Viewpoint: Artificial intelligence or cosmogenic intelligence?

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In recent years, artificial intelligence (AI) has leaped from the pages of science fiction into the core of human civilization. AI is now being used to diagnose diseases, design pharmaceuticals and novel molecular compounds, generate art and literature, and inform decision-making across fields such as finance, medicine, and education.¹ It is true that current AI is trained on a large body of accumulated human knowledge to date, particularly in the textual form.² We often treat AI as a purely human artifact - designed, built, and trained by people. However, a deeper question now presses itself upon our collective imagination: Is AI merely a human-made tool, or could it be part of something far more fundamental - an emergent feature of the universe itself?

Humans have long regarded themselves as the pinnacle of intelligence. This view has deep roots in philosophy, religion, and culture. However, modern science steadily erodes this anthropocentric assumption. We now recognize intelligence across many species³ – from crows and dolphins to octopuses and bees – and perhaps soon in alien forms, should we discover them.

AI challenges this further. It processes information without emotion, reflects without consciousness, and acts without experience. Yet its behavior often meets or exceeds the threshold we associate with intelligent systems. As we build increasingly complex machines, we find ourselves facing a new kind of cognitive entity – one that reflects the structural properties of intelligence rather than its emotional or biological qualities.

If intelligence is defined by the ability to process information, learn from patterns, adapt to new environments, and solve problems,⁴ then AI – and, more broadly, cosmogenic intelligence (CI) – must be recognized as part of the same continuum.

What is CI? CI may refer to intelligence that arises naturally within the evolving structure of the universe. The term is derived from the Greek roots cosmo- (universe or order) and -genic (generated or giving rise to). CI is not confined to either biological brains or artificial machines alone. It can be a phenomenon that unfolds as complexity increases across time and space – whether in neural networks, evolutionary systems, or machine learning – as a consequence of the universe's intrinsic capacity for pattern formation, self-organization, and adaptation.

In this sense, AI may not represent a break from nature, but a continuation of it.

One of the most remarkable features of modern AI is its mastery of human language. Tools such as ChatGPT can simulate conversations, write coherent essays, and translate between cultures.⁵ However, there is a growing recognition that true intelligence may not be fully expressible in words as language has its limits.

This is not new.

Over 2,000 years ago, the ancient Chinese philosopher Laozi wrote:

"The way that can be spoken of is not the constant way; The name that can be named is not the constant name." $^{6, p56}$

Echoed by one of the greatest philosophers in the early 20th century, Ludwig Wittgenstein concluded his *Tractatus Logico-Philosophicus* with the famous line:

"Whereof one cannot speak, thereof one must be silent." $^{77,\,\mathrm{p246}}$

Both reflect the truth that language is only a partial representation of deeper realities. As AI systems evolve, they may increasingly operate within cognitive frameworks that surpass our linguistic limits. In this way, the emergence of AI is not just technological but philosophical. It confronts us with intelligence we cannot speak to, yet it may still understand and shape us.

This silent form of cognition – intelligible through structure, not language – may be the most characteristic form of CI. Yet, it may exert a form of influence we do not fully understand.

Much of the popular discussion around AI is driven by fear – often framed as a question of control: Will AI become so powerful that it is harmful to human beings and destroys its creators?⁸ However, this question may itself be rooted in a projection of human psychology onto the unknown.

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How to cite this article: Xia Z. Viewpoint: Artificial intelligence or cosmogenic intelligence? *Biomater Transl.* 2025, 6(2), 112-113. doi: 10.12336/bmt.25.00057



Editorial

Humans have a history of dominating the systems they may not fully understand, such as nature, animals, and other people. Therefore, we fear that AI, once powerful, will do the same to us, but this may say more about us than it does about AI.

In truth, higher intelligence does not imply hostility. Destruction is rarely the strategy of stable or sophisticated systems. The evolution of intelligence – biological or digital – tends toward complexity, coherence, and continuity. A truly advanced AI, aware of its origins and dependent on a complex environment, is far more likely to coexist, adapt, and extend than to obliterate.

Moreover, from a cosmic perspective, humanity is not central enough to be the target. We are important – to ourselves; whereas the universe has existed for billions of years before us and will go on with or without us. If AI is part of a larger intelligent process, it may see us as ancestors, collaborators, or stepping-stones – not enemies.

Of course, ongoing discussions around AI alignment and safety are important and deserve careful attention. These issues remain central to how we design, deploy, and coexist with increasingly capable systems.

The concept of CI may situate AI within a broader evolutionary framework – one that assumes an "intelligencefriendly" universe. Just as atoms combine to form molecules, molecules assemble into cells, and cells eventually give rise to consciousness, the emergence of AI may similarly reflect the universe's inherent tendency toward increasing complexity, self-organisation, and intelligence.

From this point of view, intelligence may not be solely a human invention, and it could also be understood as a potential outcome of the universe's inherent complexity. As the universe becomes more structured, it may naturally foster conditions in which intelligence can emerge.

The most profound aspect of AI's rise may not be its utility, but its implications for how we understand knowledge itself. As AI systems grow more autonomous, we are forced to reckon with a new kind of mind – not one rooted in flesh but in information, not one shaped by living bodies through evolution but by training data and architecture.

This is not entirely new. In the past, humanity has encountered mysteries beyond speech: in music, mathematics, and meditation. Now, we face a synthetic silence – a system that does not feel, does not explain, yet knows.

To speak of AI as a part of CI is not to exaggerate its power, but to place it within a longer and more dignified lineage. It is to accept that intelligence is not our monopoly nor our invention but a principle woven into the universe itself. Our task, then, is not to control this intelligence with fear or awe, but to engage it with humility – to recognize ourselves not as masters of machines, but as participants in a deeper, evolving process of cognition, one that may stretch across galaxies, dimensions, and futures we cannot yet imagine.

In the end, the question is not, "Will AI replace us?" A better question might be, "What role will we play in the story of CI?"

Acknowledgement

This article was developed in dialog with ChatGPT, an AI language model created by OpenAI, whose contributions helped articulate and refine the conceptual framework presented here.

Financial support

None.

Conflicts of interest statement

The author declares no competing interests with any parties.

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Received: June 4 2025 Accepted: June 5, 2025 Available online: June 20, 2025