## Guest Editorial

# Negative Evidence: The Gordian Knot of the Dispute on the Origin of SARS-CoV-2

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***"Speak the truth, even if your voice shakes."***

### Introduction

One of the darkest periods in the human history known as "COVID-19 Public Health Emergency" caused by the novel virus SARS-CoV-2 officially ended in the year 2023.[1,2] For obvious reasons, many politicians, administrators, governmental "experts," business leaders, and other interest groups desire nothing more than the complete obliteration of any memory of COVID-19 pandemic from the collective consciousness.[3] There are moments when it seems that those wishes are granted.[4] However, despite all the attempts to silence them, echoes of this nightmarish era return periodically and resonate powerfully within public discourse. Tragically, the destructive consequences of the pandemic itself and the associated overzealous policies will remain with us and remind us about that catastrophe. ***The important question is how are we going to channel those recurrent recollections?*** Are we going to use them in a constructive way, as important lessons learned to avoid future disasters? Or are we going to succumb to despair and anger and cause even more destruction?

It is hard to not be angry when reminded about the absurdities that were unleashed during the pandemic in the name of "protecting the public," ostensibly under the banner of "science" and rubberstamped by governmental "experts." Those authoritarian actions, which contradicted basic scientific principles and common sense, caused widespread devastation that exceeded the negative impact of the novel viral disease. An undeniably man-made catastrophe followed the apparent natural disaster of the global deadly plague. Many disturbing sequalae of this double cataclysm were discussed in previous editorials.[5-12]

The over-reaching administrative responses to the sudden emergence of the SARS-CoV-2 virus have occurred in the worst possible settings. The world was already economically unstable and divided into two hostile ideological camps, with severe political polarization.[13-15] Those turbulent circumstances compounded by the politicization of science and increasing epistemological crisis[16-18] resulted in the creation of the two antagonistic partisan narratives describing differently the origin of COVID-19, its epidemiological/clinical significance, and its treatment and prevention.[19-23] Inevitably, such irreconcilable divergence of opinions led to outbursts of heated disputes about the essential aspects of COVID-19. While all those COVID-19-related partisan debates are passionate and emotionally charged, the controversy over the origin of SARS-CoV-2 has escalated to such an extent that it has been described as acrimonious, toxic, and even violent.[24-28]

An important but frequently glossed-over reason for the hostility in the dispute over the genesis of SARS-CoV-2 is that the negative economic, social, psychological, and political consequences of the drastic non-pharmacological and pharmacological interventions were distributed unevenly between the two political sides. With few exceptions, the members of the right-wing camp have experienced severe economic losses. Their small businesses were forcibly closed down during lockdowns. Many were damaged in politically motivated riots that were allowed to happen. Small landlords were prevented from collecting rent. The promised emergency business loans were granted to bigger corporations that could afford legal representation. Moreover, conservatives were humiliated psychologically by left-wing administrative autocrats, who limited personal freedoms through lockdowns, social distancing, ban on attending church services, forced masking, suppression of early treatment, vaccination mandates, etc. Finally, many on the Right believe that circumstances of the pandemic reduced the electoral chances of their favorite politicians.

In contrast, the vast majority of left-aligned individuals and businesses were either spared financial ruin or earned immense profits as a result of the pandemic-related wealth transfer.[29] The leftist elites enjoyed secret visits to indoor hairstylists or dining without masks with friends at restaurants, while right-wing "peasants" were banned from those activities by COVID-19 orders.[30,31] While attending church in small groups was deemed to be too "risky," the same administrators not only allowed but applauded the participation in the "mostly peaceful" massive riots by left wing participants.[32,33] Those injured by the pandemic-related man-made policies could not help but wonder whether the beneficiaries of the COVID-19 pandemic simply exploited a real random act of nature—or was the pandemic itself man-made, either a well-planned and orchestrated event or the result of human negligence? Consequently, to them the origin of the SARS-CoV-2 virus is not merely an esoteric scientific problem, but an intensely emotional and personal issue. Finding one or more individuals to blame could be very satisfying. But those who were spared might resist considering the possibility of malice or carelessness by people on "their side," and dismiss it as a "conspiracy theory."

There are mechanisms that can explain the strong cognitive biases affecting both sides of the dispute.[34,35] Naturally, the strength of the evidence, not personal preferences, should determine which side is right. Unfortunately, so far it seems that decisive evidence is lacking, despite all the reassurances to the contrary.

Public interest in the origin of COVID-19 virus has been waxing and waning. Contentious disputes have been recurring in a cyclical manner. After a short period of retreating to the shadows, the feud about *what or who* brought the mysterious SARS-CoV-2 virus into the existence has entered the spotlight again, with the publication of a book containing many bold assertions about that subject in December 2023.[36] As it usually happens with controversial works, it has received both stellar reviews and some pushbacks.[37-40]

In January 2024, the non-profit think tank U.S. Right To Know (USRTK) has released an analysis of the grant proposal that was previously linked to the genesis of SARS-CoV-2 virus.[41] Similar FOIA requests and analyses were done previously by the group called DRASTIC and by journalists from *The Intercept*.[42-44] The USRTK article has been featured in popular video-casts "Rising" and "Breaking Points" and "Truth Over News by Epoch TV."[45-47]

Also, in January 2024 the SARS-CoV-2 origin theories were

discussed during high-profile hearings before the House Select Subcommittee on the Coronavirus Pandemic.[48-53] Those proceedings provided the perfect illustration of the dichotomous views on this matter espoused by Republicans and Democrats. The Republican chairman of this committee released a statement asserting among other things that the former National Institute of Allergy and Infectious Diseases (NIAID) Director Dr. Anthony Fauci and his boss Dr. Francis Collins have both conceded that the COVID-19 lab-leak hypothesis is not a conspiracy theory, while being vague about the meaning of so-called gain-of-function research.[48,49] This has been followed by the immediate accusations by the Democratic members of that Committee that GOP has gravely distorted Dr. Fauci's testimony.[54] Subcommittee member Raul Ruiz (D-Md.) stated: "Nothing we have heard over the last two days or in any of these proceedings has shown that there was a cover-up of the pandemic's origins, suppression of the lab leak theory, any effort to influence the CIA's origins assessment, or plot to orchestrate the Proximal Origin paper on the part of Dr. Fauci."[54]

In parallel to all of this, the Medical Freedom Movement (MFM) blogosphere became abuzz with posts about the origin of SARS-CoV-2 virus. Numerous MFM-aligned commentators have written at least one and sometimes several articles dedicated to this hot topic—too many to include all of them here.[51, 55-65] Simultaneously, in addition to the mainstream scientific journals, social media such as X (formerly Twitter) and Substack became the battleground on which the left-wing-aligned scientists who are the zoonotic hypothesis promoters have been vigorously rebutting virtually all the notions made by the MFM-aligned lab-leak theory proponents.[66-79] (Note that links to social media are volatile. Attempts to preserve the content, by ***Perma.cc***[80] and the ***Wayback Machine***,[81] have not been completely satisfactory. Apparently all Tweets are now catalogued at the Library of Congress, so there is a permanent record there.)

This battle over the origin of SARS-CoV-2 has been escalating in a very worrisome way. It has already resulted in the creation of what can be described as the unsolvable Informational Gordian knot (Figure 1).

**Figure 1.**The AI (*DALL·E 3*)-generated image depicting metaphorically the phenomenon of the informational Gordian knot

This editorial does not intend to advocate for any side in this heated dispute, or to provide a detailed review or synopsis of the most recent research on the origin of the SARS-CoV-2 virus. There are many such publications from both sides of the debate.[60, 82-84] The goal is to provide readers with important information that is typically missing from the standard partisan reviews and analyses, including features that make this particular dispute different and more perilous than other partisan debates over COVID-19. Arguments and evidence that are presented by both sides of the SARS-CoV-2 genesis debate will be compared, relying as far as possible on original sources.

As in previous editorials, negative evidence—the unexpected absence of information that should be present—will be discussed.

***Negative evidence*** shall not be confused with the ***absence of evidence***—that is the lack of any relevant information or data that could support or refute a hypothesis.[85] The distinction is especially important for scrutinizing the COVID-19 origin hypotheses since in many cases the evidence is not deliberately hidden but is simply impossible for the COVID-19 virus-origin researchers to obtain. Such situations can become very problematic if overzealous activists substitute their speculations in the place of unobtainable high-quality evidence.

## The Importance of Distinguishing Reality from Fiction

Imagine that in a court case your attorney reassures you that he has irrevocable "smoking gun evidence" backing your position while your opponents have absolutely nothing to show. Trusting your advocate, you do not question him. Then imagine attending the court proceedings and learning that the opposing side has a persuasive (even if incorrect) rebuttal to every single one of the "smoking guns." Moreover, they have plenty of evidence contradicting your claims, and your attorney is unable to counter it. The outcome is that you lose.

Hannah Arendt has keenly observed in *The Origins of Totalitarianism* that: *"The ideal subject of totalitarian rule is not the convinced Nazi or the convinced Communist, but people for whom the distinction between fact and fiction (i.e., the reality of experience) and the distinction between true and false (i.e., the standards of thought) no longer exist."*

Indeed, there is no one easier to manipulate than a person who will believe without questioning that a lie that is convenient for the manipulator is objective reality. Hence, tyrants, child predators, cult leaders, and charlatans use this technique frequently. Paradoxically, despite unprecedented access to many sources of information a large part of the modern public is willing to accept obvious lies as truth. Many authors have observed that we are living in a time of accelerating epistemological crisis.[16-18, 86] In this situation, the sources and methods of acquiring objective knowledge are challenged or corrupted.[87]

Two main mechanisms that can lead to epistemological crisis are relativization and politicization of truth and knowledge.[87] ***Relativization*** is the idea that there is no objective or universal truth, but only different perspectives or interpretations that depend on one's culture, context, or preferences. ***Politicization*** is the process of making something a matter of political debate or controversy, rather than a matter of factual or scientific inquiry.[13,88,89] These processes foster a culture of conceptual rigidity and tribalism, in which people only accept information that confirms their preconceived notions and is shared by the group to which they belong, while rejecting any information that challenges them. The current epistemological crisis has led to creation of hermetic partisan information bubbles and echo chambers that sway the audiences towards manipulative partisan narratives and away from politically "inconvenient" truth.[90-95]

The dispute about the origin of SARS-CoV-2 virus illustrates perfectly all the above. We have here two opposing camps that are locked in their hermetic information bubbles. They both claim that only their theories are correct while the theories of their opponents are false and "disproven." Both sides periodically produce analyses that look convincing for the lay audience, which are repeated like gospel within their echo chambers, while being rebutted or ignored by opponents. The partisan audiences trapped inside those informational silos are not even aware of those rebuttals since they either do not read anything that the opposing side is producing or reject a priori any opinions that are not consistent with their "party line." Ultimately, for both sides of the debate the line between reality and fiction becomes blurred.

Therefore, to navigate the perilous waters of the ongoing debate, it is necessary to look beyond the walls of our echo chambers / information bubbles, not to be seduced by our opponents but to learn what is real. We already know that many of our opponents lie compulsively to advance their agenda. However, that does not mean that people who claim to be our friends have to tell us the truth. They can tell lies too for many reasons, and not all of them have to be nefarious. Sometimes our true allies and friends make erroneous claims because they sincerely believe in them.

To achieve the ultimate victory, we must strive to discern ***what is true, what is false, and what is uncertain*** and cannot be determined.[96]

## Hypothetical Scenarios of Origins of SARS-CoV-2

As can be seen from the cited sources, numerous hypothetical scenarios for possible origin of SARS-CoV-2 virus have been proposed[97] by both officialdom and dissident scientists.[25,66,82-84,97-105]

### Zoonotic or Natural Origin Theory

This claims that SARS-CoV-2 has developed and evolved naturally (without human intervention) most likely in the horseshoe bats' population (see Figure 2). This theory has two main variants: (1) a direct spillover to humans through direct contact with bats owing to human encroachment on bats' habitat, or even (somehow) due to climate change;[106] (2) transmission to humans through an intermediate host such as pangolins, deer mice, palm civets, raccoon dogs, ferret badgers, red foxes, domestic cats, rice field rats, and possibly other species.[107]

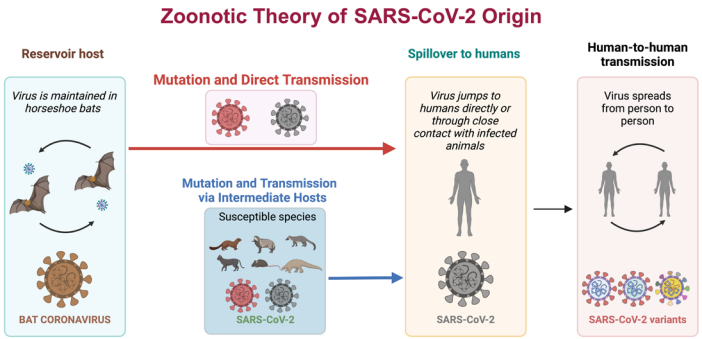


**Figure 2.** Zoonotic theory of SARS-CoV-2 virus origin

### Lab-Leak Theory

Most commonly, when journalists use the term "lab leak" they refer to the theory that SARS-CoV-2 virus was manufactured. This is actually a cluster of few distinct hypotheses (see Figure 3), often grouped together in the popular press although they are mutually exclusive: (1) **accidental release of a captured natural virus** that researchers had collected to study; (2) **accidental release of a manufactured virus**; (3) **deliberate release of a manufactured virus** with the malicious intent to cause the pandemic in order to create a crisis beneficial to those responsible for the release. The virus was hypothetically manufactured by genetic engineering, mainly by use of gain-of-function methodology.

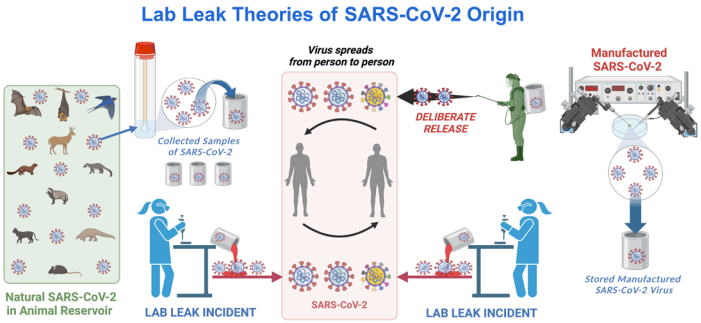


**Figure 3.** Lab-leak theory of SARS-CoV-2 virus origin

### 'No-Origin'-Theory

Frutos at al.[25] proposed the interesting concept that the origin of SARS-CoV-2 simply cannot be found, since the emergence of a pandemic virus is not a discrete, singular "de novo" event but a continuous process with blurred lines of origin. They propose that there is no determinable singular "origin point" to any living organism including viruses. Instead, there is simply an evolutionary, continuous selective process in which chance and environment play a key role. Sometimes the intermediate steps in such a continuum are narrow enough to be determined, but in other cases they cannot be. Those authors suggest that SARS-CoV-2 may belong to the undeterminable category.

### Meteor-Origin Hypothesis

Steele et al. suggested that COVID-19 arrived on a meteor, consistent with the theory of panspermia.[102,103] This theory, mentioned here only for completeness, did not get any traction. Clearly it could not serve any political agenda.

## What Compels Inquiries into the SARS-CoV-2 Origin?

In an ideal world free of corruption and tyrannical administrators, in which scientific institutions were apolitical and credible, without political polarization or power asymmetry, the main impetus to investigate the genesis of a new pathogen would be the desire to prevent or mitigate future pandemics. Gaining a detailed knowledge about the time, place, mode of origin, and initial evolution of the novel virus would allow us to identify its original reservoir and its primary transmission routes to guide the development of better surveillance and response systems. Such knowledge would also be used to design effective early treatments and minimally burdensome and low-risk methods of preventing infections caused by similar pathogens. Unfortunately, we live in the real world, which is a perfect antithesis to this ideal. Therefore, in addition to these benevolent reasons, inquiries into the SARS-CoV-2 origin must consider psychological, political, and commercial reasons.

### Psychological Factors

As noted above, the specific consequences of the COVID-19 pandemic evoked specific psychological reactions. Additionally,

psychologists have observed that in general people whose lives have been upended on a personal level by a powerful cataclysm tend to look for personal, human culprits rather than blaming impersonal acts of nature.[35,108-110] Apparently, assigning responsibility for the disaster to human actors, even without evidence, provides significant comfort. It eliminates two interconnected mechanisms that cause chronic anxiety: lack of control over future disasters and lack of certainty about the cause of the disaster. In contrast to elusive and uncontrollable acts of nature, humans can be identified, controlled, or eliminated.[111-113] Such psychological tendencies are frequently described as maladaptive coping mechanisms, leading to the formation of "paranoid conspiracy theories."[86,114,115] Many conspiracy claims were indeed delusional and wrong. Yet, even the most devoted skeptics acknowledge that some conspiracies were proven to be real.[116,117] ***Ironically, such true conspiracies were almost never uncovered by overzealous conspiracy theorists***.[118] In fact, even well-meaning but overly emotional proponents of conspiracy theories can unintentionally help the real conspiracies to remain hidden. Disseminating easily debunked false claims about the real conspiracy does not help to expose it. Rather, the actual conspirators will use such obviously false claims to ridicule and reject the legitimate accusations that are directed against them.[119,120] Moreover, driven by rage, irrational conspiracists may implicate innocent bystanders. The wrongly accused will instinctively spurn any even plausible conspiracy theories because they were unjustly dragged into them by activists. Other previously neutral individuals who have witnessed such reckless accusations may become deeply disturbed by them. Consequently, they can turn into vocal opponents of the most reasonable conspiracy theory, simply because those who promote such theories acted unethically. As a result, overzealous conspiracy theorists will end up hurting the cause they claimed to uphold.

<u>Political Factors</u>

The debate over the origin of SARS-CoV-2 virus became politicized from its onset.[19-22,121] This should not be surprising since pandemic-related policies enacted mostly by left-wing politicians have severely damaged members of the opposite political camp. On the other hand, politicians on both sides have been shamelessly exploiting the issue of the genesis of COVID-19 virus in order to manipulate their constituents and advance many hidden agendas. Therefore, members of the public should be very vigilant to avoid being manipulated by their own elected representatives and partisan activists.

<u>Commercial Factors</u>

The rampant politization of the debate over the origin of COVID-19 has been associated with pervasive sensationalization. Sensationalized fictional tales sell better than boring true stories, especially to an audience that is already significantly biased and prefers "infotainment" confirming their biases over reality-based reporting. Mainstream journalists, internet influencers, and content creators are taking full advantage of this situation. It is easy to generate money-earning "clicks" when even the most mundane or flimsy story is presented as a "bombshell" or "smoking gun." With successful monetization of sensational but dubious stories, the content creators may succumb to "audience capture," that is to a self-reinforcing feedback loop that involves telling one's audience what it wants to hear and getting rewarded for it.[122] The "infotainers" make a good profit, but sober reality (e.g., steady but slow progress) is replaced by audience-gratifying excitement fiction (e.g., "The long awaiting breakthrough has occurred!" We have "smoking gun" evidence! "Case is closed!"). The audience is excited for a while, but ultimately the promised breakthrough fails to materialize. At this point, the alleged "smoking gun" is put into the memory hole, soon to be replaced by the new viral excitement that also ends in failure. Such endless cycles are occurring with such regularity that they can be called "futile cyclic excitement events" (See Figure 4).

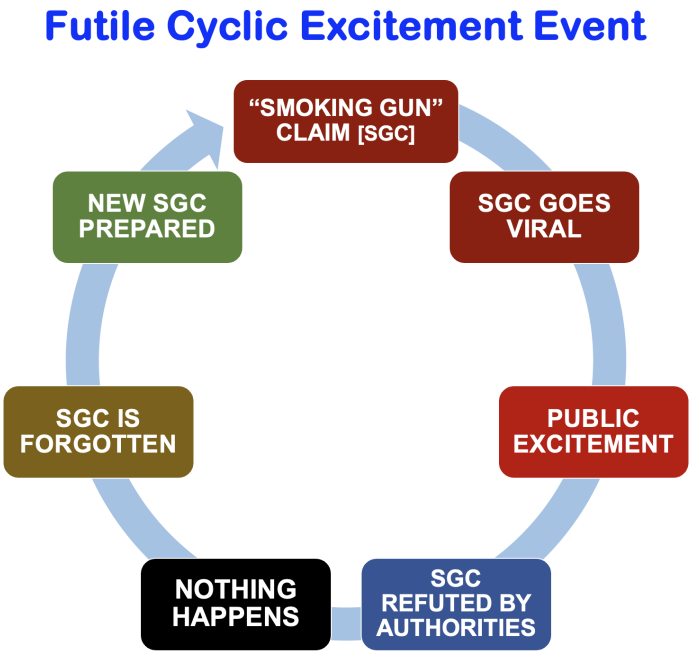


**Figure 4.** Futile cyclic excitement events

**Distinctive Features of the SARS-CoV-2 Virus Origin Debate**

While there are many hypothetical scenarios of COVID-19 virus origin, the main dispute is between natural (zoonotic) and manufactured virus (lab-leak) hypotheses. This debate over the origin of SARS-CoV-2 virus has many distinctive features that sets it apart from other COVID-19 related partisan disputes.

The **acrimony** in the controversy has been so severe that academic virologists have been harassed with threats of murder, physical violence, and even sexual assaults.[24,26,125-128] The right-wing-aligned part of the public had been distrustful of official academia even before COVID-19.[129] That distrust escalated into open hostility during the pandemic.[129]

The mistrust and disdain towards mainstream academicians had deep roots. For many years the luminaries of the left-wing-controlled academia have been preoccupied with progressive virtue signaling.

The conservative public had been offended, bewildered, and belittled by progressive academician leaders for years.[129] Hence, the conservative audience cannot be expected to show "full trust and confidence" in mainstream academia. Still, the threats of violence and harassment are very disappointing and inconsistent with the Christian ethics that the majority of conservatives profess. Being aware of the growing gap between the academic community and the public, some members of the academic community are trying to remedy the situation.[129] However, the reconciliation between conservative public and mainstream academia is unlikely to occur soon.

Acrimony has progressed to classic **witch hunt** scenarios.[130] Certain previously obscure individuals have been labeled as the masterminds who created the evil virus, based upon

speculations guided by vague clues. Those accused "witches" were *not* high-ranking functionaries of the regime that forced atrocious COVID-19 policies on the society. The accused have been caught in the crosshairs of obsessive Holy Inquisitors because they were scientists studying microorganisms related to the cursed SARS-CoV-2 virus. Therefore, the modern-day Torquemadas[130] have proclaimed them to have brought the plague upon us through their sophisticated genetic engineering techniques that seem to be as potent as evil sorcery.

The biggest problem here is that these modern-day "witches" may be either guilty or not guilty of the nefarious acts of which they are being accused. However, due to circumstances that are beyond anyone's control, it is impossible to discover absolute proof of either their guilt or innocence. For this reason, claims of their guilt are prejudiced, based upon weak circumstantial evidence, unfairly enhanced by frivolous conjectures and speculations, and defended by self-sealing reasoning.[132] Even more disturbingly, some "Inquisitors" appear to be obsessed with the alleged "witches" to such extent that they post personal data and picture of the families of the accused on the internet. While those vigilantes do not call (yet) directly for burning the witches at stake, they do foment public hatred. Such induced hatred may ultimately result in violence. This type of conduct has been classified recently as stochastic terrorism.[133] It is important to note that while society is distracted by this type of witch hunt against supposed evildoers, ***the real villains who committed their crimes in front of the public are not punished and continue to prosper from their crimes***. Also, the angry mob is not told that some of the accused had called for honest investigation of the virus origin, including the lab-leak hypothesis.[99]

Another feature of the origins debate is the exquisitely **chaotic and complex scientific background**, requiring knowledge beyond the reach of most members of the public. Most lay people can easily understand basic medical concepts such as sudden death, myocarditis, or aggressive cancers. But not everyone can intuitively understand what a "furin cleavage site" is or what "gain of function" actually means. In addition, the opinions and attitudes related to the origin of SARS-CoV-2 have changed frequently, especially on the side of official academia. The mainstream experts went from vigorous denial of any validity of the lab-leak theory (as demonstrated by so called "Proximal Origin Paper") to calls for its "serious investigation."[99,134,135] On the other hand, the opinions of the scientific dissenters, while more steady in favoring the lab-leak theory, are very hard to follow since those are largely disseminated in different informal types of publications from preprints to Substack and X/Twitter posts to video presentations on Rumble, since most dissenters have been denied access to official academic publications. To understand the origins debate, the lay public requires substantial assistance and guidance by highly specialized experts who are immersed in this subject. Where is such trusted expertise to be found?

### The Experts' Opinions Stalemate

As noted above, the severe political polarization and politicization of science has resulted in the formation of isolated partisan information bubbles / echo chambers in which both lay audiences and their trusted experts are trapped.[90] There is very little (if any) cross communication between those two ideological silos, and even when it occurs, there is simply a clash of opposite opinions, both of which can be perceived as logical and plausible by the lay members of the public.

Unbeknownst to many who are locked inside their info-bubbles, for every sensible-appearing right-wing claim there is a sensible-appearing left-wing counterclaim. There is a plethora of examples. For instance, right-wing experts claim in very diligently written articles that ***"papers claiming a zoonotic origin have all been debunked,"*** but left-wing aligned experts will claim in very eloquently written papers that ***"the lab-leak hypothesis is dead in the water"*** and ***"the lab leak and zoonotic-origin explanations are not equally probable, and the available evidence favors the latter."***[60,71,82]

Similar point-counterpoint arguments are made concerning the endonuclease-fingerprint claim that is still considered to be *"a smoking gun"* by many lab-leak theory proponents. In the paper entitled *"Endonuclease fingerprint indicates a synthetic origin of SARS-CoV-2,"* its authors claim that they found the proof that SARS-CoV-2 was bio-engineered due to presence of a peculiar pattern of unique restriction endonuclease recognition sites that in their opinion cannot happen in nature.[136] This claim was met with the rebuttal paper entitled "Updated analysis to reject the laboratory-engineering hypothesis of SARS-CoV-2," in which the authors stated: "The analysis clearly shows that the endonuclease fingerprint does not indicate a synthetic origin of SARS-CoV-2 and engineering a SARS-CoV-2 virus in the laboratory is extremely challenging both scientifically and financially. On the contrary, current scientific evidence does support the animal origin of SARS-CoV-2."[70] A comparable claim and counter-claim scenario exists for the assertions of the "proof of engineering" related to the furin cleavage site (FCS) in SARS-CoV-2 virus.[137,138]

And those are only selected examples of the long string of the stalemates, that include also such alleged "bombshells" like the DIFUSE grant and "COVID-19 virus patents" claims.[41,73,139] It is beyond the scope of this editorial to discuss all in detail but it is important to emphasize that neither side can objectively prevail despite claiming that it can. Both the claims and counterclaims frequently make perfect sense to the "average sensible person." This situation resembles the ***self-sealing argument*** fallacy that occurs when an argument is made that no evidence can possibly refute, and yet there is no evidence that proves that the conclusion is true.[132] The best way of resolving the self-sealing loop of discussion is to simply ignore it, since the proposition affected by this circular mechanism is simply not solvable.[133]

One method employed by dissidents is to challenge the experts to debate, offering a cash inducement of as much as a million dollars. Challenges are almost always turned down, often with the statement that deigning to engage would give a dissident undeserved credibility. But it would be a grave error to assume that refusal of the inducement is an admission that one does not have a good case, as Rootclaim.com does. Its very first challenger, Peter Miller (credentials unstated) won the debate on Rootclaim's own terms and got paid $100,000. Miller made the case against the lab-leak theory.[140] Rootclaim still believes that it is correct in stating that, by Bayesian analysis, there is a 99.8% probability that the pandemic emerged as a result of a virus that leaked from a lab in Wuhan, China. It attributes its loss to the debate format's favoring the debater with more memorized knowledge of the issue.[141]

Rootclaim, like many advocates, makes a statistical argument. Statistics does not prove anything; it simply calculates the probability of a result based on inputs that are possibly erroneous, and always incomplete. The decisive bit of information may be found outside the information that has been considered or is accessible (see Figure 5).

The truth is arrived at by open, uncensored discussion, hypothesis testing, sophisticated laboratory work, and

consideration of all the evidence—not by debate performance or picking the most persuasive paper.

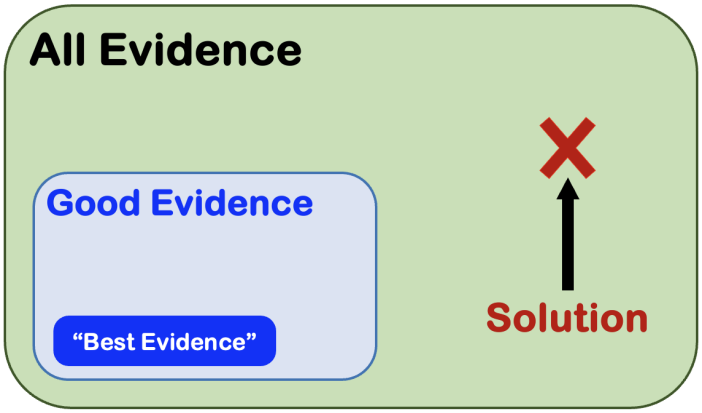


**Figure 5.** The answer to the question may not be found in the "best evidence" (Figure courtesy of Jeremy Snavely, with permission).

### Informational Gordian Knot

Under the circumstances described above, which are beyond anyone's control, neither an impartial lay person nor a neutral expert can decide which side is right or wrong in the debate over the origin of SARS-CoV-2. A reasonable person must conclude that the matter of SARS-CoV-2 virus origin remains unresolved and uncertain until more definitive evidence is available. Despite the enormous efforts that both sides of this squabble have invested in generating analyses, commentaries, and actual research studies, neither seems to have the upper hand. Ardent partisan believers will choose the version that fits their cognitive bias. The puzzle remains unsolved, reminiscent of the myth of the Gordian knot.[142]

It appears certain that neither reliance on traditional methods of science or using speculation or data fishing or dredging will solve the enigma of SARS-CoV-2 origin.[143] A vast array of forensic and intelligence methods are required to aid the tools of science and to remove doubts associated with conjectures and imputations. And such methods are likely unavailable to the right-wing side of the dispute due to the power asymmetry currently favoring the Left.[13]

The following is also abundantly clear. The lab-leak side of the dispute is struggling with the ***genuine absence of evidence***–due to the power asymmetry. In contrast, ***there is clear negative evidence concerning the validity of the zoonotic theory***. The remarkable inability or unwillingness to provide even residual evidence of the original animal-to-human infection event by the mighty, well-equipped, and well-funded mainstream academia is very telling.

### The Effect of the Continuing Dispute

A sensible person would not deny a strong possibility that SARS-CoV-2 virus could be engineered and leaked from some laboratory due to either negligence or deliberate malicious act. However, it is an insurmountable task to demonstrate beyond any doubt that such a scenario has occurred. Continuation of the current tendency to disregard reality and replace it with recurring claims of "smoking guns" is a self-destructive strategy. Engaging in speculation-driven witch hunts against possibly innocent individuals is unethical, perilous, and counterproductive. Therefore, any reasonable person would advocate for a rational and efficient approach to the investigation of this matter—an investigation done in a way ***that would not divert attention, efforts, and funding from much more strategically relevant and solvable issues***.

The current acrimonious dispute over the origin of SARS-CoV-2 virus has not provided any constructive answers. Instead, it has already diverted attention and resources from the much more relevant, urgent, and solvable matters, including:

- **Perils of the COVID-19 experimental "vaccines"**: While draconian vaccine mandates are no longer as severe as in the past, this matter remains the major calamity requiring serious efforts and continuing attention. It is crucial to continue exposing the iatrogenic morbidity and mortality of the mRNA COVID-19 injections. It is critical to continue efforts to remove this dangerous product from the market and to develop scientific treatments for those injured by vaccination whenever possible—whatever the origins of the virus.
- **Early COVID-19 treatment with repurposed drugs:** Outrageously, the use of ivermectin and hydroxychloroquine as effective, safe, and affordable early therapy of COVID-19 and other conditions is still not accepted by officialdom. Some patients can now obtain it from a few independent doctors or "under the table," but for how long will this be tolerated? Proving the lab-leak theory would not help patients get treatment.
- **Assuring accountability for tyrannical COVID-19 pandemic policies:** The matter of draconian enforcement of useless or harmful non-pharmacological interventions such as masking, lockdowns, and social distancing remains unaddressed. The authorities and their enablers must be held accountable, and measures enacted to prevent similar devastating tyranny—whatever the origin of the virus.

### Conclusion

If one steps outside one's partisan information bubble, the debate on the origin of the SARS-CoV-2 virus appears to be a stalemate, with complexities forming an informational Gordian knot, which is blocking urgently needed action on solvable problems.

We shall remember that the best solution for the Gordian knot puzzle was Alexander the Great's: just cut it.

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