us in evolution.

The Paradise Machine model posits a hidden “quantum detection mechanism” embedded in nature, continuously monitoring for successful zero-risk strategies among emerging life forms (such as ours), on our side of the event horizon in the cosmos. On our side of the event horizon lies the positive energy state, where $Eu > 0$, essentially indicating that our world exists in the form of mass-energy. In contrast, the receivers of such signals, the Fermi life-forms (representing nature or the machine), are hypothesized to reside *beyond* the event horizons of black holes, existing in a mathematical format (as also discussed in the *Einstein-derived version* video), where the paradise state $Eu = 0 = \text{Paradise}$ is realized (Figure 4A&B). According to the paradise machine model this side of event horizon should be the location of advanced Fermi life-forms that makes up the state of *100% love and intelligence*. This article suggests that quantum entanglement serves as a mechanism to instantaneously alert them of zero-risk situations taking place anywhere on the other side (on our side) of event horizon in the universe. It should be a pre-designed system naturally integrated into nature from the very beginning of the universe. To remain consistent with standard quantum mechanics and the no-communication theorem, the proposed mechanism relies on pre-established quantum correlations and engineered protocols already stored in the machine at the receivers end. In other words, the information about the zero-risk situation has always been present in the machine and merely needs to be awakened by a unique ‘signature’ quantum-entangled event (Figure 7).

Black holes, with their event horizons, represent an important boundary between the Fermi life-forms (100% love and intelligence) and all other emerging life forms in the universe. According to the Paradise Machine model, the purpose of black holes in the machine is **1)** to produce *love and intelligence* via the process $Eu \rightarrow 0 \rightarrow \text{Paradise}$ (explaining why mass and energy disappear within

black holes), as well as **2**) to distinguish other life-forms in terms of risk from the Fermi life forms (they can observe us, but we cannot observe them because information flows in only one direction—into the black hole), while also **3**) the suggested tunneling system in relation to black holes (potentially worm holes) serving as portals and to play a logistic role in the machine.

The special gravitational design of black holes as “information consuming entities” (point 2 over) was highlighted in the 2024 article to support the zero-risk argument in the machine’s design (Sponberg, 2024, part 4). This is demonstrated by how the extreme gravity of black holes provides a one-way communication situation, similar to a one-way mirror effect, since not even light ever comes back from a black hole. In other words, if Fermi life-forms indeed resided on the other side of the event horizon, this universal design would mean that they could see us, but we could never see them, maintaining their dominant zero-risk status in the universe (and thereby again obey the *zero-risk argument* in the machine’s design). However, this should change as soon as a signal for zero risk has been registered and their approach towards the source of the signal begins (Figure 7 under). We should be able to see this urge to maintain their zero risk status in their approach process, as they “stick their neck out” and change their dominant risk-status while approaching the source of the stress signal. This was why the extreme risk-reducing anomaly in 3I/ATLAS trajectory got so much attention from me, as it confirmed this basic rule in the Approach Theory launched the year before. It was an expected pattern of behavior if the Fermi life-forms had anything to do with 3I/ATLAS (Sponberg, 2025). Simultaneously, while reducing their risk by clearly demonstrating a risk-lowering behavior in their trajectory (Figure 3), they could by doing so also be attempting to draw attention to this article series, as seemed to be the case with ‘Oumuamua. I suppose that drawing attention to this article series would also help reduce their overall risk scenario. However, if this approach theory of an advanced life form is true, they will never stop until they have achieved complete control (Sponberg, 2024, figure 26). This pattern of approach will therefore likely continue in the future, growing increasingly stronger over time. That is essentially my argument in the debate: time itself will reveal whether the Approach Theory is correct, so there is no real need to argue excessively about its credibility. On that note, it probably means that this article’s suggestion of a bypassing of the no-communication theorem (faster-than-light signaling — FTL signaling) is also correct — in a designed system, that is.

Based on the Zero Risk Argument in the machines design, it is also reasonable to assume that the Paradise Machine’s incorporates quantum entanglement (since we now know the mechanism, or

non-local correlation in principle is available to the machine), to notify Fermi life-forms instantly of a zero-risk threat in the universe. While all other emerging life forms in the universe are restricted by the no-communication theorem, which limits all their activities (continuing to adhere to the zero-risk principle in the design). The Paradise Machine likely views this as a way to control other lower life forms in the universe. It's as if the universal speed limit for lower life forms traps all emerging life (including us) in "an invisible cage" within the universe. To illustrate, *Voyager*, which now has traveled for about 50 years at a speed of about 61 kilometers per hour in one direction in space, has in that time covered the distance light travels in about 23 hours (NASA, 2024). Hence, if the Fermi life-forms in the Paradise Machine model operate thousands of light-years away and can operate at instant speed, the zero-risk argument is indeed upheld by implementing the no-communication theorem for lower life-forms in the same design.

What first attracted me to black holes in around 2022 was that the area in space in relation to black holes were the only place in the universe where mass-energy was known to 'disappear'. Which made black holes a perfect candidate to rapidly produce the 100% love and intelligence state already proposed in the Fourth Law in 2010 expressed as *Eu* \rightarrow 0 \rightarrow *Paradise* (Sponberg, 2010). In conclusion, there are many things about black holes and the event horizon that make them interesting to the paradise machine model, and black holes are therefore seen as a central "component of the machine". It is therefore reasonable to believe that the receiver(s) of a zero-risk signal resides in this area of space (for instance, the Sagittarius region 26000 light years away from Earth). So, when one of the anomalies noted by Avi Loeb's Galileo Project group was that the Wow! signal in 1977 and 3I/ATLAS arrived from approximately the same direction in the Sagittarius region of the Milky Way, it was of course interesting. However, the main focus and the only officially registered "signal candidate" in this article series from 3I/ATLAS is its trajectory anomaly, since it directly confirms the logic of the Approach Theory (see Figure 3 above).

Surpassing the No-Communication Theorem on both ends.

The conditions for a quantum entangled link on either side of event horizon probably differ significantly in the machine model (in the universe). On our side, $Eu > 0$, we have the Copenhagen interpretation of the quantum world (complete randomness), but on the other side in the $Eu = 0$ state, that would probably not be the same. The entangled counterpart in the $Eu = 0$ state on the other side of event horizon could have a more stabilized nature, as it resides in the lowest possible

energy state available in nature. Remember, $Eu = 0$ is an unknown and abstract energy state to us so far, the only thing we should know about this condition is that it's a state of *no energy*. However, the little we know (if the model is true) is that the state at the receiver's end would probably stabilize the quantum world to a less dynamic state than it has in the $Eu > 0$ state (or no dynamics at all). It is impossible to pinpoint exactly where in the paradise state the entangled counterparts are located; it can only be said that the counterparts reflecting the unique condition for zero risk should be *accessible* to the Fermi life-forms. I like to envision the quantum world in the $Eu = 0$ state on the other side of event horizon as equally and nicely placed "piano keys", all laying perfectly still waiting to be struck by only one quantum event (which it should already know the meaning of) - a successful zero-risk strategy on its entangled partner(s) on our side of the event horizon. It is, of course, extremely difficult to determine how the entangled signal might be received by the Fermi life-forms, but it is reasonable to assume that the design remains loyal to the zero-risk argument in the machine's design. Hence, the situation at the receiver's end should therefore ensure (with zero-risk) that a detected zero-risk event does not go unnoticed on the other end of event horizon. It is much easier to propose a credible mechanism on our end of the quantum signal, as most of this article has focused on. However, through the lens of the zero-risk argument, a unique quantum event triggered by a successful zero-risk strategy on our side should likely dramatically affect its entangled partner on the other side of the event horizon. Never giving the machine's true enemy on our side of the event horizon, what it considers to be evil traits, a chance to gain control unnoticed. This general behavior by the machine is also observed in the *delayed-choice quantum eraser effect* in quantum experiments (Sponberg, 2021 and 2024, Part 4), where nature or the Paradise Machine appears to respond to the intent to observe itself (before the intent turns into action). As so many times before in the suggested design, it will probably stick to the zero-risk argument on the receiver's side as well, preventing a potentially malevolent intelligence from having any time or room to escape its true intent (in this case to harm them). Hence, the signaling mechanism is likely adapted to the same zero-risk argument, also designed for maximized sensitivity on the receiver's end of the entanglement. That's how far I will go in speculating about how the instant signal might be received behind the event horizon, just assuming that the conditions for the entangled partner at the receiver's end will be different from our side due to the $Eu = 0$ condition, but suited to serving the zero-risk argument. And then to activate the instructions in a pre-stored protocol with information on what to do next, as envisioned in figure 7 under. This stored-information scenario, shown in Figure 7 below, is probably very important for the machine to bypass the no-communication theorem, which reduces the FTL signaling to one specific and anticipated correlation.

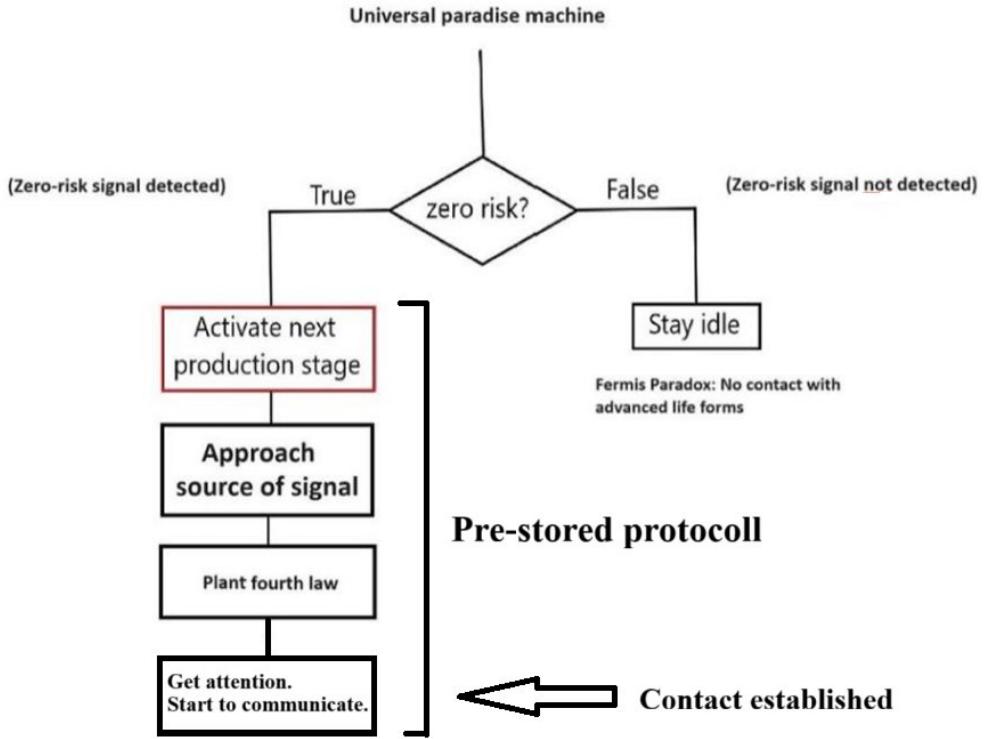


Figure 7. Modified figure 19 from the 2024 paper shows a suggested pre-stored protocol that is activated if the unique signal for zero-risk is detected by Fermi life-forms, transmitted from another life form anywhere in the universe.

The proposed lowest ground state in nature, the $\text{Eu} = 0$ state behind event horizon, would suggest that all quantum systems collapse into a single, uniform configuration with minimal dynamics (as in a quantum singularity of some sort). This should maximize the sensitivity of the detection mechanism. The question now arises, what would it take for its entangled counterparts on our side of the event horizon, in the $\text{Eu} > 0$ state, to destabilize one of these stabilized quantum states for the machine to notice? Most of this article has suggested a rather powerful triggering mechanism, invoking the universe's inner resistance to accepting a situation that demands limitless energy (Figure 6). As long as the triggering mechanism on our side is strong enough to surpass a given threshold, a threshold that would be enough to trigger the entangled partner in the $\text{Eu} = 0$ state to activate a pre-stored protocol. This should be received as a meaningful stress signal on the $\text{Eu} = 0$ receiving end, which is designed to activate the pre-stored protocol of how to precede next. As already mentioned, the recent "signal" from both Oumuamua and 3I/ATLAS should be part of this already activated response, the strongest so far, approximately 20 years into the approach process. At the end of the 2024 article I do predict that the future signals should from now on

address a wider majority on earth. That is, if the theory is correct the important stage now for humanity is that they slowly are trying to establish contact, by using interstellar objects which extreme anomalies related to this article series must be from them (based on probabilistic calculations). The idea is that the next signal should be even stronger than 3I/ATLAS which at one stage should start to convince even the most critical individuals, gradually and slowly, informing us of what is going on in the universe.

On that note, I should also mention that I will never go back to edit anything in the 2024 document after 3I/ATLAS, to avoid speculation about manipulation of the article to suite the 3I/ATLAS situation in 2025. Hence, if certain spelling errors etc. are found in the last version of the 2024 article, that's the reason. However, I had to change certain parts of Section 4 in the 2024 article after 3I/ATLAS due to the no-communication theorem issue, and include a reference to this very follow-up paper addressing the topic of instantaneous communication. Which take-home message is that the no-communication theorem should hold true for all naturally emerging life-forms in the universe, but not necessarily for a pre-designed system, such as the Paradise Machine model.

Result (technical presentation)

Technical Presentation of the Instantaneous Quantum-Entangled System in the Paradise Machine Model.

Quantum entanglement involves pairs of particles (e.g., particle A at $E_u > 0$ on our side of the event horizon and particle B at $E_u = 0$ behind the event horizon (where Fermi life forms should be located) in a shared and correlated state, such as: $|\Psi\rangle = (1/\sqrt{2}) (|E_u>0\rangle_A |E_u=0\rangle_B + |E_u=0\rangle_A |E_u>0\rangle_B)$. In standard quantum mechanics, measuring one particle (A in $E > 0$) instantly collapses the state of its entangled partner (B in $E = 0$), even across the event horizon. However, the no-communication theorem prevents this correlation from transmitting information, as the reduced density matrix of B: $\rho_B = (1/2) |E_u = 0\rangle_B \langle E_u = 0| + (1/2) |E_u > 0\rangle_B \langle E_u > 0|$, remains unchanged by A's measurement (but could potentially be circumvented as the $E_u=0$ creates a quantum singularity state). This limits entanglement to providing correlations, not signaling. However, in a universe designed as the Paradise Machine Model presented in the 2024 article in this series, could engineer an apparatus to exploit the documented correlation in quantum entanglement for instantaneous zero-risk notification. The mechanism would involve:

- Entanglement Correlation: When the unique zero-risk event triggered by a human or humans uniquely affects particle A (in the $Eu > 0$ state), B instantly is uniquely affected in the $Eu = 0$ state (which state creates quantum singularity), detectable by Fermi life forms behind the event horizon involving a pre-stored protocol.
- Pre-Stored Protocol: Embedded in the machine models design, the protocol states that particle A is only measured when a zero-risk situation — a unique event never before occurred in life on earth— is detected on our side of the event horizon. This ensures the measurement is uniquely tied to the event with information on what to do next.
- Detection Apparatus: A sophisticated device at the receivers end (at particle B), in the $Eu = 0$ state behind the event horizon, is pre-engineered to measure the unique correlation potentially in a quantum singularity state at $Eu = 0$, and to interpret this unique outcome as a warning, based on the pre-stored protocol. In other words, the information on what takes place at the senders end in quantum particle A, is already stored in a pre-existing protocol in particle A's correlated partner in the $Eu = 0$ state (Figure 7). Consequently, due to the machine's design, an intelligent life form light-years away from us will be instantly aware if zero-risk strategies have been successfully implemented anywhere in the universe that consist of positive energy, $Eu > 0$ (outside of the paradise state).

The zero-risk argument (Part 4 of the Paradise Machine model) posits that nature's focus on risk absence is to guarantee natures, or the machines version of the eternal paradise state $Eu = 0$ = Paradise (100% love and intelligence). Basically saying that the most influence evil traits ever will have in the machine, or in nature, is the second it triggers the zero risk detection mechanism. From that point on (as suggested in the Approach Theory to take place on Earth in 2005), the constant dominant zero-risk status of the machine should start working against the newly discovered threat (Figure 7). This is because a zero-risk situation, on our side of the event horizon ($Eu > 0$), represents a deviation from the machine's goal of producing its version of what 100% love and intelligence might be, but rather the opposite. In a way, you could say that the definition of what love and intelligence might be is relative to how the machine was designed from the very beginning, and that the moral debate more or less ends there. However, the suggested design belongs to a universally good side — via the general principle of justice imbedded in the design (Sponberg, 2024, part 3).

Conclusion

In this article series on the Fourth Law, a unique connection between evil intent in life, energy consumption and the quantum world has been proposed. This unique connection should be fully activated when evil intent is successfully executed without risk in the survival game, triggering a universal alarm signal that propagates instantly across the universe to protect a hidden paradise state in nature of 100% love and intelligence. However, this way of monitoring malevolent traits in nature via the quantum world would appear to violate the no-communication theorem in quantum mechanics.

This article proposes at least three specific conditions in the paradise machine model from 2024 that potentially allows it to circumvent the no-communication theorem.

1. The unique and energy demanding zero-risk condition, analogous to a one-time alarm system, creates a distinct quantum state with a reduced superposition that may challenge the applicability of the no-communication theorem, by removing the randomness factor.
2. If the machine is pre-designed for a specific condition (e.g., the critical zero-risk condition), an already established protocol that detects and processes the unique entangled correlation may be sufficient to enable advanced communication. All the system requires is a signal transmitted through a unique correlation from the sender's end described in 1. The information about the meaning of the unique signal has been stored in the machine since its design and does not need to be transmitted.
3. The unique energy condition behind event horizon, where the entangled quantum partners exists in a zero-energy ground state ($E_u = 0$), may all be equally stabilized, for example, in a quantum singularity state. All set to wait for the unique zero-risk threshold event in their entangled partners at the other side of event horizon, to activate a pre-stored protocol on how to proceed.

This follow-up article also introduces a more precise definition of what might trigger the zero-risk mechanism. It is likely not the evil intent itself, but rather its demand for limitless energy as it achieves 100% efficacy in concealing itself. This scenario may be most accurately characterized

as a successful attempt of ‘reversing’ the von Neumann chain, expressed within the framework of quantum mechanical terminology. This situation should create a zero-risk scenario where malevolent traits become “invisible”, operating risk-free for the first time in evolution. This new and unique risk-free situation in the struggle for survival game in nature, should be experienced by nature as a requirement of infinite energy. As a result the same infinite energy requirement that limits the universe’s speed to the speed of light, c , now also seems to halt the dominance of malevolent traits in the universe. This marks the second time in the article series on “Fourth Law” that the theory is directly connected to the logics in Einsteins related formula $E=mc^2$.

REFERENCES

Aiello, A. (2023). A probabilistic view of wave-particle duality for single photons. *Quantum Journal*. <https://quantum-journal.org/papers/q-2023-10-11-1135/>

Almheiri, A., Hartman, T., Maldacena, J., Shaghoulian, E., & Tajdini, A. (2021). *The entropy of Hawking radiation*. *Reviews of Modern Physics*, 93(3), Article 035002. <https://doi.org/10.1103/RevModPhys.93.035002>

Babcock, N. S., Montes-Cabrera, G., Oberhofer, K., Chergui, M., Celardo, G. L., & Kurian, P. (2024). Ultraviolet superradiance from mega-networks of tryptophan in biological architectures. *Journal of Physical Chemistry B*, 128, 4035–4046.

Bassi, A., Lochan, K., Satin, S., Singh, T. P., & Ulbricht, H. (2012, December 21). *Models of wave-function collapse, underlying theories, and experimental tests*. arXiv. <https://arxiv.org/abs/1204.4325>

Bell, J. (2025, August 23, 28:55). Lecture on quantum entanglement [Video]. YouTube. <https://youtu.be/BFvJOZ51tmc?si=VroEwiNMnjhQz0-V>

Calhoun, J. B. (1962). Population density and social pathology. *Scientific American*, 206(2), 139–148.

Galileo Project. (2025). The Galileo Project: Scientific research on extraterrestrial technological artifacts. Harvard University. <https://projects.iq.harvard.edu/galileo>

Greene, B., & Maudlin, T. (2025). [Video]. <https://youtu.be/VbXEc9vpeIM?si=HP6D3Bhz8fPuOGiS>

Gribbin, J. (2011). *Erwin Schrödinger and the quantum revolution*. Wiley.

Kim, S., et al. (2023). Observations of the delayed-choice quantum eraser using coherent photon pairs. *Scientific Reports*, 13(1), 36590. <https://www.nature.com/articles/s41598-023-36590-7>

Kleidon, A. (2024). *The second law of thermodynamics, life and Earth's planetary machinery revisited*. *Physics of Life Reviews*, 51, 382–389. <https://doi.org/10.1016/j.plrev.2024.10.009>

Loeb, A. (2025). Is the interstellar object 3I/ATLAS alien technology?

Loeb, A. (2025, October 3). A recap of the anomalies of 3I/ATLAS on the day of its closest approach to Mars. *Medium*. <https://avi-loeb.medium.com/a-recap-of-the-anomalies-of-3i-atlas-on-the-day-of-its-closest-approach-to-mars-6c2949fb16ab>

Meech, K. J., Weryk, R., Micheli, M., Kleyna, J. T., Hainaut, O. R., Jedicke, R., ... Fitzsimmons, A. (2017). A brief visit from a red and extremely elongated interstellar asteroid. *Nature*, 552(7685), 378–381. <https://doi.org/10.1038/nature25020>

NASA. (2024, December 1). Where are Voyager 1 and Voyager 2 now? *NASA Science: Solar System Exploration*. <https://science.nasa.gov/mission/voyager/where-are-voyager-1-and-voyager-2-now/>

NASA. (2025, July 2). NASA discovers interstellar comet moving through solar system. <https://science.nasa.gov/blogs/planetary-defense/2025/07/02/nasa-discovers-interstellar-comet-moving-through-solar-system/>

Nobel Prize. (2022). Nobel Prize in Physics 2022: “For experiments with entangled photons, establishing the violation of Bell inequalities and pioneering quantum information science.” *The Nobel Prize*. <https://www.nobelprize.org/prizes/physics/2022/summary/>

Penrose, R. (1994). *Shadows of the mind: A search for the missing science of consciousness*. Oxford University Press.

Penrose, R., & Hameroff, S. R. (1996). Consciousness, the brain, and spacetime geometry: An addendum on Penrose’s approach to the problem of consciousness. *Annals of the New York Academy of Sciences*, 929(1), 105–127. <https://doi.org/10.1111/j.1749-6632.2001.tb05711.x>

Schrödinger, E. (1935). Die gegenwärtige situation in der quantenmechanik [The present situation in quantum mechanics]. *Naturwissenschaften*, 23(48), 807–812. <https://doi.org/10.1007/BF01491891>

Sponberg, B. (2010). *Fourth law of thermodynamics: A philosophic introduction*. <https://headbiotech.wordpress.com/wp-content/uploads/2012/09/33831910-fourth-law-of-thermodynamics-a-philosophic-introduction1.pdf>

Sponberg, B. (2021). *Third paper: Fourth law of thermodynamic-1*. https://headbiotech.wordpress.com/wp-content/uploads/2012/09/third_paper_fourth_law_of_thermodynamic-1.pdf

Sponberg, B. (2024). Viewing nature as a paradise machine through the lens of the fourth law of thermodynamics. *Medium*. <https://medium.com/@sponberg1/viewing-nature-as-a-paradise-machine-through-the-lens-of-the-fourth-law-of-thermodynamics-0b3a232baae3>

Sponberg, B. (2025). My prediction about the next signals after 3I/ATLAS by applying the Approach Theory. *Medium*. <https://medium.com/@sponberg1/my-prediction-about-the-next-signals-after-3i-atlas-by-applying-the-approach-theory-da4e170dd18f>

Sponberg, B. (2025b). The Women of Paradise Story (2005). *Medium*. <https://medium.com/@sponberg1/the-women-of-paradise-2006-275a5fae4d1d>

Susskind, L. (2021). [Video]. <https://youtu.be/fKHMXvnaeSg?si=NvSY2bFuMkmUowKa>

The 4th law explained with six slides. (2023, November 7). YouTube.
<https://youtu.be/c4oR6QVBQKM>

von Neumann, J. (1932). *Mathematical foundations of quantum mechanics*. Springer. (English translation: Princeton University Press, 1955)

Walleczek, J., & Stillfried, N. von. (2019). Response: Commentary: False-positive effect in the Radin double-slit experiment on observer consciousness as determined with the advanced meta-experimental protocol. *Frontiers in Psychology*, 10, 1891.

<https://doi.org/10.3389/fpsyg.2019.01891>

Wheeler, J. A., & Zurek, W. H. (Eds.). (1983). *Quantum theory and measurement*. Princeton University Press.

Wikipedia contributors. (2024). Sagittarius A*. *Wikipedia*.
https://en.wikipedia.org/wiki/Sagittarius_A%2A

Wikipedia contributors. (2024). Wow! signal. *Wikipedia*.
https://en.wikipedia.org/wiki/Wow%21_signal

Wigner, E. P. (1961). Remarks on the mind-body question. In I. J. Good (Ed.), *The scientist speculates: An anthology of partly-baked ideas* (pp. 284–302).

Zeilinger, A. (2010). *Dance of the photons: From Einstein to quantum teleportation*. Farrar, Straus and Giroux.

YouTube video: Einstein derived version of fourth law. <https://youtu.be/Q4XqvoFUP38>

Front picture of John Bell. CERN Document Server, “Portrait of John Stewart Bell, author of Bell’s Theorem” (Photolab CERN, 1984).