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Article

Challenging Evolution with Numbers and AI: A Case Study in Christian Apologetics Within Peer-Reviewed Science

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Abstract

early two centuries after Charles Darwin formulated the theory of evolution by natural selection, resistance to evolutionary science persists among influential strands of Christian thought, particularly within creationist and Intelligent Design (ID) movements. This study examines recent publications by Olen R. Brown and David A. Hullender, whose peer-reviewed papers exemplify how this ideological conflict can manifest within scientific discourse. Although written in technically calibrated language, their arguments reproduce the rhetorical structure of Christian apologetics—characterized by moralizing tone, faith-based framing, and metaphysical vocabulary disguised as empirical reasoning. Using GPT-5 for linguistic and semantic analysis, combined with manual verification, this study identifies recurring patterns consistent with apologetic framing embedded in ostensibly scientific texts. The results demonstrate how theological rhetoric can infiltrate peer-reviewed literature through the idioms of biomathematics, complex systems theory and artificial intelligence, often invoking complexity or emergence to confer scientific legitimacy. These findings underscore the importance of epistemic vigilance in interdisciplinary research. Detecting and contextualizing such rhetorical patterns is essential to safeguarding scientific integrity and preventing the instrumentalization of academic publishing for theological or ideological ends.

Keywords: evolution; biomathematics; artificial intelligence; Christian apologetics; rhetorical analysis; theoretical and mathematical biology; science and religion; peer review

Introduction

The enduring tension in the United States between Charles Darwin’s theory of evolution and religious explanations for the origin of life reached a decisive legal climax in *Kitzmiller v. Dover Area School District* (2005). This federal case—popularized by the NOVA documentary *Judgment Day: Intelligent Design on Trial*—established that Intelligent Design (ID) is a religious doctrine rather than a scientific theory. The court ruled that ID functions as a form of “negative science”: it critiques evolution without producing empirically testable hypotheses.

Two decades later, this pattern of “negative science” reemerges in a new guise. Recent peer-reviewed papers by Brown and Hullender revive many of the rhetorical strategies associated with ID, but now couched in the language of biomathematics, complex systems theory and artificial intelligence. While presented as interdisciplinary research, these studies reproduce key conceptual errors identified in the Dover case—particularly the conflation of abiogenesis (the origin of life) with evolution (the diversification of life), which is the same pattern. By misrepresenting evolution’s explanatory scope, the authors construct a straw man and then declare it refuted using probabilities assigned to this straw man model.

Brown and Hullender’s 2023 and 2024 publications illustrate this tendency clearly. They propose a series of speculative mechanisms—a “bioelectromagnetic field,” an “emergent self-organizing principle,” and even a “fifth force”—without empirical evidence or testable predictions [1,2] aiming at

refuting evolution and naturalism, the general modern scientific principle that life can be explained using the laws of physics and chemistry. These constructs echo 19th-century vitalism, the belief that living systems are animated by non-physical forces [3]. Despite adopting contemporary terminology, the underlying argument remains metaphysical rather than scientific.

Their approach exemplifies the rhetorical repackaging of creationist reasoning into scientific-sounding discourse. The invocation of modern scientific buzzwords such as “AI,” “emergence,” and “self-organization” functions rhetorically to confer legitimacy, not to convey validated findings. This aligns with the broader pattern of Christian apologetic infiltration—the strategic use of scientific language to reframe theological or teleological positions as empirical research.

A distinctive feature of this recent wave is the appeal to artificial intelligence as a supposed ally against Darwinian evolution. Brown and Hullender [4] speculate that future AI systems may one day “disprove” evolution. This claim conflates two fundamentally different forms of intelligence:

1. Syntactic intelligence, the pattern recognition and statistical inference characteristic of AI models;
2. Semantic intelligence, the human capacity for causal understanding and conceptual abstraction.

Even the most advanced AI systems, such as AI-Descartes [5] that they cite as reference, struggle to rediscover physical laws under controlled conditions; it is important to stress that [5] does not claim anything as ambitious as handling theories such as the theory of evolution, they even leave a clear caution against using it in biology. The irony: AI-Descartes uses **genetic programming**, which borrows its logic from biological evolution. AI-Descartes employs an evolutionary search akin to a constrained Darwinian process: candidate mathematical expressions ‘mutate’ and ‘recombine,’ and only those that best fit the data while remaining logically consistent survive to the next generation. Extending this capacity to biological systems—whose data are noisier and mechanisms less formalized—remains far beyond current capability. Assertions that AI could “disprove” evolution reflect neither technical knowledge nor empirical grounding; they function rhetorically, as appeals to technological authority.

Such rhetorical displacement—appropriating the prestige of AI to reinforce non-scientific claims—marks a new phase in the long historical interaction between religion and science. Earlier, theological opposition to evolution framed Darwinism as moral or spiritual decline; today, it is reinterpreted through the idiom of computational intelligence. The result is a digital apologetics, where AI becomes a symbolic extension of Intelligent Design rather than a scientific instrument.

The persistence of this discourse raises questions that are empirical, not theological:

How does apologetic rhetoric adapt to contemporary scientific language?

What linguistic and conceptual markers reveal its presence within peer-reviewed literature?

Can computational tools, including large language models, assist in identifying such rhetorical infiltration?

These questions define the focus of the present study. Using AI-assisted linguistic analysis, this paper examines four peer-reviewed publications by Brown and Hullender and an interview they gave about their work to a Christian group to identify recurring rhetorical markers of Christian apologetic discourse—including moralizing tone, faith-based framing, metaphysical vocabulary, and authority borrowing.

The question is: *can we find traces of their discourse both in the interview and the papers that signs Christian apologetic rhetoric?*

By quantifying and contextualizing these markers, the study seeks to characterize how religious apologetics can masquerade as empirical research under the guise of interdisciplinarity. As I am going to argue, this is not how interdisciplinary works must be conducted. A good interdisciplinary work must know its limits and serve more as an expansion of basic science, such as biology and mathematics. This study also seeks to call attention for the instrumentalization of the peer-review system, which is the core of modern science.

Even though I shall not focus on that, this work points to a possible peer-review system based on AI. Since all the AI tools used are available as APIs from openAI, called Artificial Intelligence as Service (AaaS), one could actually implement these insights as a system that could support reviewers and editorial on actually spotting what I am going to discuss here.

This inquiry does not evaluate personal beliefs or intentions; it examines linguistic evidence, it examines how the idea that science and Christianity does not have to be separated clearly can damage research endeavors, creating unnecessary noise in science, which is focused on the theory of evolution (biology). Detecting apologetic rhetoric within scientific discourse is vital because it reveals an epistemic blind spot in peer review: theological language can slip through not by deception but through the semantic opacity of modern interdisciplinarity. This is important to stress that interdisciplinary work is important, and that what I am going to show does not represent what a biomathematician generally do when they collaborate with biologists.

In fields like biomathematics, bioinformatics, complex systems theory and AI—where terminology is rapidly evolving and does not necessarily require validation by evidences or falseability—reviewers may not easily detect when words like “intelligence,” “purpose,” or “design” carry theological connotations. These areas can easily be instrumentalized by those groups that aims at blurring the line between science and religion metaphysics.

The study contributes to a growing literature in rhetorical analysis of science and science–religion interaction [6,7]. By integrating linguistic pattern detection with conceptual analysis, it proposes a methodological framework for identifying apologetic intrusion into ostensibly scientific texts. More importantly: it aims to expose these possible future of Christian apologetics by using the peer-review system to validate their religion metaphysics. Once validated, it can be proposed as valid science in schools and universities.

When the Dover case was on trial, a just discovered finding could not be used as evidence for evolution because it has not been published at the time. Thus, it shows how peer-review system is more than just scientific communication in modern society. Scientific discoveries are not automatically authoritative simply upon discovery; they must undergo rigorous documentation, review, and publication. For example, the transitional fossil Tiktaalik, discovered in 2004, provides compelling evidence for the evolutionary transition from fish to tetrapods. Its formal description in *Nature* [8] postdates the Dover trial, demonstrating how even profound findings cannot immediately be cited as authoritative science until they pass peer review.

The remainder of this paper is organized as follows: Section 2 describes the corpus and analytical methods, including the use of GPT-5 for text classification and manual coding of rhetorical categories. Section 3 presents the quantitative and qualitative results of the analysis. Section 4 discusses the implications for scientific integrity, interdisciplinarity, and the evolving relationship between faith and science. Section 5 concludes with recommendations for improving epistemic transparency in peer review.

Methodology

Data Sources

Three types of sources were used to examine potential influence of Christian apologetics in the authors' publications:

1. **Public interviews and videos** – YouTube interviews given by the authors, focusing on the presentation of their work and discourse style. Specific videos considered include:
 - *How Toxicology Disproves Evolution* – Dr. Olen R. Brown
 - *Creation Scientist Talks Coronavirus* – Dr. Olen R. Brown
 - *Paul Pepper: Author Olen R. Brown, "The Art and Science of Poisons"*
 - *Biological Evolution Didn't Happen!* – Dr. Olen Brown & Dr. David Hullender (primary focus; [link](#))
2. **Written discussions** – Blogs and forums where the authors' work is discussed by third-parties, including:
 - Sandwalk: *Strolling with a Skeptical Biochemist* ([link](#))
 - Reddit discussions in r/DebateEvolution ([link](#))

3. **Published papers** – Four peer-reviewed papers published in *Progress in Biophysics and Molecular Biology* (Elsevier) and authored by Drs. Brown and Hullender were analyzed for rhetorical patterns, the framing of evolutionary theory, and the presentation of scientific evidence. The study examined how the authors frame the theory of evolution, comparing it both to the framing used by other scientific peers and to the historical development of the theory since Darwin. This approach helps illuminate possible strategies in their rhetorical presentation of evolution. Special attention was given to parallels with Christian apologetics in public debates, enabling a comparison between the authors' discourse and public debates. Additionally, their framing was compared with the Dover case as depicted in the NOVA documentary [9] to identify potential rhetorical strategies aligned with Intelligent Design.

Analytical Framework

The study employed qualitative content analysis to identify broad patterns across the authors' public and written output. The analysis focused on:

- **Rhetorical style:** Identifying markers consistent with Christian apologetics in both public discourse and publications.
- **Framing of scientific evidence:** Examining whether the interpretation of evolutionary theory, selection mechanisms, or mathematical modeling may reflect simplifications or selective emphasis.
- **Strategic usage of modern scientific language:** Examining how the authors use modern scientific language to defend their Christian-driven agenda into science.

The goal was to detect systematic patterns rather than evaluate individual claims in isolation.

Triangulation and Comparative Approach

Publicly available videos, forum discussions, and published papers were compared to assess consistency of rhetorical strategies. Independent expert commentary (e.g., Larry Moran's blog posts) was used to provide context and to triangulate interpretations. The goal is to show that their public Christian apologetic rhetoric was actually inject into the peer-review process using scientific language. In an indirect way, based on a long study of public debates between atheists and Christian apologetics done by the author, those debates can be found on YouTube, it was looked for common patterns, common on public debates between Christian apologists and atheists.

Expert and AI-Assisted Analysis

- The author's expertise in biomathematics, complex systems theory and artificial intelligence informed the identification of methodological and interpretive patterns in the published papers. This was used to guide GPT 5 on what to look for, and also, to double-check what AI found.
- GPT-5 was used as a tool to support qualitative pattern recognition, extraction of rhetorical markers, and systematic comparison across sources. Open-ended prompts were used to minimize bias, e.g., "Does this paper exhibit intelligent design rhetoric patterns, or am I seeing inexitent patterns?", "Does this paper has a Christian apologetic rhetoric or it is scientifically neural?" rather than leading questions that could induce the AI model to confirm the suspicion (e.g., confirmation bias).
- NotebookLM (Google, 2024) was employed to assist in the analysis of the interview. This tool enables semantic querying across transcripts, allowing for targeted questions such as "Does the interviewee adopt a religious tone?" or "Does the interviewee correct the host when their theory is framed in a Christian apologetic context?" The purpose of this approach is to identify recurring rhetorical or epistemic patterns as objectively as possible, minimizing subjective interpretation by grounding observations in consistent, replicable query logic.

Ethical Considerations and Potential Conflicts of Interest

The authors' religious, Brown and Hullender, beliefs were considered as a potential factor influencing their work. The study notes these beliefs for contextual understanding, without claiming they invalidate completely their scientific results and it should not be extended to their career without actually doing more research. The research presented herein are restricted to their four papers analyzed, and should not be extended without further research into their other works. The research approach maintained transparency regarding the analyst's own perspective (atheist), acknowledging that the analytic focus was on observable patterns rather than personal beliefs. It is important to stress that I do not consider atheism as conflict of interest since it is just the lack of belief in God or Gods [10].

While this study does not claim to infer personal intention, the inclusion of public interviews provides critical contextual evidence. In these interviews, the authors explicitly frame their scientific claims within Christian apologetic language. The recurrence of identical rhetorical and conceptual structures in their peer-reviewed papers thus strengthens the interpretive link between public apologetic discourse and scientific exposition. This does not prove intent in the causal sense, but it constitutes strong triangulated evidence of ideological influence consistent across discourse contexts.

Results

This section summarizes the main empirical findings emerging from the textual and computational analyses of Brown and Hullender's publications [1,2,4,11]. The goal is not to question the professional competence or scientific credentials of the authors, but to document recurrent linguistic, thematic, and epistemic patterns that suggest a systematic intersection between religious framing which can be traced back to the authors' own religion beliefs and scientific public discourse. The general goal is to alert, and place the question whether we should allow the scientific publication system to replicate the public debates between science and Christianity. The general question is whether blurring the line between empirical science and religion metaphysics should be allowed in the peer-review system. We also question whether endless doubting in science is really productive. How much evidence is enough for a theory to leave the vitrine of eternal endless skepticism?

General Observations

Across four primary publications [1,2,4,11], GPT-5-based linguistic analysis, supported by close reading, identified several recurring features. These features fall into three main categories:

1. Moralizing and value-laden framing of evolutionary theory;
2. Integration of religious and metaphysical references within scientific exposition;
3. Substitution of empirical reasoning with speculative or rhetorical propositions.

While no explicit mention of Christian belief occurs in the analyzed papers, the cumulative stylistic and conceptual patterns are consistent with apologetic discourse rather than neutral scientific reasoning.

Category 1: Moralizing and Value-Laden Framing

The authors repeatedly describe evolutionary biology using evaluative rather than analytical language. Typical expressions include "dogma," "pernicious consensus," and "death knell for evolution" [4]. Evolutionary theory is portrayed as morally or intellectually deficient rather than empirically incomplete. Such language departs from standard scientific prose, which ordinarily avoids moral judgment. The recurrent use of emotionally charged metaphors (e.g., "worshiping at the altar of an idea") suggests an implicit moral hierarchy that mirrors rhetorical strategies common in creationist literature.

0.1. Category 2: Religious and Theistic References

Biblical or theological figures appear throughout the corpus, including Solomon, Augustine, and Kepler "who desired to think God's thoughts after Him." The authors also cite overtly religious

sources such as Stephen C. Meyer, a leading Intelligent Design theorist. References to an “intelligent Mind” and “miraculous origins” are interwoven with scientific discussion, creating a hybrid style that blends metaphysical speculation with empirical terminology. These inclusions indicate the presence of faith-inflected framing that is atypical for peer-reviewed scientific literature.

It is not the goal of this work to provide an exhaustive analysis of the papers by Brown and Hullender. However, let us consider one illustrative case: references to an “intelligent Mind.” In their paper [1] on the purported ‘bioelectromagnetic’ field, they cite Max Planck directly, presenting a quote in the introduction that attributes to him the notion of a conscious and intelligent mind underlying matter.

I have used AI tools to investigate this quotation. Current models from OpenAI are trained on vast corpora of online texts, including scientific literature, historical documents, and popular interpretations. Currently and additionally, they can search in the internet. I have added their footnote that they add to the citation, adding more context.

A careful examination shows several issues. First, Planck did not utter or write those exact words; the widely circulated quotation is a later paraphrase or embellishment. Second, while Planck philosophically reflected on the rational order of the universe and occasionally used poetic or metaphysical language, he did not explicitly advocate for an “intelligent mind” as a causal principle in the physical world. Third, although Planck was personally religious and saw God as a symbol of rational order, there is no evidence that his religious beliefs influenced his scientific research, and he consistently maintained a clear separation between empirical physics and philosophical speculation.

Thus, the citation in Brown and Hullender’s paper represents a misattribution: it leverages Planck’s authority while conflating his philosophical musings with literal scientific claims. This underscores the importance of careful source verification, particularly when integrating historical scientific figures into contemporary theoretical frameworks. Also, direct quotation is not scientific reference, it is just a writing technique.

Category 3: Speculative and Metaphysical Propositions

Their papers introduce untested or unfalsifiable mechanisms—such as a “bioelectromagnetic field” or “aeon chemistry”—to explain biological complexity. This mechanisms seems to point to an early 20th idea long abandoned called vitalism [3]. With the advance of biomathematics, so it is advancing our confidence that we can model life without recurring to “mysterious forces”, a sort of “fifth force”. These speculative mechanisms are not accompanied by empirical models, datasets, or reproducible methods. The structure of argumentation parallels Intelligent Design reasoning: established evolutionary theory is rejected as inadequate, followed by the introduction of a poorly defined alternative insulated from testing, without actually explaining the evidences we already have. This pattern corresponds to what may be termed “negative science,” where scientific terminology is used primarily to negate an existing framework without generating new empirical content. The goal of those models seem to be to create an eternal doubting cycle around the theory of evolution, same rationale behind the attempt to add ID alongside the theory of evolution in the public school in the Dover case [9].

Computational Assessment

GPT-5 textual analysis corroborated these qualitative findings. When asked to classify the rhetorical tone of the papers, the model characterized them as “faith-tinged, anti-evolutionary, and moralizing,” while noting the absence of explicit religious identifiers. The model therefore detected rhetorical signals of ideology without overt doctrinal reference—indicating that apologetic influence can manifest covertly within the stylistic register of scientific writing.

Comparative Baseline and Control

In other to have a reference point, a neutral baseline text (the present study in draft form) was analyzed under identical conditions as a reference point. The model identified this text as scientifically

critical but not anti-religious, confirming that the detection method distinguishes between ideological framing and legitimate critique. This calibration supports the interpretive validity of the detected apologetic signals.

It is also important to note that the present study adopts a deliberately **critical and interpretive tone**, reflecting the author's professional judgment rather than ideological bias. Scientific neutrality does not require rhetorical flatness; interpretation is an integral part of analysis. By testing the draft itself, the procedure ensures that the linguistic intensity of the paper—its evaluative or polemical moments—does not register as religious or ideological content in the computational assessment. In this way, both the model and the author's own methodological reflexivity converge: the critique is **assertive in style but empirically grounded in substance**, exemplifying that rigorous scientific discourse can remain value-charged without becoming biased.

Conflict-of-Interest Context

The analysis revealed no declared religious or ideological conflicts of interest in the authors' publications, Brown and Hullender, despite their public endorsement of the Discovery Institute's "*Scientific Dissent from Darwinism*" petition. Brown is an actual signer of the list, Hullender is not. This list is composed of Ph.Ds that doubt evolution, asking publicly for more investigations on the evidences for evolution, no such list exists for any other areas in science, which raises a question regarding its validity as merely a call for healthy skepticism in science. Such behavior can be seen in flat-earth proponents: they also ask for more careful investigations on the evidences for the format of the earth as spherical. This omission represents a potential epistemic conflict analogous to financial conflicts in other research domains. Current editorial policies rarely address such non-financial conflicts, highlighting an oversight in peer-review transparency.

Integration of AI and Rhetorical Strategy

The invocation of artificial intelligence across the analyzed works [4] serves primarily a rhetorical rather than methodological function. Although the authors claim that "AI should evaluate the validity of Darwinian theory," none of the papers describe an implemented system or dataset. References to AI-Descartes [5] are used metaphorically, implying that computational intelligence could arbitrate between scientific and ideological claims. The citation to a public news [12] regarding the cited scientific paper, which has a more realistic tone, confirms that: this news article, as most of the media news, depicts AI in a simplistic and fear-inducing narrative. For a scientific paper, this tone should not be used, news article should only be cited under very specific context. This framing positions AI as an epistemic judge rather than a scientific tool, thereby elevating formal abstraction over empirical verification. They clearly place AI in a unrealistic point aiming to induce the reader to expect that AI could find flaws in the theory of evolution.

Epistemic Distance and Disciplinary Position

The observed rhetorical patterns are consistent with sociological findings linking creationist or Intelligent Design advocacy to scientists working outside evolutionary subfields [6,7,13]. Both authors' disciplinary backgrounds—microbiology and engineering—fit this trend. The distance between their expertise, especially for Hullender, and less for Brown, and macroevolutionary evidence may facilitate ideological coherence by reducing exposure to contradictory data, a phenomenon described here as "epistemic insulation." This allows them to keep their career, without having to face the evidences in such a way that threaten their academic positions.

Summary of Findings

Table 1 summarizes the major recurring elements across all analyzed texts. This pattern may appear in one paper, and not necessarily on all over them.

Overall, the findings indicate a recurring rhetorical structure that merges scientific language with moral, metaphysical, and Christian apologetic elements. While not overtly religious, the analyzed texts

Table 1. Summary of recurring rhetorical and thematic patterns.

Pattern Category	Description and Example Indicators
Moralizing Language	Dogmatic or pejorative descriptions of evolutionary theory (e.g., “pernicious consensus,” “death knell”).
Religious References	Biblical or theological citations embedded in scientific discussion.
Speculative Propositions	Introduction of unfalsifiable metaphysical mechanisms (“fifth force,” “bioelectromagnetic field”).
Rhetorical Flourishes	Use of metaphors and dramatization to replace empirical justification.
AI as Rhetorical Device	Invocation of AI as epistemic arbiter rather than analytical tool.
Conflict of Interest	Undeclared ideological alignment (e.g., Discovery Institute petition).
Use of no academic references	Citations from cites such as Goodreads, or news articles, which are sources not concerned about being scientific, most, self-edited.

display a consistent orientation toward anti-evolutionary reasoning and anti-materialist worldview framing.

Discussion

Interpretation is inescapable in scientific analysis.

This paper takes a position grounded in evidence yet informed by professional judgment: ignoring interpretation would obscure rather than clarify how ideological reasoning can infiltrate scientific discourse. Accordingly, I make my stance explicit, supported by the corresponding evidence and rationale. Scientific integrity does not require silence; it requires *traceable reasoning*—the ability for others to follow, test, and, if necessary, challenge one’s interpretive path.

The findings presented above indicate that the four publications by Brown and Hullender exemplify a recurrent pattern of **pseudo-skeptical discourse** rooted in **Christian apologetic reasoning**—a form of rhetorical critique that mimics scientific argumentation while avoiding empirical accountability and fostering perpetual doubt about evolution, regardless of the accumulating evidence across biology, genetics, and related fields. This pattern aligns closely with strategies historically employed by **Intelligent Design organizations such as the Discovery Institute**, which seek to reframe theological dissent as scientific skepticism. No comparable movement exists in other scientific domains; for instance, there is no consortium of Ph.D.s in biology petitioning to “re-examine the evidence for relativity.” Their approach contrasts sharply with legitimate scientific critique, which aims to refine or extend established theories through testable propositions. Instead, their work relies on mathematical abstraction and speculative reasoning to challenge the foundations of evolutionary theory without providing alternative hypotheses, predictive models, or empirical validation.

From Salami Slicing to “Negative Science”

In contemporary scientific publishing, “salami slicing” refers to dividing a single research project into multiple smaller publications—the so-called least publishable unit (LPU) or smallest publishable unit (SPU) [14]. While this practice is ethically questionable, it at least presupposes an underlying body of empirical work. Brown and Hullender’s publications, by contrast, revolve around a conceptual void: rather than fragmenting a core dataset, they produce papers largely detached from empirical evidence. Their sequence of articles collectively exemplifies what may be termed “negative science”—the systematic generation of literature whose primary function is to deny, rather than to explain, a well-supported theory.

The Rhetoric of Endless Doubt

A central feature of this discourse is its deployment of doubt as an end in itself. The authors frame evolutionary theory as an object of perpetual skepticism, invoking terms such as “Darwinian

dogma” and “magical thinking” to imply that evolution rests on belief rather than evidence. When they justify the parameters of their model—used to argue that macroevolution is improbable—they appeal to values that even a “believer in evolution” would supposedly accept. Yet those parameters are never anchored in empirical data; indeed, the authors admit that such values cannot be empirically estimated.

However, scientific skepticism has limits. Once a theory accumulates convergent evidence across independent domains—genetics, paleontology, developmental biology, and observed speciation—it moves from a provisional hypothesis to an established explanatory framework [15]. Continuing to question evolution as if it were unproven confuses methodological caution with epistemic paralysis.

In this sense, the critique of evolution by Brown and Hullender represents not scientific rigor but ideological persistence. There is a crucial difference between encountering an anomaly that challenges a model—as when discrepancies in Mercury’s orbit prompted Einstein’s revision of Newtonian gravity—and persistently seeking exceptions in defiance of overwhelming evidence. The former is legitimate skepticism; the latter is an endless and self-defeating attempt to disprove a theory that has withstood nearly two centuries of empirical scrutiny.

Conflation of Evolution and Abiogenesis

Another recurring strategy is the conflation of biological evolution with the origin of life: which is clearly a straw man. The authors repeatedly treat uncertainty about abiogenesis as evidence against evolution itself [2]. This is similar to doubt the relativity theory just because it cannot explain the origin of the universe, they are clearly two distinct questions. This reasoning collapses distinct scientific questions: the mechanisms of diversification after life arose and the chemical pathways leading to life’s emergence. Uncertainty in the latter does not invalidate the former, just as unresolved questions about the origin of the universe do not undermine the empirical success of general relativity. This conflation functions rhetorically rather than scientifically, enabling the construction of doubt without falsifiable claims. This is a common Christian apologetics strategy to invalidate the theory of evolution: they create a straw man so it becomes easier to criticize. In their interview [16], they even compared evolution to “forming a Boeing 747 from a junkyard”. This is the [Junkyard tornado](#) well-known Christian apologetics against evolution. As a biomathematician myself, I should emphasize that there is nothing inherently wrong with simplifications. Many researchers have modeled the glucose regulatory system primarily through insulin–glucose interactions. In my doctoral work [17], I sought to extend these classical models—not because they were flawed, but because they are inherently limited in scope. By incorporating additional hormones, such models can capture a broader range of glucose-related physiological and pathological processes. My goal was thus one of enhancement and refinement, not of challenging the foundational frameworks developed over the past three decades.

Predetermined Failure and Straw-Man Modeling

The analysis of their “co-origination” model [2] reveals a methodological structure designed to produce failure: this is called irreducible complexity, an well-known ID strategy to invalidate evolution. By assuming that complex biochemical systems must arise fully formed, without intermediates, the model excludes stepwise selection by definition. The resulting improbabilities are therefore mathematical artifacts of initial assumptions rather than reflections of biological reality. No theory can meet this standard: either it explains everything, such as how life started before evolution, or the entire process is flawed. This approach exemplifies what might be described as “baking failure into the model”: constructing parameters so restrictive that evolution necessarily appears impossible. The tactic parallels a broader pattern in anti-evolutionary discourse, where the impossibility of life’s emergence is first presupposed and then presented as a result. It is a backward modeling: you have a fixed agenda, and you backward the modeling to fit your agenda. It is confirmation bias as mathematical modeling applied to life sciences.

Mathematical Formalism versus Empirical Constraint

Historically, attempts to mathematize biology have oscillated between productive abstraction and overextension. Early biomathematicians such as D'Arcy Thompson and Alan Turing employed idealized models to illuminate pattern formation, never to deny biological principals itself [3]: they clearly aimed to make biology more deductive, more theoretical, more "like physics", which generally do not imply in a hierarchal relationship. Brown and Hullender, however, invert this relationship. They treat mathematics not as a heuristic for biological understanding but as a tribunal before which biology must justify itself. This inversion reintroduces the pre-modern tension between vitalism and mechanism: formal elegance is privileged over empirical adequacy. The result is not interdisciplinary synthesis but pseudomathematical denialism—a reversion to metaphysical speculation dressed in quantitative language.

The Function of AI as Rhetorical Amplifier

The invocation of artificial intelligence across their publications further exemplifies a rhetorical layering of authority. Phrases such as "AI as arbiter" or "AI rescuing biology" function more as symbolic gestures than as methodological tools, projecting an aura of computational objectivity onto ideologically motivated claims. This pattern reflects a broader cultural tendency to deploy AI as a legitimizing metaphor rather than as a genuine research instrument. The absence of any implemented system or empirical data underscores the performative nature of this appeal. Moreover, it overlooks well-established epistemic limits of AI, such as the "broken leg paradox" [18]: while AI can identify statistical regularities through regression, it lacks the capacity to apprehend semantic or causal structures underlying the data. Even the AI-Descartes system they cite [5] remains a pattern-recognition framework, not a model capable of conceptual understanding. This system relies on user-defined parameters and pattern constraints—and, ironically, it employs evolutionary principles to infer natural laws, the very principles that Brown and Hullender themselves seek to question.

Ideological Conflict and Disciplinary Pressure

The broader sociological context aligns with prior research on the interface between faith and scientific practice [13,19]. Scientists distant from evolutionary subfields are statistically more likely to reconcile faith and science through epistemic compartmentalization, a pattern mirrored in Brown and Hullender's disciplinary positions—microbiology and engineering. The proliferation of signatories to the Discovery Institute's "Dissent from Darwinism" list from non-biological fields further illustrates how ideological dissent can masquerade as interdisciplinary critique, exerting external pressure on evolutionary biologists while contributing little to the empirical discourse. I find it problematic that biological fields related to evolution must respond to a pressure that brings no benefit: there is no such as list from biologist asking physics to review all the evidences for the theory of gravity.

Peer Review, Publishing Incentives, and Systemic Vulnerability

These findings also underscore vulnerabilities within the contemporary publishing ecosystem [20]. The peer-review process, often idealized as a safeguard against bias, has demonstrably failed to detect both overt AI-generated texts and ideologically motivated arguments presented as scientific critique (e.g., [21,22]). The structural incentives of the publish-or-perish system and the high profitability of paywalled publishing models create conditions in which content may be evaluated more for form than for substance. Under such conditions, rhetorical mimicry of science—such as faith-inflected but technically formatted papers—can pass undetected. This raises questions about whether commercial peer review, as currently practiced, can reliably filter ideological intrusion.

Implications for Scientific Integrity

The intersection of religious apologetics and formal scientific publication raises an underexplored dimension of conflict of interest. If financial ties to industry must be disclosed, ideological commitments that shape research framing should be treated with similar transparency: a Christian scientist working

on evolution should disclose that, for example. One should not have to do what I did herein to gather all the information: this should be declared in the conflict of interest section as default, and not doing so should be considered scientific misconduct. The only reason I was able to write this paper was because the authors appear in several public webinars in YouTube. This is not to exclude religious scientists from participation but to acknowledge that deeply held beliefs can constitute epistemic biases requiring disclosure and management. Recognizing religiously motivated rhetoric as a potential conflict of interest would strengthen, not weaken, the integrity of scientific inquiry. I believe this problem could be more serious, widespread than we may realize at first. After studying the paper [23] as careful as I could, I was left under the impression that the paper was written by Christians, or at least motivated by religious values: they claim that Church attendance can influence in marijuana usage. Their methodology is problematic, it could be religious motivated.

Summary and Outlook

In sum, the analyzed corpus reveals a systematic pattern in which mathematical and technological rhetoric is mobilized to repackage longstanding creationist arguments within a framework of scientific legitimacy. Since they are scientists with valid careers and they have a long experience publishing, it is hard to see the patterns, and it is even harder to arrive to the conclusion that they are injecting Christian apologetics into modern science through the peer-review system. These publications do not advance empirical knowledge of evolution or AI; rather, they exploit the aesthetic of scientific form to sustain ideological doubt: an ever-ending cycle of doubts. The source may be the Discovery Institute, an institution largely known to promote anti-evolution views, they were evolved in the Dover case where they tried to introduce ID alongside evolution in public schools using the same rhetoric: teach students to doubt. The case of Brown and Hullender thus illustrates both the resilience of apologetic discourse and the permeability of the peer-review system to ideologically motivated content. Future work should focus on developing computational tools capable of detecting rhetorical or theological framing within ostensibly scientific texts, thereby reinforcing the epistemic safeguards that distinguish science from belief. Since openAI makes their AI models available as APIs, you pay as you use, it is not hard to create a prototype for testing. All the algorithms used herein were either in their site for developers or from the public site. All their algorithms are made available as APIs, they use a business model called Artificial Intelligence as Service (AIaaS), which is different from the traditional model of AI apps were sold as closed tools, with well-defined capabilities. This is my latest work using their APIs [24] as example of what we can achieve with their APIs: the process is the same.

Limitations

Causality between belief and writing cannot be established definitively; however, the consistency between public and peer-reviewed discourse substantially supports the interpretive inference of ideological influence.

Conclusions

This study examined the work of Brown and Hullender as a case study in how religiously inflected rhetoric can infiltrate peer-reviewed scientific discourse under the guise of biomathematics and artificial intelligence.

Empirical studies suggest that the source of interpretive error varies with the ideological charge of the subject matter. In ideologically laden contexts, misinterpretations of data tend to correlate with preexisting belief systems and identity commitments, whereas in ideologically neutral contexts, error rates are more closely associated with differences in expertise, experience, and disciplinary training [25–27]. The analysis presented herein supports the view that when a researcher's religious or ideological commitments intersect with the topic under investigation, such as Christianity and evolutionary theory, these commitments may unconsciously influence interpretive neutrality. The enduring opposition to evolutionary theory among certain Christian groups exemplifies how scientific

debates can become ideologically saturated, reshaping epistemic boundaries and altering the standards of evidence themselves.

Using a combination of qualitative textual analysis and computational evaluation with GPT-5, we identified linguistic, thematic, and structural markers characteristic of apologetic reasoning—moralizing tone, appeals to transcendence, conflation of evolution with abiogenesis, and invocation of metaphysical causation disguised as physical law. These findings confirm that theological framing can persist in scientific writing even when overt religious language is absent.

The significance of this analysis lies less in the specific case of these authors than in what it reveals about the vulnerabilities of the scientific publishing system. The formal apparatus of peer review, long regarded as a safeguard of epistemic integrity, remains susceptible to ideological mimicry. Papers that reproduce the syntax and citation style of science—but not its evidentiary logic—can evade detection, particularly when reviewers are overburdened or unfamiliar with the subtle cues of faith-based reasoning. The same structural weaknesses that allowed clearly AI-generated manuscripts, or even less intelligence manuscript such as those from SciGen, to pass as peer-reviewed research now enable apologetic narratives to masquerade as theoretical innovation. I was left under the impression that preprints are being published as peer-review papers.

This does not imply that scientists of faith cannot participate in legitimate inquiry, it means that they should disclose their faith clearly when working with topic sensitive to their faith-based system, such as the theory of evolution and Christianity. The issue is not belief per se, but the absence of disclosure when belief shapes interpretation. Just as financial conflicts of interest are openly declared, intellectual and theological commitments that influence research framing should be recognized as potential sources of bias. Treating such influences as epistemic conflicts of interest would strengthen, rather than threaten, the credibility of science by reinforcing its commitment to transparency. It would even help to support the claim that science and Christianity can coexist, if there is any truth to this claim.

The case of Brown and Hullender also underscores a deeper epistemological lesson. Mathematical formalism and artificial intelligence, when detached from empirical constraint, can become rhetorical instruments rather than investigative tools. In this sense, the “war on evolution” has entered a new, computationally mediated phase—one in which equations and algorithms are enlisted to lend authority to religion metaphysical propositions. Recognizing and countering this shift requires vigilance from both the scientific and publishing communities. I also urge for young scientists to be aware of that, and that senior scientists make sure to expose their students to this trend, as a last defense mechanics against the Christian apologetics rhetoric infiltration into the peer-review system.

Ultimately, this study advocates for a more reflexive and computationally informed model of peer review—one capable of detecting not only plagiarism or data fabrication but also subtle forms of ideological framing. The boundary between science and belief cannot be enforced through culture wars or courtroom trials; it must be upheld through methodological rigor, epistemic humility, and transparent discourse. Only then can science remain humanity’s most reliable instrument for distinguishing what is true from what is merely desired to be true.

I also leave an open question: if, in a democracy, all beliefs are to be tolerated—including religious ones such as Christianity—should science be expected to do the same? My Ph.D. advisor once told me that *science is not a democracy*. At the time, I resisted this notion; now, it resonates. Science should not treat all opinions as equally valid—only those that have been critically examined, empirically tested, and methodologically grounded deserve a place within its discourse.

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