Four-Layer Model of Open Scientific Communication

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Abstract

Scientific publishing is entering a period of profound transformation driven by digital communication, artificial intelligence, decentralized technologies, and the global movement toward Open Science. While concepts such as Open Access, open peer review, FAIR data principles, altmetrics, and blockchain-based publishing have largely been discussed as independent developments, they may instead represent consecutive stages within a broader evolutionary process.

This editorial proposes a conceptual ***Four-Layer Model of Future Scientific Publishing***.

The first layer begins with the scientist and emphasizes intellectual honesty, self-criticism, reproducibility, and the continuous questioning of one's own findings before publication. The second layer consists of the traditional editorial process, including peer review, methodological evaluation, ethical oversight, and permanent scientific archiving by journals. The third layer extends scientific communication beyond conventional publishing through decentralized, transparent, and censorship-resistant platforms that facilitate continuous post-publication discussion, replication, and community evaluation. The proposed fourth layer envisions a future ecosystem in which individual scientists communicate directly with the global scientific community through immutable, AI-supported publication channels, where scientific recognition is increasingly determined by transparency, reproducibility, public scientific discourse, and demonstrated long-term impact rather than by the historical prestige of the publishing journal.
Rather than predicting the disappearance of scientific journals, this model suggests a gradual shift from journal-centered prestige toward scientist-centered reputation. Future scientific publishing may evolve from a static process of publication into a dynamic, continuously evaluated ecosystem in which every scientific contribution remains openly accessible, permanently discussable, and transparently reassessed over time. The purpose of this editorial is not to provide definitive answers, but to stimulate discussion about the next evolutionary stage of scientific communication in medicine. For more than 350 years, scientific journals have been the primary guardians of scientific credibility. The coming decades may witness a gradual transition in which credibility increasingly emerges from transparent, continuous, and globally accessible scientific discourse itself.

Keywords: Open Science, Scientific Publishing, Peer Review, Artificial Intelligence, Blockchain, Open Access, Altmetrics, FAIR Principles, Decentralized Science, Future of Scientific Communication.

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The Evolution of Scientific Publishing

For more than three and a half centuries, scientific journals have served as the principal guardians of scientific knowledge. Since the publication of the first scientific journals in the seventeenth century, peer review, editorial oversight, and permanent archiving have become the cornerstones of scientific communication. Countless medical breakthroughs, technological innovations, and Nobel Prize-winning discoveries have reached the scientific community through this remarkably stable publication system.

Despite continuous advances in medicine, molecular biology, artificial intelligence, and digital communication, the fundamental architecture of scientific publishing has remained surprisingly unchanged. A scientist performs research, prepares a manuscript, submits it to a journal, undergoes peer review, and—if accepted—the work becomes part of the permanent scientific literature. Although the transition from printed journals to digital publishing has dramatically accelerated global access to scientific information, the underlying communication model has changed relatively little over the past centuries.

Today, however, scientific publishing is approaching what may represent its most profound transformation since the invention of the scientific journal itself. Open Access, Open Science, FAIR data principles, artificial intelligence, blockchain technologies, preprint repositories, decentralized communication platforms, and social media are often discussed as separate innovations. Yet these developments may not represent isolated phenomena. Instead, they may constitute successive stages of a much broader evolutionary process that is fundamentally redefining how scientific knowledge is created, evaluated, disseminated, discussed, and ultimately accepted by both the scientific community and society.

The traditional publication process has served science extraordinarily well. Nevertheless, it also exhibits well-recognized limitations. Publication bias, delayed dissemination of important findings, restricted accessibility, dependence on journal prestige, and the concentration of scientific influence within relatively few publishing organizations have become increasingly debated topics. Moreover, scientific impact is no longer measured exclusively through citations. Online discussion, open data, post-publication review, replication studies, and alternative impact metrics increasingly contribute to the visibility and influence of scientific work.[1-6]

At the same time, the emergence of artificial intelligence is beginning to reshape every aspect of scientific communication. AI systems are already capable of assisting literature searches, statistical analyses, manuscript preparation, language editing, automated translation, plagiarism detection, and evidence synthesis. During the coming decades, AI may become an active participant in scientific communication itself, fundamentally changing not only how manuscripts are written but also how they are evaluated, discussed, updated, and integrated into the continuously expanding body of scientific knowledge.

Rather than viewing these technological developments as isolated innovations, it may be useful to consider them as components of a single evolutionary pathway. This editorial therefore proposes a conceptual Four-Layer Model of Future Scientific Publishing. The model does not attempt to predict the disappearance of scientific journals or peer review. Instead, it suggests that scientific communication may gradually evolve through four complementary layers, beginning with the scientist's own intellectual integrity and culminating in a decentralized, AI-supported ecosystem in which scientific credibility increasingly emerges from transparency, continuous discussion, reproducibility, and community participation rather than solely from the historical prestige of the publishing journal.

Scientific publishing has never been a static institution. It has continuously evolved alongside society, technology, and scientific culture. The next evolutionary step may no longer be defined primarily by faster publication or wider accessibility, but by a fundamental redistribution of scientific reputation—from institutions toward individual scientists whose work remains permanently transparent, openly discussable, and continuously re-evaluated throughout its scientific lifetime.

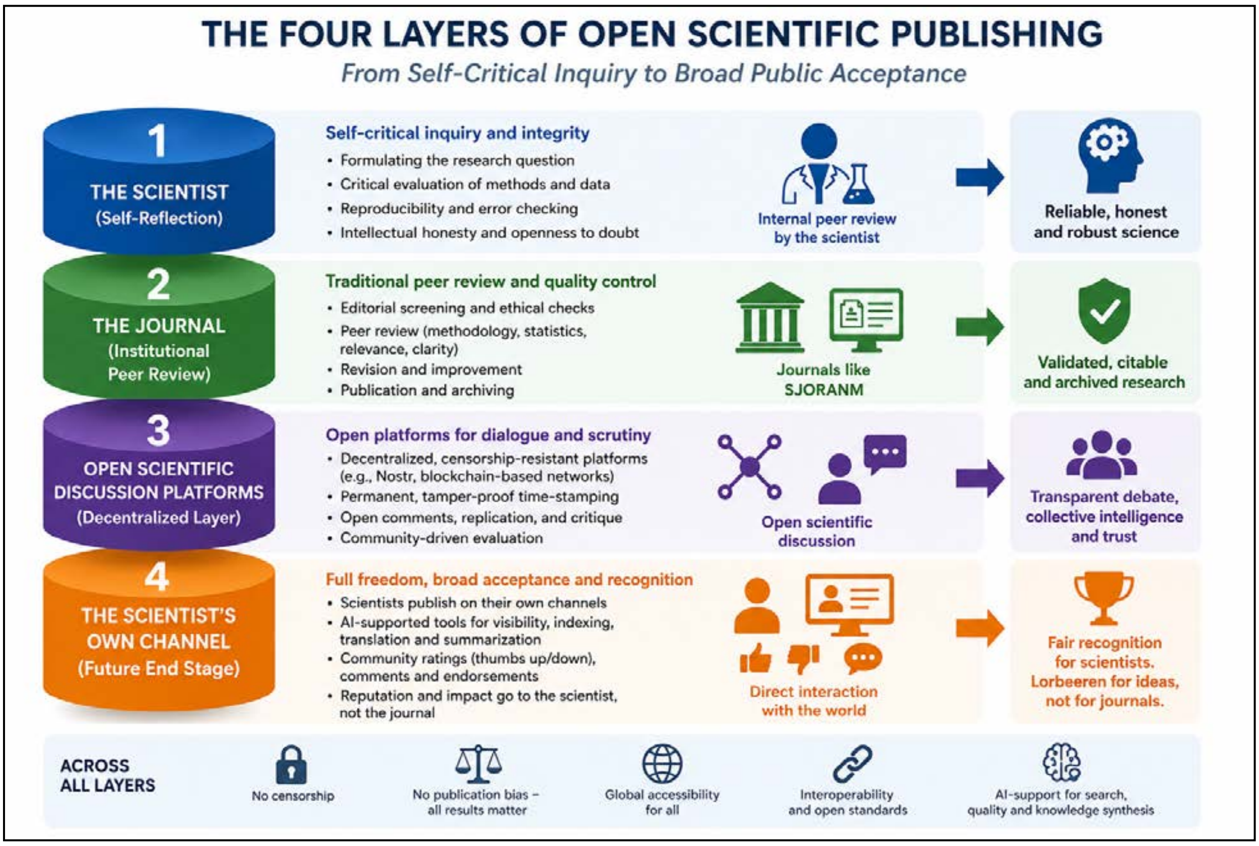

Fig. 1 - The Four Layer Model proposed by Editors of SJORANM

Layer 1 – The Scientist

Intellectual Honesty as the First Layer of Scientific Credibility

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Intellectual Honesty as the First Layer of Scientific Credibility

Every scientific publication begins long before the first manuscript is written. It begins in the mind of the scientist. Before editors evaluate a manuscript, before peer reviewers analyze its methodology, and before readers discuss its conclusions, every researcher must first confront the most demanding reviewer of all: themselves. (Fig. 1 & 2)

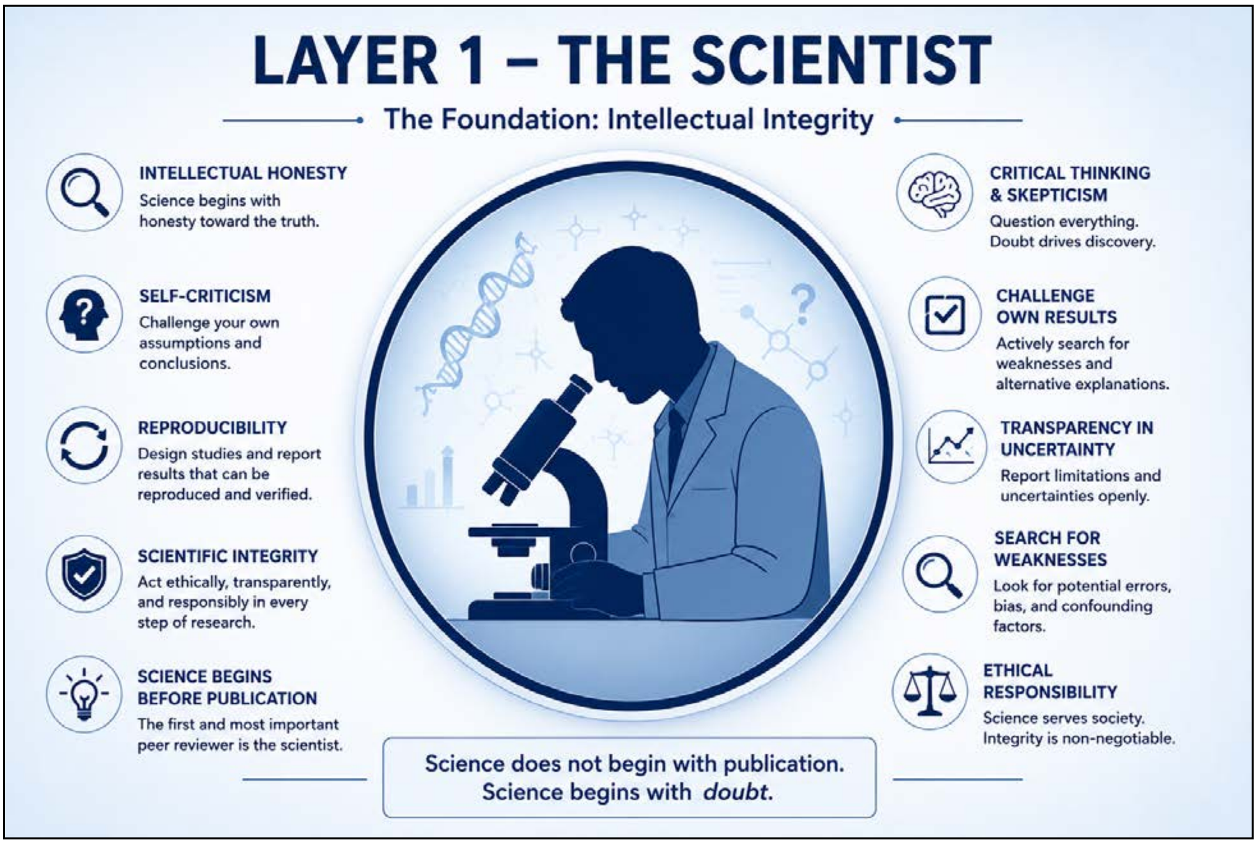

Fig. 2 - Layer 1 - The Scientist

Scientific progress is founded upon intellectual honesty. Every observation, every statistical result, and every conclusion should first be subjected to rigorous self-examination. The scientist must continuously ask uncomfortable questions. Could the observed effect simply be the result of chance? Have alternative explanations been sufficiently considered? Could unconscious bias have influenced data collection or interpretation? Are the results reproducible? Have contradictory findings been ignored? Such questions represent neither weakness nor uncertainty. They constitute the very foundation of scientific integrity.

History repeatedly demonstrates that scientific progress is driven not by confidence alone but by the willingness to question one's own conclusions. Many of the greatest scientific discoveries emerged because investigators refused to accept apparently convincing explanations without further scrutiny. Equally, numerous scientific errors resulted not from misconduct, but from premature certainty. In this sense, skepticism is not an obstacle to scientific progress; it is one of its principal driving forces.[7]

The importance of this first layer has become increasingly evident in recent years. Concerns regarding reproducibility, publication bias, selective reporting, statistical flexibility, and unconscious confirmation bias have stimulated extensive discussion throughout biomedical research. Ioannidis famously argued that under many circumstances published research findings may be substantially less reliable than generally assumed, emphasizing that methodological rigor alone cannot fully compensate for bias introduced during study design, analysis, interpretation, and reporting.[8] His observations should not be interpreted as criticism of science itself. Rather, they illustrate the extraordinary importance of continuous self-critical evaluation before scientific results enter the permanent literature.

Scientific integrity therefore begins before peer review. It begins with the scientist's willingness to actively search for weaknesses in his or her own work. Every experiment should first be challenged by its own author. Every hypothesis deserves an attempt at falsification before it is defended. Every unexpected finding should initially be viewed with healthy skepticism rather than enthusiasm. The most convincing scientific publications are often those in which authors openly acknowledge the limitations of their own investigations.

Intellectual honesty also requires transparency regarding uncertainty. Scientific knowledge is rarely absolute. Confidence intervals, limitations, competing hypotheses, missing data, and methodological constraints are not signs of poor science but indicators of responsible scientific reporting. Authors who openly discuss the weaknesses of their own work frequently strengthen rather than weaken the credibility of their conclusions.

Artificial intelligence may increasingly assist scientists during this first layer. Future AI systems will likely identify statistical inconsistencies, detect image manipulation, compare results with previous publications, recognize methodological weaknesses, and automatically suggest additional control experiments. However, even the most sophisticated AI will remain an assistant rather than a substitute for scientific judgment. Critical thinking, ethical responsibility, intellectual curiosity, and scientific creativity remain uniquely human characteristics that cannot be delegated to algorithms.

This first layer is therefore fundamentally different from all subsequent layers. It is invisible to readers, editors, and peer reviewers. Nevertheless, every later stage of scientific communication depends entirely upon it. A manuscript that lacks intellectual honesty cannot ultimately be rescued by excellent peer review, prestigious journals, or sophisticated technology. Conversely, a scientist who rigorously challenges his or her own conclusions already performs the first and perhaps most important stage of peer review.

For this reason, the Four-Layer Model proposed in this editorial deliberately begins not with journals, editors, or technology, but with the scientist. Scientific credibility is not created by publication. It originates from intellectual integrity, self-criticism, and the continuous willingness to question one's own conclusions before asking others to evaluate them.

One may therefore argue that the first peer reviewer in every scientific project is not an external expert appointed by a journal, but the scientist who performed the work. Every subsequent layer of scientific communication merely expands this circle of critical evaluation.

Once a scientist has critically challenged his or her own work, scientific responsibility extends beyond the individual. Knowledge now enters the second layer, where independent experts evaluate its methodology, validity, and potential contribution to medical science.

Layer 2 – The Scientific Community

Peer Review as Collective Scientific Intelligence

Once a scientist has critically examined and challenged his or her own work, scientific responsibility extends beyond the individual. Knowledge now enters the second layer, where independent experts evaluate its scientific validity before it becomes part of the permanent medical literature. This transition represents one of the most remarkable achievements in the history of modern science: the concept of independent peer review. (Fig. 3)

For more than three centuries, peer review has functioned as the principal mechanism of scientific quality assurance. Although its exact implementation differs among journals and scientific disciplines, its fundamental purpose has remained unchanged: to expose weaknesses, identify methodological limitations, improve clarity, detect errors, and ultimately strengthen the scientific reliability of published work. In this sense, peer review should never be regarded as an obstacle to publication but rather as a collaborative process designed to improve scientific communication.[4]

Importantly, peer review is not intended to determine absolute scientific truth. Reviewers evaluate scientific plausibility, methodological quality, statistical soundness, ethical standards, and the consistency of conclusions with the presented data. They cannot determine whether a scientific hypothesis will ultimately withstand future

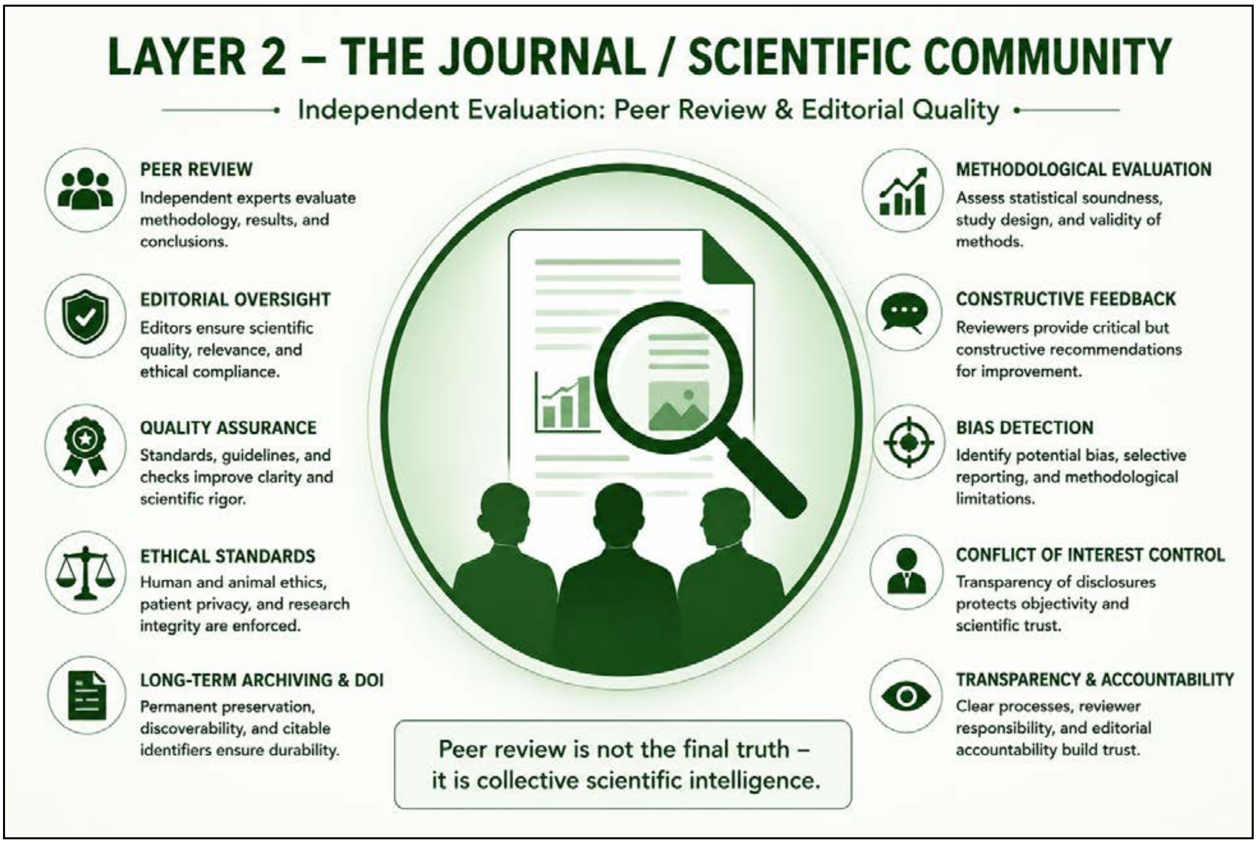

Fig. 3 - Layer 2 - The Journal / Scientific Community

research. History repeatedly reminds us that many groundbreaking discoveries were initially met with skepticism, while other highly praised publications were later modified, corrected, or even withdrawn. Science therefore advances not because peer review is perfect, but because scientific knowledge remains permanently open to re-evaluation.

This distinction is fundamental. Peer review is not the final destination of scientific knowledge; it is one important stage within a continuous process of scientific verification.

During recent decades, the peer review process itself has undergone increasing scrutiny. Questions regarding reviewer bias, transparency, reproducibility, conflicts of interest, publication delays, reviewer workload, and publication bias have stimulated extensive discussion throughout the scientific community. Open peer review, transparent editorial procedures, registered reports, post-publication review, and open reviewer identities have all emerged as attempts to further improve the quality, fairness, and accountability of scientific evaluation.[4]

Scientific journals continue to fulfill several indispensable functions beyond peer review. They provide editorial oversight, ethical supervision, long-term digital archiving, permanent citation through DOI assignment, standardized reporting requirements, plagiarism screening, and increasingly sophisticated quality control supported by artificial intelligence. In addition, journals create structured scientific collections that allow readers to identify, retrieve, and preserve knowledge within specific medical disciplines. These functions will likely remain essential even in future decentralized publication systems.[9-10]

However, the role of journals may gradually evolve. Historically, journals have acted not only as publishers but also as primary gatekeepers of scientific visibility and reputation. Acceptance by a prestigious journal has frequently been interpreted as a proxy for scientific quality, influencing academic careers, research funding, institutional rankings, and professional recognition. Although this system has contributed substantially to maintaining scientific standards, it has also created unintended consequences. Publication pressure, excessive emphasis on journal metrics, publication bias, and the concentration of scientific prestige within a relatively small number of established journals have become increasingly recognized challenges of contemporary academic publishing.[2,5,8]

It is therefore conceivable that future journals will gradually shift their primary function from exclusive gatekeepers toward trusted scientific curators. Rather than acting as the sole arbiters of scientific visibility, journals may increasingly become highly respected institutions that organize, validate, contextualize, and permanently preserve scientific knowledge within an expanding ecosystem of open scientific communication.

Artificial intelligence is likely to strengthen rather than replace this second layer. Future editorial systems may automatically detect statistical inconsistencies, image manipulation, duplicated publications, reference inaccuracies, undisclosed conflicts of interest, methodological deficiencies, and reporting guideline violations long before manuscripts reach human reviewers. Such technologies may substantially reduce routine editorial workload while allowing reviewers to focus on the scientific interpretation and originality of submitted research.

Consequently, the future importance of scientific journals may not depend on their ability to control access to publication, but rather on their ability to provide trustworthy scientific evaluation, transparent editorial processes, long-term preservation of knowledge, and continuous integration with emerging technologies.

Within the proposed Four-Layer Model, peer review therefore represents neither the beginning nor the endpoint of scientific credibility. Instead, it constitutes the second layer of an expanding scientific dialogue in which independent experts transform individual scientific observations into collectively evaluated knowledge. Future scientific communication may increasingly extend beyond this layer, but it is unlikely to succeed without it.

Once scientific knowledge has undergone independent editorial evaluation, publication should no longer represent the end of scientific communication. Instead, it may become the beginning of a continuous, transparent, and globally accessible scientific discussion. This emerging concept forms the third layer of the proposed model.

Layer 3 – Open Scientific Communication Networks

From Publication to Continuous Scientific Dialogue

For centuries, publication has largely represented the final step of scientific communication. Once an article appeared in a scientific journal, subsequent discussion was often limited to occasional letters to the editor, conference presentations, or future

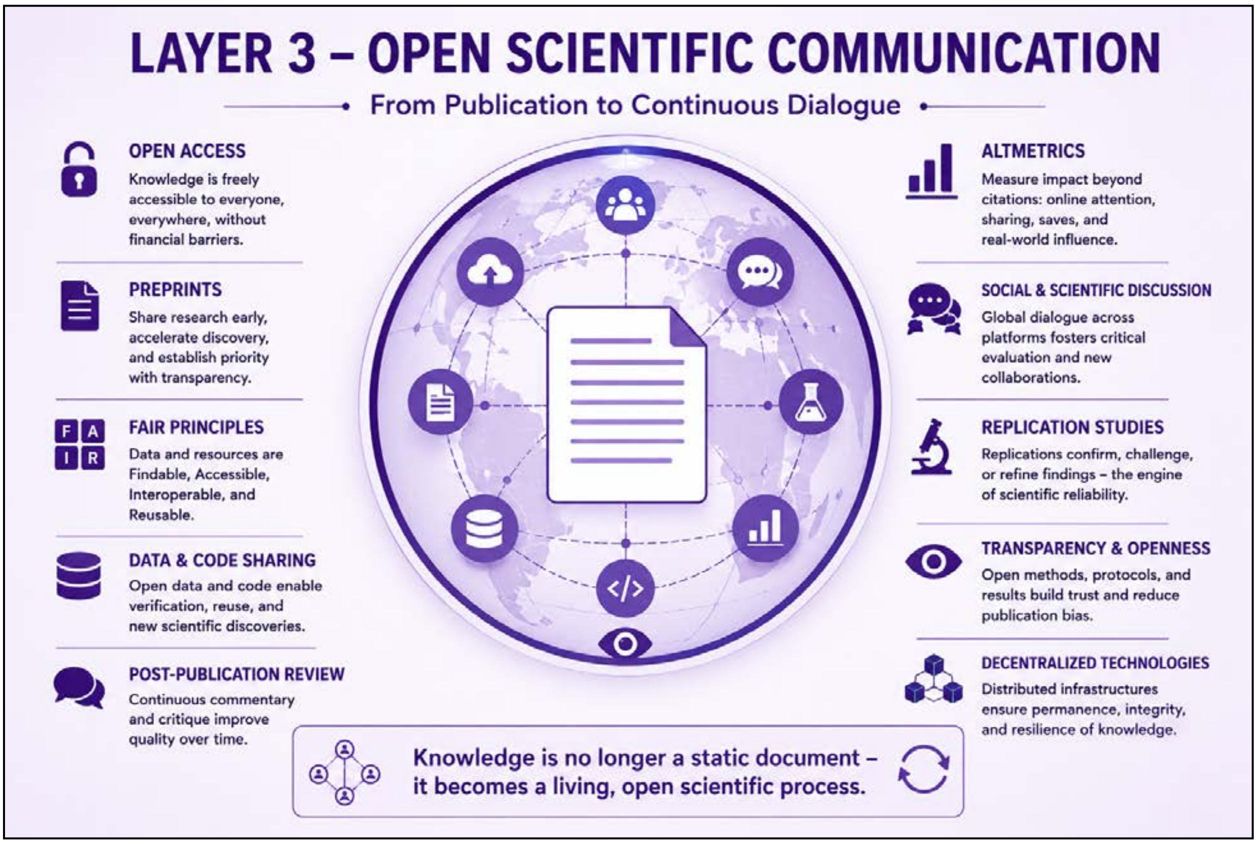

Fig. 4 - Layer 3 - Open Scientific Communication

publications that cited the original work. Communication therefore remained relatively slow, fragmented, and restricted to comparatively small scientific communities. (Fig. 4)

Digital technologies have fundamentally changed this paradigm. Today, scientific communication increasingly continues long after formal publication. Researchers discuss newly published studies on professional online platforms, exchange opinions through social media, publish replication studies, upload datasets, share source code, release preprints, and comment on methodological strengths and weaknesses almost immediately after publication. Scientific knowledge is gradually evolving from a static product into a dynamic and continuously developing process.[1,7]

This transformation reflects one of the central principles of Open Science: scientific knowledge should not merely be published—it should remain continuously accessible, discussable, verifiable, and reusable throughout its scientific lifetime. Open Access has already removed many financial barriers to scientific information. FAIR principles have extended this philosophy to data, software, algorithms, and research workflows by emphasizing that scientific resources should be Findable, Accessible, Interoperable, and Reusable.[5,9] These developments have shifted attention away from the published article alone toward the entire scientific process.

Preprint repositories have introduced another important element into this evolving ecosystem. By making scientific work publicly available before formal peer review, they accelerate scientific communication while simultaneously establishing a permanent, timestamped record of intellectual priority. This development provides an important level of protection against the misappropriation of scientific ideas and contributes to greater transparency during the publication process. At the same time, preprints remind readers that scientific findings should always be interpreted as evolving knowledge rather than definitive conclusions until they have undergone independent critical evaluation.

Future decentralized technologies may further strengthen this process. Blockchain-based publication systems, distributed digital ledgers, cryptographic time-stamping, and decentralized storage architectures offer the possibility of creating scientific records that are permanently traceable, verifiable, and resistant to subsequent manipulation. Rather than relying exclusively on centralized databases, future scientific communication may increasingly employ distributed infrastructures in which the authenticity, publication history, authorship, and subsequent revisions of scientific work remain permanently transparent.[7]

Such systems could also contribute to addressing one of the longstanding challenges of scientific publishing: publication bias. Numerous studies have demonstrated that positive, statistically significant, or commercially attractive findings are more likely to reach publication than negative or inconclusive results.[8] Consequently, the scientific community and the public often evaluate only a selected fraction of the evidence that actually exists. Open scientific communication networks could provide a broader and more balanced representation of scientific observations by allowing both confirmatory and contradictory findings to remain permanently visible and openly discussable.

Importantly, openness should not be confused with the absence of scientific standards. Transparency does not eliminate the need for methodological rigor, ethical responsibility, or critical evaluation. On the contrary, continuous public discussion may expose methodological weaknesses more rapidly than conventional publication alone. Open scientific dialogue therefore complements traditional peer review rather than replacing it.

Artificial intelligence will likely become an increasingly important participant in this third layer. AI systems may continuously summarize newly published evidence, identify methodological similarities across studies, detect contradictory findings, monitor replication attempts, translate scientific discussions into multiple languages, and automatically connect related publications across disciplines. Instead of replacing scientific debate, AI may substantially expand its accessibility and efficiency.

Scientific influence may therefore become increasingly multidimensional. Traditional citations will remain important indicators of scientific impact, but they will be complemented by broader measures of scientific engagement, including data reuse, software implementation, post-publication discussion, replication studies, educational dissemination, public communication, and alternative impact metrics.[6] The scientific value of a publication may increasingly be reflected not only by how often it is cited, but also by how openly it stimulates critical discussion, reproducibility, interdisciplinary collaboration, and continuous scientific improvement.

Within the proposed Four-Layer Model, this third layer represents the transition from scientific publication to continuous scientific communication. Knowledge is no longer viewed as a static endpoint preserved within journal archives but as a living entity that remains permanently open to discussion, correction, refinement, and expansion. Scientific credibility increasingly emerges not only from editorial evaluation but also from transparent, ongoing dialogue within the global scientific community.

If scientific communication becomes permanently open, decentralized, and continuously evaluated, an even more fundamental question arises: Who will ultimately become the primary carrier of scientific reputation—the journal or the scientist? The fourth layer explores a possible future in which scientific credibility gradually shifts toward the individual researcher, supported by artificial intelligence and global scientific participation.

Layer 4 – The Scientist

Scientific Democracy in the Age of Artificial Intelligence

The first three layers describe an evolutionary progression from individual scientific integrity to collective scientific evaluation and finally to continuous global scientific communication. Together, they already represent a substantial transformation of traditional publishing. Yet an even more fundamental question remains unanswered.

Who should ultimately own scientific reputation?

For centuries, scientific recognition has been closely linked to journals. Researchers often build their academic careers not only upon the quality of their discoveries, but also upon the historical reputation of the journals in which those discoveries appear. Journal prestige has therefore become a surrogate marker for scientific quality, influencing funding decisions, academic promotion, institutional rankings, and professional recognition. (Fig. 5) Although this system has contributed significantly to maintaining scientific standards, it also concentrates scientific visibility within a comparatively small number of publishing organizations.

The continued evolution of digital technologies, decentralized communication, and artificial intelligence may gradually alter this relationship.

One possible endpoint of this evolutionary process is a scientific ecosystem in which every researcher possesses a permanent, publicly accessible, AI-supported scientific identity that serves simultaneously as publication archive, discussion forum, scientific portfolio, and continuously evolving record of scholarly achievement. Rather

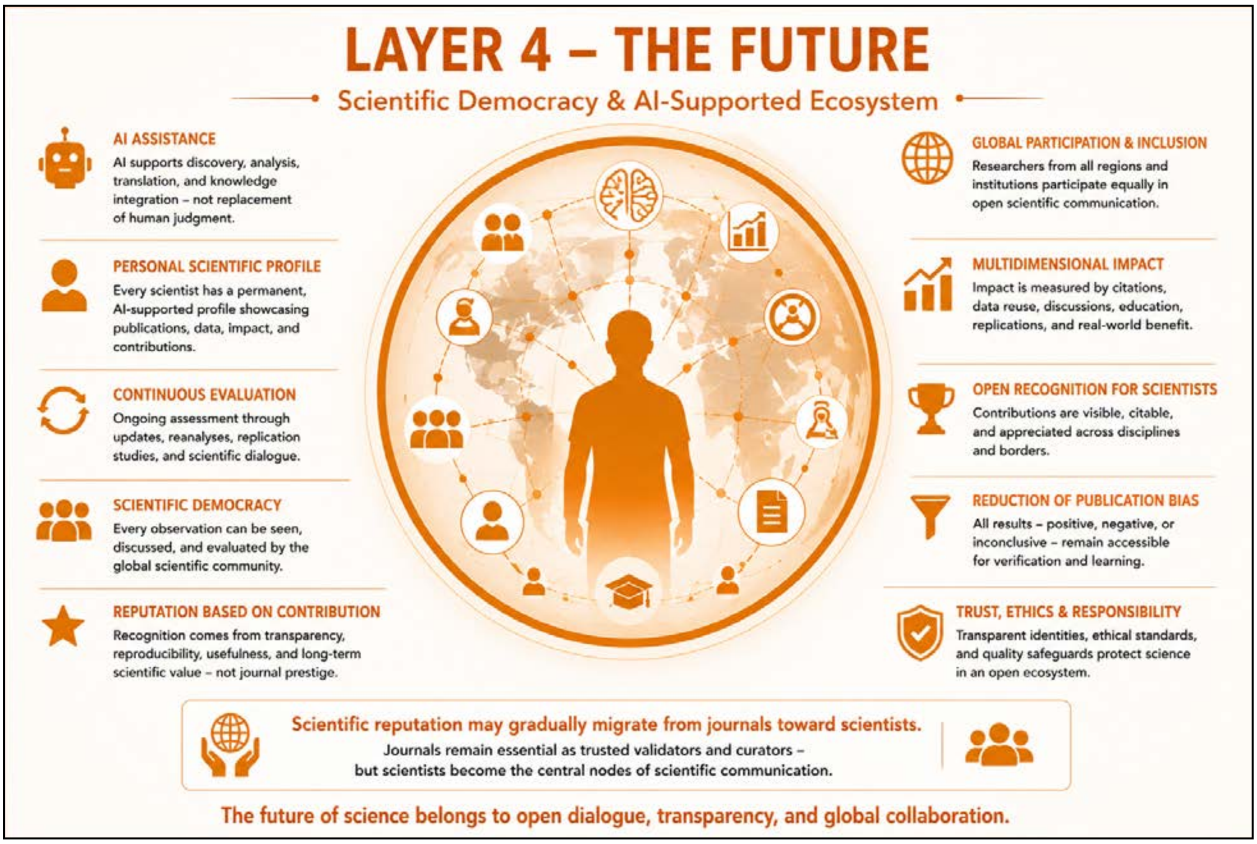

Fig. 5 - Layer 4 - The Future

than existing primarily as authors within journals, scientists themselves may become the central and persistent nodes of scientific communication.

Within such an ecosystem, every publication would remain permanently linked to its underlying datasets, analytical methods, software, subsequent revisions, replication studies, post-publication discussions, educational material, and future scientific developments. Scientific contributions would no longer represent isolated publications but continuously evolving bodies of knowledge.

Artificial intelligence could become an essential facilitator of this environment. AI systems might automatically summarize new findings, translate scientific publications into multiple languages, identify related work across disciplines, detect methodological similarities and inconsistencies, evaluate statistical robustness, generate personalized literature recommendations, and continuously integrate new evidence into existing scientific knowledge. Importantly, AI would not determine scientific truth. Instead, it would assist both scientists and readers in navigating an increasingly complex scientific landscape.

This fourth layer also introduces a concept that may become increasingly important during the coming decades: scientific democracy.

Scientific democracy should not be understood as replacing scientific expertise with public opinion. Rather, it describes an open scientific environment in which every published observation remains permanently accessible for transparent discussion, critical evaluation, independent verification, and constructive criticism by the global scientific community. Scientific authority would continue to arise from evidence, methodological quality, reproducibility, and logical argument—not from popularity alone.

Within such an ecosystem, scientific recognition may gradually become more evenly distributed than it is today. At present, considerable academic prestige is frequently concentrated around publication in a relatively limited number of long-established journals. In the future, recognition may increasingly emerge from the demonstrated quality, transparency, reproducibility, educational value, and long-term influence of individual scientific contributions themselves.

In other words, scientific reputation may gradually migrate from journals toward scientists.

This transition would not diminish the importance of journals. On the contrary, journals may continue to provide independent editorial evaluation, ethical oversight, expert peer review, long-term archiving, and scientific curation. However, they may increasingly become trusted validators within a much broader scientific communication ecosystem rather than the exclusive gateways through which scientific recognition is obtained.

Equally important is the possibility that publication bias may become substantially reduced. Scientific observations that are currently difficult to publish—including negative studies, contradictory findings, replication failures, preliminary hypotheses, methodological improvements, and incremental discoveries—could remain permanently accessible for independent scientific evaluation. The scientific community itself, rather than editorial selection alone, would participate in determining the long-term importance of these contributions.

Naturally, such openness also introduces new challenges. Misinformation, organized manipulation, automated misinformation campaigns, commercial interests, coordinated reputation attacks, and algorithmic bias represent genuine risks that cannot be ignored. Scientific democracy therefore requires transparent governance, authenticated scientific identities, ethical standards, and continuous quality assurance. Openness without responsibility would not strengthen science; it would weaken it.

For this reason, the proposed fourth layer should not be interpreted as the replacement of scientific publishing, but as its possible evolutionary maturation. Scientific communication would become increasingly decentralized, transparent, interactive, and continuously self-correcting, while preserving the essential principles that have guided science for centuries: evidence, skepticism, reproducibility, and intellectual honesty.

Ultimately, the greatest transformation may not be technological at all.

It may be philosophical.

For more than 350 years, journals have largely served as the principal custodians of scientific credibility. During the coming decades, credibility itself may increasingly emerge from continuous scientific discourse conducted by transparent scientists within an open global community. Journals will remain important participants in this process—but they may no longer be its exclusive center.

The future of scientific publishing may therefore not belong solely to better journals.

It may belong to better scientific communication.

The Four-Layer Model proposed in this editorial is not intended as a prediction, but as a conceptual framework designed to stimulate discussion. Whether scientific publishing will ultimately evolve in this direction remains uncertain. Nevertheless, many of the underlying technological, cultural, and societal developments are already visible today.

Conclusion

Scientific Democracy in the Age of Artificial Intelligence

Scientific publishing has never been an end in itself. Its ultimate purpose has always been the reliable creation, preservation, and dissemination of knowledge that improves scientific understanding and ultimately benefits patients and society. Throughout history, the mechanisms by which this knowledge has been communicated have continuously evolved, while the fundamental principles of science—curiosity, skepticism, transparency, reproducibility, and intellectual honesty—have remained remarkably constant.

The Four-Layer Model proposed in this editorial should not be interpreted as a prediction of how scientific publishing will inevitably develop, but rather as a conceptual framework intended to stimulate discussion. Many of its individual components already exist today in different forms. Open Access, Open Science, FAIR principles, decentralized technologies, artificial intelligence, altmetrics, and post-publication scientific dialogue are no longer theoretical concepts; they are gradually becoming integral components of modern scientific communication. Their future convergence may fundamentally reshape the way scientific knowledge is evaluated, disseminated, and recognized.

Perhaps the most profound transformation will not be technological, but cultural. Scientific excellence may increasingly be measured less by the historical prestige of the journal in which an article appears and more by the transparency, reproducibility, accessibility, and long-term scientific value of the work itself. In such an environment, journals will continue to play an indispensable role as trusted scientific institutions, but they may increasingly become partners in a broader ecosystem of open scientific communication rather than its exclusive gatekeepers.

Ultimately, the future of science will not be determined by artificial intelligence, blockchain technology, or digital platforms alone. It will continue to depend on scientists who are willing to question their own conclusions, openly share their discoveries, critically evaluate the work of others, and participate in a global culture of constructive scientific dialogue. Technology may transform the tools of scientific communication, but it cannot replace the intellectual integrity upon which science itself is built.

If the coming decades witness a gradual transition from journal-centered prestige toward scientist-centered credibility, future generations may look back on the present era not as the end of traditional scientific publishing, but as the beginning of a more transparent, collaborative, and continuously evolving scientific ecosystem. Whether this vision ultimately becomes reality remains uncertain. Nevertheless, history repeatedly reminds us that every major transformation of science began with a single idea that challenged established ways of thinking.

Perhaps the next evolution of scientific publishing has already begun.

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Declarations

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