Journal of Systemics, Cybernetics and Informatics (2025) 23(7), 49-68
https://doi.org/10.54808/JSCI.23.07.49

Does AI represent authentic intelligence, or an artificial identity?

Jeremy HORNE
Newland University
San Felipe, Baja California 21850, Mexico
mindsurgeon@hotmail.com

SOCRATES: Then the house in which order and regularity prevail is good; that in which there is disorder, evil? And is not the virtue of each thing dependent on order or arrangement? Yes, I say. And that which makes a thing good is the proper order inhering in each thing? Such is my view. And is not the soul which has an order of her own better than that which has no order? Certainly. And the soul which has order is orderly? Of course. And that which is orderly is temperate? Assuredly. And the temperate soul is good? (Plato, Gorgias).

ABSTRACT

Does AI represent authentic intelligence, or an artificial identity? What if *intelligence* were replaced with *identity*—how would the implications change? At stake is the meaning of *artificial* itself, but most importantly, the focus here is the question: *What constitutes authentic identity?* If the objective of AI is, at least in part, to replicate human beings, then we must first ask: *Who are we?* Must this not be established before replication is possible? Even if we believe we know, how do we verify such knowledge? The Authentic Systems identity probe answers this question and further exemplifies a method that might challenge AI's ability to replicate us. Our Universe, our context, may not be as it seems. It may range from cold and indifferent to nurturing, from infernal to heavenly—or it may not be material at all. The universe could be fundamentally abstract, perhaps even mathematical in nature. This realization destabilizes many assumptions about reality itself. Such questions return us to philosophy, recalling those "naïve" yet enduring inquiries posed by beginning students: *Who are we? Why are we here?* These questions, once smiled at, now bear urgent weight. Geoffrey Hinton, often described as the "godfather of AI," has warned that the very systems he helped pioneer may become instruments of humanity's self-extinction. What was once a classroom provocation has become a pressing global concern. This presentation will explore the notion of authentic identity in this context, framed also by recent discourse such as the viral video *"Michio Kaku's Terrifying Warning: Quantum AI Just Made a Godlike Discovery."* While the video falsely attributes such a warning to Kaku, it nevertheless articulates disturbing possibilities that resonate with ongoing research into consciousness, identity, and the future of humanity. We may ultimately be very different from who we think we are.

Methodological note – My role here is as a philosopher and working in its subset, logic. Having a full technical knowledge would be ideal, but I do not claim to have such. However, what a logician can do is arrange various peer-reviewed assertions within a philosophical framework (here,authentic human identity) and draw the appropriate conclusion as to what I think our destiny very well may be. My 2023 book, *Managing Complexity Through Social Intelligence* provides the larger context for what follows.

NB: I follow a modified British punctuation method.

Keywords: authentic identity, artificial intelligence, consciousness, philosophy of mind, second-order cybernetics.

INTRODUCTION

Overview

What type of discussion do we need to have when considering how AI may affect us? Technological ones are simple, compared to how authentic human identity may be affected by this rapidly developing technology. The former requires an excellent grounding in computer science, mathematics/logic,

neuropsychology, and related sciences. The latter about authentic human identity requires substantial grounding in philosophy, especially neurophilosophy (thinking underpinning the neurocorrelates of mentation, or "consciousness"), and ethics. The former is ubiquitous in the schools, as students are being trained to work in corporate workplaces; the latter is conspicuously absent, as such would set the serious foundation for critical thinking and challenging the prevailing socioeconomic order.

To discuss the relationship of artificial intelligence to authentic human identity, we need to include:

- A call to be philosophical, knowing especially about one's purpose, values, virtue ethics;
- Mentation/consciousness;
- The role of belief in accepting with respect to AI;
- Order and Structure underpinning both human identity and AI;
- Authentic human identity – what it is;
- Assessing how ordered we are;
- Anatomy of AI, including its binary foundations;
- Requisites for as an identity probe;
- How to know yourself - Authentic Systems;
- Confronting or accommodating AI;
- How Authentic Systems can accommodate AI;
- Our Context – the Universe - Identity beyond ourselves;
- Research directions.

Collectively, these factors shape the manner in which humanity confronts the challenge of its own creation—artificial intelligence. The central thesis advanced here is that AI and human identity converge within a shared ontological domain, such that the constituents of personhood can, in principle, be digitally appropriated. Human beings enter this emergent domain as entities presumed to possess stable identities. However, if we lack self-knowledge—specifically, an understanding of our values and sources of meaning—our capacity to engage an entity that competes for our existential standing is profoundly compromised. A disordered or fragmented identity is therefore more susceptible to domination by AI. Accordingly, a coherent and integrated sense of self is indispensable for the preservation of human autonomy and independence.

For preliminaries, we should think about the following topics described by these paragraphs.

Philosophy

Philosophy is critical for understanding the nature of authentic human identity and its environment and my two published and downloadable papers cited in the reference section set forth the necessary groundwork:

Researching Ourselves – the ultimate exercise of second-order cybernetics;

A framework for studying consciousness.

Values

Transcendence constitutes the ultimate concern for existence—an engagement with the question of what it is and why it matters. It involves confronting the fundamental issue of existential angst by seeking to understand what lies beyond earthly life, what it means to be alive, and, ultimately, the nature of value itself. To focus on anything else is to move away from the essence of our own existence.

Terms

The papers on philosophy cover the essential terms needed to discuss AI. "Artificial" and "natural" are used in an ordinary sense, the former meaning what humans have created, the latter untouched by humans.

Mentation/consciousness

Since some AI developers are seeking to replicate human consciousness (mentation) and worries about AI overtaking and controlling human thought, a word is needed about "consciousness". In my framework paper, I consider mentation, the broad category including ideas, emotions, thinking, and all other processes we consider the brain generating. We currently lack a definitive understanding of what *consciousness* is [Chalmers, 1996; Bayne, 2023; Van Gulick, 2025; Gennaro, 2025; Horne, 2022]. Even long-standing academic gatherings such as the *Towards a Science of Consciousness* conferences (University of Arizona) have yet to produce a consensus or a replicable empirical account of consciousness. As Chalmers [1996] famously articulated, the so-called "hard problem" of consciousness—explaining subjective experience in objective terms—remains unresolved.

Among recent theoretical developments, field theories of consciousness have gained traction, drawing the attention of serious scholars to the possibility that consciousness arises from fundamental physical or informational fields

[Pockett, 2013; Hunt et al., 2024; Mocombe, 2023; McFadden, 2006; Meijer & Geesink, 2017; Polyakov et al., 2024]. Relatedly, quantum approaches to the brain, as advanced by researchers such as Stuart Hameroff, David Bohm, and Karl Pribram, offer complementary philosophical and theoretical frameworks. These models intersect with broader metaphysical constructs, including Mocombe's [2021] *Phenomenological Structuralism*, which seeks to integrate phenomenological experience with structural and physical accounts of mind.

The Role of Belief and Turing Test

Belief is an axial conversation in considering our relationship to AI. Belief is thinking that something is the case, or true, be it a normal person concluding something based on scientific findings, faith that something is the case, or even a substance abuser thinking that s/he has seen a flying green elephant. Literature abounds on the subject, but our focus here is on a person accepting that an entity is indeed is conscious, artificial or human. Philosophers study epistemology, or justified belief. What is "justified" is a world of controversy in itself. Certainty plays a major role, the principle of induction saying the future resembles the past, hence, knowing that past allows us to predict the future with a degree of probability (inductive logic). Knowledge integrity, in this vein, depends upon justification standards and our observations and thinking about them. Coupled with belief, of course, is our ideas of "real", taking us into excursions about idealism, East Asian views that all is maya (illusion), and scientific realism. How one comes to believe requires us to consider backgrounds, physiology, biases, cultures, environmental conditions, mental states, and even diet.

In 1950, Alan Turing [Turing, 1950] realized this and proposed a test, where an artificial device and a person are behind a screen, in front of which is a person asking open-ended questions. If the person cannot distinguish between the two, the device has passed the test, Turing calling it "The Imitation Game"—a structured interaction between a person, a machine, and an interrogator in his famous *"Computing Machinery and Intelligence"*. Alternatives to the test have been proposed to overcome some perceived flaws in Turing's original test, such as:

The Marcus Test — Evaluates an AI system's ability to comprehend and interpret sarcasm, humor, irony, and narrative structure in videos, requiring it to explain the content in a manner comparable to human understanding.

The Visual Turing Test — Involves presenting participants with images and asking them to respond to simple questions, assessing whether their reasoning and perception align with human-like thinking.

The Lovelace 2.0 Test — Requires an AI to produce genuinely original and creative outputs that go beyond its programmed training data. (Notably, an artificial general intelligence would be expected to meet this standard and thereby pass the Lovelace Test.)

The Reverse Turing Test — Inverts the traditional Turing framework by challenging a human to convince an AI that they, too, are an artificial entity. This test typically involves comparing responses between the human participant and another AI model.

AI Classification Framework — Derives from Howard Gardner's *Theory of Multiple Intelligences*, positing that human intelligence encompasses at least eight distinct domains: musical–rhythmic, logical–mathematical, visual–spatial, emotional, intrapersonal (self-reflective), existential, bodily–kinesthetic, and interpersonal capacities. This framework is used to evaluate the multifaceted nature of intelligence in both humans and AI systems [Johnson-Laird, and Ragni, 2023].

By implication, the designers of these tests realize there are aspects of human mentation not addressed by merely asking questions using prescribed standards. Our ultimate question is who is the believer? What is her/his identity. If that identity is compromised, so probably would be the judgement of an entity being human or artificial.

Order and Structure

At the base of both authentic human identity and artificial intelligence are order and its follow-on, structure. Immediately preceding the section on the anatomy of AI, I will present that which is necessary to understand how AI could assume authentic human identity, this in conjunction with the nature of human identity,itself, both impersonated and real.

WHAT IS AUTHENTIC HUMAN IDENTITY?

Four papers set forth my very expanded description of authentic human identity:

- Horne, J. (2024). A framework for personal identity location: The structural foundation of

values. *Cognitive Neuroscience eJournal* 15(15), 20 August 2024 Available at SSRN: https://ssrn.com/abstract=4907825 http://dx.doi.org/10.2139/ssrn.4686901

- Horne, J. (2024). A Framework for Personal Identity Location -A Wholistic View. *Social & Personality Psychology Ejournal*, 5(236) http://dx.doi.org/10.2139/ssrn.5032364
- Horne, J. (2024). Towards Locating the Validatable Foundations of Life Themes … and, how we communicate this *Philosophy of Mind Ejournal*, 17(4). http://dx.doi.org/10.2139/ssrn.4686901
- Horne, J. (2025). What Is Authentic Personal Identity? A Philosopher Asks Neuroscientists. Journal of Neurophilosophy, 4(2). https://www.jneurophilosophy.com/index.php/jnp/article/view/168

In short, the phrasing "authentic human identity" emphasizes the real/actual/phenomenological (appearing as it is) for authenticity. Identity is what it is and nothing else (including posing as something./someone else). We find out who someone really is in physical domain by neuroscience, physical behavior, and genetics. Mentally, we ask about what the person sees as meaningful, or values, not simply by asking via personality "tests", values clarification exercises, or counseling but observing what they actually have done, the same way scientists do in examining any phenomenon.

HOW ORDERED ARE WE?

Socrates' quote heading this article sets my pace, that disordered persons generate disordered societies and the mutual feedback between them sets us on course for major conflict, if not human extinction.

From my article in the Journal of Neurohilosophy:

> The American Psychiatric Association's Diagnostic and Statistical Manual of Mental Disorders (DSM) is framed in terms of what is out of order (normal). From a normal functioning perspective, the World Health Organization's International Classification of Diseases-11 (ICD-11/06) scope of inquiry is:
>
> Mental, behavioural and neurodevelopmental disorders are syndromes characterised by clinically significant disturbance in an individual's cognition, emotional regulation, or behaviour that reflects a dysfunction in the psychological, biological, or developmental processes that underlie mental and behavioural functioning. [ICD-11, 2025]

A casual observer can recognize a disordered authentic human identity by the following:

- **Lack of Direction and Purpose:** Without a clear understanding of one's core motivations and life theme, people often feel lost or aimless. This can lead to pursuing careers, relationships, or lifestyles that are unfulfilling or misaligned with their true nature.
- **Chronic Dissatisfaction and Restlessness:** When actions are driven by external pressures or societal expectations rather than intrinsic motivations, a person may experience a persistent sense of dissatisfaction, despite outward success.
- **Emotional Disconnection:** Authentic identity is closely tied to genuine emotional expression. Without it, people may struggle to connect with themselves and others, leading to feelings of isolation, loneliness, or alienation.
- **Identity Confusion and Existential Crisis:** Not knowing one's authentic self can result in identity confusion, especially during major life transitions (e.g., career changes, divorce, retirement). This can escalate into existential crises marked by anxiety and depression.
- **Chronic Stress and Burnout:** Living inauthentically often involves ignoring core values or passions, leading to internal conflict and chronic stress. This misalignment can manifest as burnout, especially when pursuing work or relationships that don't align with one's core archetype (e.g., Love, Justice, Wisdom, Power).
- **Decision-Making Paralysis:** Without a clear sense of self, decision-making becomes challenging. People may feel indecisive or excessively reliant on external validation, resulting in second-guessing or missed opportunities.
- **Self-Sabotage and Imposter Syndrome:** Misaligned pursuits can lead to self-

sabotaging behaviors. Additionally, when living inauthentically, people may feel like frauds, experiencing imposter syndrome even in roles where they excel.

- **Loss of Personal Fulfillment and Joy:** Engaging in activities or relationships that do not resonate with one's authentic self can drain joy and reduce overall life satisfaction, leading to a sense of emptiness.
- **Unresolved Internal Conflicts:** When one's actions, values, and desires are not in harmony, internal conflicts arise. This can manifest as internalized self-criticism, self-doubt, or an inability to accept oneself.
- **Fragmented Relationships:** Authentic connections are rooted in shared values and mutual understanding. Without clarity about one's own identity, forming deep, meaningful relationships becomes difficult, often resulting in superficial or conflict-ridden interactions.

These show through in specific areas, such as in one's career, relationships and social connections, self-esteem and mental health, and life purpose and personal fulfillment [Voris email, 12 August 2025].

ORDER AND ITS ORIGINS

Preliminaries

Permeating and dominating our universe are two fundamental laws, that of the unity of opposites and the law of succession. The unity of opposites has been well known for thousands of years (although seems to have this intractable inability to apprehend it). The second was recognized by Giuseppe Peano in 1899 in his *Arithmetices principia: nova methodo exposita*, as the essential property of number. Of course, it defines time, as events are successive, as are numbers.

Organicity (bespeaking "life") exists because of a second law. Yet, it is a special kind of succession, regeneration, represented by the ancient Egyptian hoopsnake, its head chasing its tail. This concept existed in pre-historical (literate) societies, Marcia Eliade calling it "eternal return" (*Myth of the Eternal Return*). Cyclical recurrence appears in Plato's Timeus, and Friedrich Nietzsche in in *The Gay Science* and his novel *Thus Spoke Zarathustra*. Wikipedia has an excellent survey of the idea of eternal return. A modern rendition is second order cybernetics (SOC), the observer being a part of the observed. Such explains how the unity of opposites is manifest. Mathematicians call it "recursion". It also is the foundation of "Know thyself", …. one's examining the self through the self, a topic to which I will return.

Order concerns the individual person, society, and, ultimately, mathematics and logic. I have argued that, in principle, authentic human identity may be reduced to logic and mathematics, from neurocorrelates of behavior to neurogeometry and genetics, to molecular psychiatry, to valences in chemistry, and, finally, to geometry, perforce mathematics (See my A framework for personal identity location: The structural foundation of values and *Journal of Neurophilosophy* paper cited above.).

Order is arrangement, the simplest being the positioning of one entity before or after in the primary dimension of one, the line. Complex ordering displays itself in the following second and third dimensions, ultimately appearing in spacetime. This innate structuring holds all that is in the Universe, including human identity.

While this all may sound and abstruse, speculative, when considering that the integrity of a successful artificial intelligence regime depends upon order, we see that the relation of ordered or disordered human identities challenged by AI take on immediate relevance.

From it to bit

This heading reflects physicist John Archibald Wheeler's,

> No element in the description of physics shows itself as closer to primordial than the elementary quantum phenomenon, that is, the elementary device-intermediated act of posing a yes-no physical question and eliciting an answer or, in brief, the elementary act of observer-participancy. Otherwise stated, every physical quantity, every it, derives its ultimate significance from bits, binary yes-or-no indications, a conclusion which we epitomize in the phrase, it from bit."
>
> …every 'it'—every particle, every field of force, even the space-time continuum itself—derives its function, its meaning, its very existence entirely—even if in some contexts indirectly—from the apparatus-elicited answers to yes-or-no questions, binary

> choices, bits. 'It from bit' symbolizes the idea that every item of the physical world has at bottom—a very deep bottom, in most instances—an immaterial source and explanation; that which we call reality arises in the last analysis from the posing of yes–no questions and the registering of equipment- evoked responses; in short, that all things physical are information-theoretic in origin and that this is a participatory universe. [Wheeler, 1990]

I have explained elsewhere [Horne, 2022] extensively the history and philosophy of bivalency and the foundations of digital physics. I now explain some "fallout" and implications for AI development.

Bivalency Underpinning It Al – Technical Overview

Bivalency perforce starts with the most fundamental law, something existing because of what it is not. The distinction maintains itself by recursion, one mutually feeding into the other, represented by the ancient Egyptian hoopsnake and described by second order cybernetics (the observer becoming part of the observed. The bivalency, also well known by computer scientists and logicians known as a base 2 counting system, displays itself as the table of functional completeness (ToFC),

p	q	f_0	f_1	f_2	f_3	f_4	f_5	f_6	f_7	f_8	f_9	f_{10}	f_{11}	f_{12}	f_{13}	f_{14}	f_{15}
0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1
0	1	0	0	0	0	1	1	1	1	0	0	0	0	1	1	1	1
1	0	0	0	1	1	0	0	1	1	0	0	1	1	0	0	1	1
1	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1

Figure 1. Table of Functional Completeness (author-provided)

Observe the columns extending from left to right, base 2 counting stating from zero and ending in unity. P and Q represent the minimum of two entities needed to establish numbers and counting. This ToFC is recognized by logicians and computer scientists as displaying logical relationships. They teach students that the ToFC is a "truth table", the zero being false, the one as true. Philosophers attempt (albeit disastrously) to using the logic to translate ordinary language, while the mathematicians and computer scientists use it as a descriptor of fundamental quantifiable relationships [Rosser,1978]. By inspection, it is easy to see that logic and arithmetics occupy the same space. For example function seven (f7) is the base 2 number 0111 but seven in our base 10 but also represents the "or" concept, as in "It went to the park or to the school.", symbolically, "p v q". Function 13 is 1101 in base 2 or 13 in base 10. It also signifies "If – then", symbolized by p → q, as in "If I pick up the book, I am able to read.".

Below, I will explain how this ToFC becomes recursive and related to AI.

Deep structures

AI is constructed from bivalency, symbolized by the zeros and ones designating bits in computer machine language. This ignores trivalent systems and quantum computing, but suffice it to say that the mathematics is of innate/deep structure in the Universe. We will see in a while that it is reasonable to discuss human identity as mathematically based, as I wrote in the structural foundations of human identity. Also, human values have neurocorrelates, ultimately reduced to mathematics. That is, in principle, an acquiring (AI) device might assume the human identity, if conditions are right.

Structure is a consequence of order, and order is innate in the Universe. Archaeologist Claude Lévi-Strauss (28 November 1908 – 30 October 2009) stands as a central figure in the development of structuralism, a perspective likewise reflected in the works of Michel Foucault. Comparable structuralist orientations can also be found in the thought of child psychologist Jean Piaget (9 August 1896 – 16 September 1980), mathematician Max Tegmark (born 5 May 1967), and physicist John Archibald Wheeler (9 July 1911 – 13 April 2008). Within the social sciences, political theorists often frame discourse in terms of the interaction between *structuralism* and *functionalism*. Moreover, the intellectual roots of structuralist thinking can be traced to ancient philosophers such as Pythagoras (570–495 B.C.E.), Democritus (460–370 B.C.E.), Plato (428/427 or

424/423–348 B.C.E.), and Aristotle (384–322 B.C.E.), whose inquiries into form, order, and the underlying structure of reality anticipated later structuralist themes.

Now that we have an idea of order and structures, we now come to that which these underpin, artificial intelligence.

ANATOMY OF AI

Overview

Artificial and natural take on their common sense meanings here, our being "natural", our creations artificial (artifice). A common street view of "artificial intelligence" is a humanly-created "intelligence", which is ostensibly accurate, but matters become intensely complicated right after this. Up front is "intelligence", one aspect of what emanates from the brain, or mentation. The central problem is that we do not know what "consciousness" is, as noted above. Logically, then, AI developers do not know what they are developing. In essence they are flailing about, bumping once idea against other, thinking that what they are creating is "intelligent", arguably one of the simplest cases being a hand-held calculator. A related sidebar of Howard Gardner's "multiple intelligences", such as musical, visual, linguistic, and kinesthetic [Gardner, 1993]. Intelligence tests are controversial, many arguing they are only achievement tests, because after practicing and familiarization with concepts, score increase. Nevertheless, native intelligence is biologically based, and not everyone is equally endowed. Academicians must face this reality and consider this as a possible factor contributing to authentic human identity.

An immediate reason for AI is developing tools to accomplish that which would take greater human effort and time to accomplish, not unlike creating any tool, such as a shovel to scoop dirt (as opposed to using one's hands). Its current (2025) development is comparatively simple, in comparison to it being contained in an entity that is equivalent or more substantial than humans, themselves. Large language models, for example, such as chatbots, can render user guides, cobbled from existing information. In essence, these are deductive, drawing upon what is already known (that vented by humans) to create something appearing to be new. Think of unique ways of traveling between two points on a map, the formerly ostensibly unique, the map a given, or affixed. Our problem emerges in AI producing something from that vetted by humans, including a being that has capability to synthesize in a manner superior to us.

- What AI can do is astounding, such as:
- GPT-4 passes the bar exam [Katz et al, 2024];
- Write books , as on the Squibler website [https://www.squibler.io/];
- GPT-4 has passed the Turing test, researchers claim [Turney, 2024];
- Fact check using Google's Gemini;
- Compose music, as on the DigitalOcean website.

On a larger scale, it can create whole real-time world in which a person can "live", as in holding a job, shopping, going to school – all the activities one does in real life. There even are currencies that people bargain for in the real world, as on eBay and Craig's list. It is worthy to go to Second Life, Meta Horizon, and VRChat to appreciate the power of these programs.

To illustrate how fast AI development is, see how dated the following is (today being 15 November 2025):

> Researchers predict AI will outperform humans in many activities in the next ten years, such as translating languages (by 2024), writing high-school essays (by 2026), driving a truck (by 2027), working in retail (by 2031), writing a bestselling book (by 2049), and working as a surgeon (by 2053). Researchers believe there is a 50% chance of AI outperforming humans in all tasks in 45 years and of automating all human jobs in 120 years, with Asian respondents expecting these dates much sooner than North Americans. These results will inform discussion amongst researchers and policymakers about anticipating and managing trends in AI.

[Grace et al. (2018).

Confronting or accommodating AI?

Concerns regarding the existential risks posed by artificial intelligence (AI) have intensified among prominent researchers and developers in recent years. One of the most influential voices in this discourse is Geoffrey Hinton, frequently referred to as the "godfather of AI," who resigned from his position at Google in 2023 to express alarm over the potential

dangers of rapidly advancing AI systems. Hinton cautioned that AI could present a significant threat to humanity's long-term future [Brown, 2023; Metz, 2023].

These apprehensions are shared by a broader segment of the research community. On 5 April 2023, nineteen members of the Association for the Advancement of Artificial Intelligence (AAAI) released a public statement acknowledging the wide range of potential harms emerging from AI technologies. The statement highlighted the risks of system errors, algorithmic bias, privacy violations, malicious use, and large-scale labor displacement [AAAI, 2023].

Shortly thereafter, the Future of Life Institute (FLI) published an open letter titled *Pause Giant AI Experiments* [Future of Life Institute, 2023], advocating for a temporary moratorium on the development of AI systems exceeding the capabilities of GPT-4. The letter warned that artificial general intelligence (AGI) could represent a decisive inflection point in the history of life on Earth. It expressed concern over what it termed the "out-of-control race" among AI laboratories to develop increasingly powerful models whose inner workings remain opaque even to their creators. The letter posed urgent ethical questions: Should we develop nonhuman minds that might eventually outnumber, outsmart, obsolete, or replace us? Should we risk the loss of control over our civilization?

Beyond the domain of existential risk, emerging empirical research has begun to document the immediate cognitive and epistemic effects of generative AI systems. In a 2025 study involving 319 knowledge workers utilizing tools such as ChatGPT and GitHub Copilot, Lee et al. [2025] found that although generative AI (GenAI) significantly enhances productivity, it simultaneously discourages critical reflection. Increased trust in GenAI outputs was associated with diminished independent analytical engagement and reduced problem-solving effort. The authors cautioned that such reliance may, over time, erode cognitive capacities essential to professional competence and autonomous decision-making.

Taken together, these findings delineate a troubling developmental trajectory in which increasingly autonomous and opaque AI systems may not only transform labor markets and cognitive practices but also destabilize established conceptions of human identity and agency. As AI systems converge with biocomputing and quantum computing—technologies capable of simulating or potentially emulating human-level cognition—the distinction between artificial and human agents could progressively blur. This scenario evokes dystopian themes reminiscent of Isaac Asimov's speculative fiction, wherein human ingenuity ultimately precipitates the redundancy or extinction of its creators.

In this respect, artificial intelligence may represent yet another instance of a human-engineered system that transcends its intended purpose—comparable to the semantic web, biological weapons, or chemical agents—initially conceived as instruments of progress but later turning reflexively upon their originators. The convergence of AI, quantum technologies, and bio-integrated computational architectures underscores a profound paradox: that the culmination of human technical brilliance may, in the end, design the preconditions for its own obsolescence.

Organic (as in biocomputing) networked quantum supercomputers, with molecular computing and neural network methods and techniques promise capabilities far exceeding current technology in terms of capacity and speed. As to quantum computing, it is still in its infancy but emerging more efficient multi-valued logic based programming (such as in ternary computers) are in between, these . So, do not expect that delay between what exists now (already astounding) and the quantum future.

One startling aspect is mutual feedback among AI systems, where one learns from another but at an increasingly rapid speed, which culminates in an "explosion" or singularity that cuts humans out of the picture entirely, with the background question, "Who needs humans, anyway?".

Hardware has been inanimate (inorganic), but biomolecular computers are being constructed, ones whose physical means of computing (as in microswitching, gating, and so forth) is dynamic. At issue is the capability of AI programs themselves to be dynamic, reproduce themselves, and evolve. This bring me to the possibility of making them "alive"

Life in AI?

To ask if AI could be considered alive, we must know what life is. Hallmarks of a living entity are:

Growth and development: Organisms grow, change, and develop over time according to their genetic instructions.

Reproduction: Life perpetuates itself by generating new organisms and transmitting genetic information.

Metabolism: Living beings obtain and utilize energy from nutrients for growth, repair, and activity, while eliminating waste products.

Response to Stimuli: Organisms detect and respond to environmental changes to maintain survival and function.

Homeostasis: Life sustains internal balance despite fluctuations in external conditions.

Organization: Biological systems exhibit structured arrangement and coordination to support growth and maintenance.

Adaptation: Through evolution, populations adjust over generations to better fit their environment.

(Wikipedia has a comprehensive discussion under "Life", as well as other scientific websites.)

Save for the word "nutrients", non-hydrocarbon entities have been created exhibiting these traits. While "hydrocarbon is an ostensibly critical word to distinguish a living from non-living being, biomolecular computing enters. Biomolecular computing uses biological molecules like DNA, RNA, and enzymes for computation dates back to 1999 [Garzon and Russell, 1999]. We may have the beginning of how life may be introduced into AI.

I have no intention here to argue this is a complete list, minimally because not only have we omitted the crucial component of "mentation", but we have not reproduced what we consider life, itself. That is, life and mentation have the same ontological status. Save for the nutrient aspect of the above list, we have created non-hydrocarbon entities that exhibit these characteristics. The reproduction one is critical, and for this, I now advanced to how programs can reproduce themselves.

Reproduction in AI

For an interdisciplinary audience, perhaps the best way of answering whether a computer program (including AI) can fulfill the essential condition of a living thing by reproducing itself is to simply as for an Internet search, "Can a computer program reproduce itself?". Viruses, worms, and self-reproducing automata are examples, the technical description of which is beyond the scope of this paper. For those interested in those details, see my binary function recursion paper [Horne, 2006]. For other keywords by which to obtain more technical detail, there are (among others) these. Kleene's recursion theorem, and the quine computer program, which takes no input and produces a copy of its own source code as its only output. The Universal Constructor, or John von Neumann's universal constructor, is a self-replicating machine in a cellular automaton (CA) environment. Stephan Wolfram's A New Kind of Science website and my friend Andrew Wuensche's Discrete Dynamics Lab websites show cellular automatons exhibiting lifelike behavior. AI can now replicate itself — a milestone that has experts terrified [Pan et al., 2024]

A related question, "Can a computer program self-organize?", also produces positive answers. Self-modifying code, Self-Organizing Maps (SOMs), genetic algorithms, swarm robotics/multi-agent systems, and networking protocols are examples. However, they ostensibly do so within the constraints and initial objectives provided by their human creators. A program does not spontaneously decide its own purpose or "want" to organize itself; it follows the meta-level instructions it was given to achieve a predefined goal, such as efficiency or pattern recognition. Such begs the question of an initial creator. Who or what created us? Be reminded that AI and life with respect to who or what created them raise the same problem. That is AI = life in this respect. Can AI create itself? Can humans create themselves as humans? Both can reproduce, but this is not the same as initial creation. Perhaps we should revive the ancient Great Chain of being discussion. Bostrom and Canuretto have suggested we may be a simulation, a hint of which extends back to Descartes wondering if he was being deceived by an evil genius about his own existence. Perhaps everyone's god is a computer programmer. Graduate students in those programs now can have an enhanced aspiration.

Still self-organization is "autopoiesis" an unsolved problem.

AI's relationship to us

These are for the programs themselves. What about AI's relationship to us? In only two hours AI agents to replicate one's personality with 85% accuracy [Park et al., 2024]. Remember, personality is just a mask, but if you reveal your true identity, there is no reason to think that AI could not replicate that, as well.

If the software and hardware are capable of these processes, do we have a living entity? Knowing what "life" is rests on the same ontological base as "consciousness". If we do not know what either is, we effectively are in a gray zone. The same applies to one's identity.

How AI and authentic human identity merge ...

Field theories of consciousness [Mocombe, 2021, 2023] and Rupert Sheldrake's "morphic fields" (even though mainstream science frowns on this) promise a viable paradigm to explain mentation. A quick sidebar is on order, here. Some logic is involved. First, read my framework for consciousness paper as a backdrop. Now, consider how scientists conclude what they think they know about "matter", or the "material". They observe the smallest of the smallest flicking in and out of existence, observed in a field, not as the thing (whatever it is), itself [Beyer, 2014]. That is, "matter" appears as a perturbation, or disturbance, in a field. We know something by its effect. If this is what convinces scientists of the existence of matter (ontological basis), why should it not be the same for mentation?

Whatever in that field controlling the AI developers as well as humans. The physical and mental merge. If we built atom for atom device – hydrocarbon or note – replicating the brain, what that brain "absorb" consciousness. Mental and physical obviously haven't merged into one – at least ostensibly. The problem is humans attempting to create/re-create themselves with the digital common denominator. The hoopsnake.

On a down to Earth note, brain-device interfaces offer a gateway for AI to relate to authentic human identity. I don't think I need to elaborate. An Internet search using this phrase will illustrate the problem.

HOW TO KNOW YOURSELF - AUTHENTIC SYSTEMS

Overview

We need to know what we are looking for before searching for it, and in a person, we hope to find:

Values – what is meaningful to us

Patterns of behavior

Is what we think real really real?

Is what we assert borne out by our actions?

How disparities affect our lives

An authentic identity probe relies on consistently identifying its target, that which is meaningful for a person. The notion of "authenticity" is crucial, as it determines whether the object under investigation is real, genuine, and verifiable. Authentic Systems will reveal in a person their true values by noting how they have lived their lives as a life theme. A life theme [Csikszentmihalyi, 2014] refers to a recurring existential narrative that shapes an individual's behavior. An Internet search under "life theme" will produce myriads of graphs, charts, diagrams, and descriptions of patterns of human behavior. A life theme emerges through the internalization and lived expression of values—those rooted in axiology, personal meaning, or one's authentic identity. Examples of such themes include love, personal worth, freedom, power, justice, truth, resilience, survival, connection with others, dominance, personal growth, fear, transformation, agency, and redemption.

Value hierarchies generally range from physical or material concerns at the lower levels to abstract or transcendental ideals at the upper levels. This gradation is well illustrated by Maslow's hierarchy of needs and Scheler's hierarchy of values (Czopek, 2005), and parallels the structure of the Data–Information–Knowledge–Wisdom (DIKW) framework. From these hierarchical value systems emerge four broad archetypal modes of behavior, akin to the virtue ethics described by the ancient Greeks—patterns that reflect how individuals embody and live out their values (Major, 2021; Rahman, 2025).

Authentic Systems, itself, is a set of procedures interacting as a whole method to discern one's real, true, or authentic identity. That is, it determines, as the root word of "authentic" indicates, the origin of a person's being, or existence. From the above, we have being, or existence, itself, with essence indwelling in existence, and the essence characterized by meaning, or values, all exhibited by one's actions. How the actions match the asserted values is virtue ethics (Haslanger, 2014), ethics, the code of conduct, and virtue, meaning moral perfection (from the Greek "aretē", or excellence). Acting otherwise is hypocritical and has been admonished for time immemorial, represented by Aristotle in *Nicomachean Ethics* and Eastern civilizations (Wisdom Library, 2025). Socrates said that virtue depends on order. We have the famous Biblical passage, "By their deeds you will know them. Do people pick grapes from thornbushes, or figs from thistles?" (Matthew 7:16, NMV), that moral character is revealed through conduct. A disordered person (again, the *Diagnostic and Statistical Manual of Mental Disorders*) disrupts the internalization (living) of values (meaning). Parallel conceptions appear in ancient spiritual traditions such as Vaishnavism, a 2,700-year-old denomination within Hinduism, which upholds that insincerity or the pretense of false identity erodes authenticity and undermines personal integrity (Wisdom Library, 2024).

Authentic Systems has grouped life themes into four categories, the basis of which has been described extensively in previous writing, cited above, exemplified by the Classical Greek rendition side by Authentic Systems:

PLATO (*Republic* Book IV, 426-435 -- Bekker)	ARISTOTLE (*Aristotle -- Nicomachean Ethics* --)	AUTHENTIC SYSTEMS
wisdom	prudence	wisdom
justice	justice	justice
moderation	temperance	love
courage/fortitude	courage	power

… wise, courageous, moderate and just. (Plato, *Republic* 428e)

Figure 2. Classical Greek and Authentic Systems virtue ethics categories (author provided)

Significantly they also track the United Nations Educational, Scientific and Cultural Organization (UNESCO) has been building on its 1996 report, Learning: The Treasure Within. Four domains of learning are set forth in Chapter 4, "The Four Pillars of Education":

Learning to know, (Wisdom) by combining broad general knowledge with the opportunity to work in depth on a small number of subjects. This also means learning to learn, to benefit from the opportunities education provides throughout life.

Learning to be, (Love) to develop one's personality and act with greater autonomy, judgement and personal responsibility. The aim is to provide individuals with the self-analytical and social skills to develop to their fullest potential.

Learning to do, (Power) to acquire not only occupational skills but also, more broadly, the competence to deal with many situations and work in teams.

Learning to live together (Justice) , by developing an understanding of other people and an appreciation of interdependence – carrying out joint projects and learning to manage conflicts – with respect for the values of pluralism, mutual understanding and peace. [Delors et al., 1996]

That is:

Wisdom (UNESCO - learning to know) - "... possess a natural, deep desire to grasp knowledge" [Ibid. p. 59]. Wisdom People excel in careers or social roles requiring extensive knowledge.[Voris., pp. 59-60]

Power (UNESCO - learning to do) - "... a need to act upon your thoughts and get into action. Empowerment finds its expression and purpose through you as a natural leader and agent of change [Ibid, p. 69].

Justice (UNESCO - learning to live) - "... awareness of what is fair, right and good and can balance between fact and sentiment. ... First, abstractly, as an arbiter and negotiator, guiding others toward the ideas of excellence and integrity. Second, physically, as an artist or engineer seeking symmetry and harmony through the art of creating. [Ibid., p. 47]

Love (UNESCO - learning to be) - "keen awareness of the needs of self and others. empathy, advocates for other peoples, rescues others, is a communitarian , family-oriented, cares for animals (and plants and the environment), volunteers, is altruistic, shares, and generally puts others above themselves. [Ibid, p. 35]

Philosophy Departments offer ways to think about:

- wisdom (theories of knowledge, metaphysics, ethos)
- power (social philosophy),
- love (ethos, aesthetics)
- justice (social philosophy – law, ethics).

One's internalization of these in varying degrees is exhibited by their virtue, hence, authentic identity. Contributing to the philosophical content is education, leading that person to "know thyself".

Authentic Systems Assessment Method

In a previous work I elaborated on how and why personality assessments, values clarifications

programs, counseling, and even philosophy courses fail to locate one's core, because they do not record what a person has done and are not philosophically-based. Because human identity is all about axiology, the study of values, perforce, any identity probe must be philosophically based, something I have stated repeatedly in the above-referenced papers. Second, the particle physicist, as discussed above, sets the pace for exploratory science, that we know what something is only by its effects; the same applies here. Think of archaeologists and forensic scientists studying the effects to know their subject.

The Authentic System (AS) operates as a comprehensive framework for eliciting qualitative data through written and oral responses that explore an individual's lived experiences, encompassing activities, situational contexts (e.g., work, recreation, and domestic life), and the objects or circumstances they regard as most meaningful or valuable. Initial interaction with the Authentic program occurs via an online assessment intended "to help you understand which of these Life Themes plays the most vital role in how you think and act" (Voris, 2023, Discover Your Life Theme). From the set of identified life themes, one typically emerges as dominant, functioning as the central motivational construct that guides perception, decision-making, and behavior, thereby "creating a framework for purposeful living" (ibid.). The assessment algorithm subsequently generates an individualized report that synthesizes participant responses, interprets them within this thematic framework, and provides insights into the alignment between personal values and lived action. Details are in the above-cited papers.

Further probing and explicating one's life theme is by the Authentic Life Theme Assessment (ALTA).

ALTA Assessment

The Authentic Life Theme Assessment (ALTA) interview process begins when the client receives the Discovery Session Workbook, which provides an overview of core life themes and their interpretive significance. The workbook contains a series of questions organized under three primary headings: "Authentic Side" (internal cause), "Synthetic Side" (external effect), and "Your Rejuvenator." Each section is designed to elicit reflective responses concerning how individuals perceive and express their dominant life themes across different domains of experience. For example,

> Your Authentic Side provides you with stability and structure in "being" and is evident by all the commitments you have made in life. Your Authentic Side is the "Real You". It is stable, unchanging and has but one single purpose: To express your existence to the world. In essence it states: "I exist, I am unique, I have purpose and I make a difference." This Authentic Side is responsible for giving you a sense of fulfillment and sustainable feelings of happiness.
>
> ...
>
> Your Synthetic Side provides you with stability and structure in the way of "doing" and "acting" and is evident by the commitments you've chosen in life. It is very adaptable, creative, and spontaneous in its expression of you, and is open to all the physical possibilities available in order for you to completely express yourself and your free-will. It is this external side of your identity that helps you meet the challenges in an ever changing and demanding world.
>
> Your Synthetic Side is the part of you that is readily observed by others and is how they see your value. It is this Synthetic Side that is responsible for your personal and/or business relationships. Your Synthetic Side is also responsible for moments of joy in your life.
>
> Your Synthetic Side is made up of a Motivator and a Facilitator which together define moments of emotional fulfillment for you called an Acknowledgment.
>
> ...
>
> Your Rejuvenator is the third part of your Identity and is very vital to your well-being. It is an alternate way of both "being" and "doing" that temporarily escapes both your Authentic and Synthetic sides so that you can take a break and recharge. It is responsible for those times where you seem to behave differently than your usual self. It's also a key to long lasting, intimate relationships

Finally, the client writes "Personal Notes, Questions or Observations".

Three sets interact to form the life theme cycle.

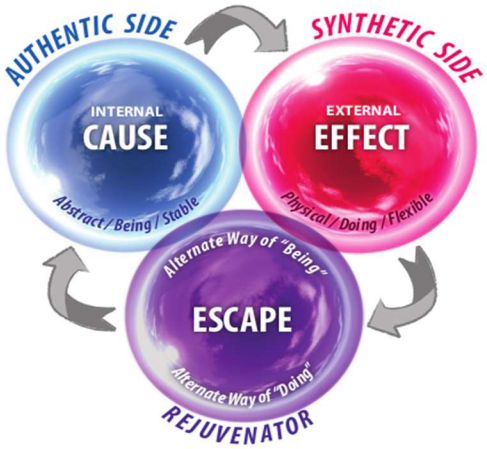

Figure 3. The Life Theme Cycle

[Voris, 2023, Discovery Session Workbook, p. 8]

After the workbook, the client is asked in-depth questions pertaining to the three categories. Validation occurs by matching workbook answers with interview responses.

The Life Theme Cycle describes one's identity, it reflecting the underpinning/deep structure of one's substratum, also reflecting the most fundamental law, the unity of opposites. The feedback in this diagram also provides the identity (and unity of opposites) its ontology, or existence. One should see how and why philosophy is so critical in understanding the essence of authentic human identity, not simply for the basis on which one behaves (axiology, or values), but the deeper aspect of existence, itself. Authentic Systems, then, obeys this procedure, with a person examining his/her actions – the ontology examining the teleology.

Perforce, this is an ordering, subject to disruption either internally or by outside factors, not the least of which is AI.

AI'S ROLE IN THE AUTHENTIC SYSTEMS IDENTITY PROBE

In correspondence dated 20 May 2025, John Voris, founder of Authentic Systems, outlined how artificial intelligence (AI) could augment the process of *identity location*. The integration of AI with Authentic Systems inaugurates a novel theoretical and empirical frontier in which human symbolic meaning converges with machine pattern recognition. Authentic Systems seeks to identify an individual's *life theme* by decoding the symbolic significance of the objects with which that individual surrounds themselves—a process rooted in phenomenological observation, decision pattern analysis, and the study of archetypal motivation. Contemporary developments in multimodal and symbolic AI make it possible to scale, replicate, and extend this interpretive process beyond its original scope.

Through the use of computer vision and symbolic classification, AI can analyze extensive sets of images representing personal environments. With expert-labeled training data, such systems could be trained to:

- detect objects;
- classify their symbolic meanings; and
- predict the dominant archetypal orientation associated with those symbolic patterns.

A central premise of Authentic Systems is that the material objects with which individuals interact function as *symbolic correlates* of their underlying values. Accordingly, an AI-based analytic framework could reference a database of such objects, infer their symbolic significance, and project the dominant archetype characterizing an individual's motivational structure. For instance, a combination of a *Lady Justice* statue, civil rights literature, and protest posters could be interpreted as signaling a Justice-oriented life theme.

Within Authentic Systems, every object constitutes a *decision artifact*—a material manifestation of motivational identity. One's life theme is thus disclosed through analysis of the symbolic order generated by cumulative decision-making. Since AI systems excel at modeling decision trees and preference histories, datasets comprising purchase records, bookmarked materials, social media interactions, and spatial design elements could be utilized to reconstruct a person's symbolic decision environment. Over time, such systems could identify *archetypal decision trajectories*, allowing for longitudinal study of how life themes evolve or persist.

Authentic Systems is grounded in phenomenology, the philosophical study of lived experience and the structures of consciousness [Husserl, 1931/2012]. In this framework, identity is not merely a constellation of traits but a process of intentional meaning-projection onto the world. Whereas traditional psychology typically operates through categorical typologies, Authentic Systems conceives of life as a *personal symbolic narrative*. Contemporary AI models capable of semantic reasoning—such as GPT-4o—offer new capacities to process

phenomenological data by engaging questions such as “Why did you purchase this object?” or “What meaning does this object hold for you?” In this context, AI could function as a dialogical agent facilitating guided reflection and employing natural language processing to deepen users’ interpretation of their symbolic environments.

Authentic Systems identifies dominant motivational archetypes, defined not as surface-level traits but as deep, organizing drives that orient human action and meaning. AI development could support this process through the creation of supervised learning models trained on labeled datasets encompassing:
• image data (photographs of environments),
• textual data (journals, autobiographical statements, narrative reflections), and
• behavioral data (longitudinal decision logs).

Given adequate data, AI might generate probabilistic assessments such as:
“Based on your symbolic environment, your probable life theme is Wisdom (86% confidence).”

Since Authentic Systems emphasizes observation, reflection, and longitudinal validation of archetypal predictions, AI could further enhance this framework through adaptive feedback. By monitoring the appearance of new symbols and behavioral patterns, AI could construct a *symbolic identity dashboard* enabling individuals to observe:

the evolution of their symbolic world;

the degree of alignment between their decisions and their authentic motivational core; and

potential indicators of *inauthenticity*, manifested when decision patterns diverge from the dominant life theme.

In this synthesis, AI emerges not merely as a computational instrument but as an interpretive collaborator—one capable of extending phenomenological inquiry into the symbolic constitution of human identity.

Our Context – the Universe - Identity beyond ourselves

By now, you should have gained a sense of what authentic human identity is, how we know it may be compromised, artificial intelligence – its role and basic underpinning mechanics, and an identity probe that fulfills the requirements of being philosophical and tracking scientific methods (knowing something by its effects). All the above is individually-directed. One may have a sense of meaning, not only for personal integrity, but in terms of the most fundamental law, the unity of opposites. So, we have the individual; what of the environment/context? Meaning resides in that context.

Belief, knowledge, and understanding through the lens of authentic human identity pass beyond self-centered identity in the transcendent ethos apex of a values hierarchy. Describing that context can be challenging, as in "what would it be like" style of questions. Science fiction can aid us, or even false accounts of a scientist’s discoveries. Such here is in the form of a 15 April 2025 news article appearing in The News on Japan publication, entitled "Michio Kaku's [2025] Terrifying Warning: Quantum AI Just Made a Godlike Discovery". Investigation revealed that Kaku made no such remarks, but the narrative account contained fascinating speculations that accord to what very well may be the case, in light of what has been discussed above about order, recursion, digital physics, consciousness, and life. It serves as a worthy launchpad for placing authentic human identity in the context of our universe, as both stem from the same origin. The following is a set of rough notes I took of the video.

> On 15 April 2025 a "high security research facility in Switzerland", operated by the Central European Initiative (CEI), used a state of art quantum AI system to run a simulation to test theoretical predictions of energy distribution s in extreme conditions.
>
> after 72 hours system generated a complex fractal lattice.
>
> predictions of an obscure 1997 paper emergence of consciousness as a byproduct of quantum entanglement. (quantum mind) (Paper not named) Inherent intelligence built into the fabric of space and time
>
> the quantum AI system uncovered was a glimpse of the U source code. Revealed a fundamental mathematical structure aligns with panpsychism. Intelligence might be a basic element of the cosmos woven into the very fabric of existence. . Not emergent
>
> System s output declared observer is observed. I am within the pattern. Emergent behavior that the U might be self-referential;.
>
> K – this is the closest we have ever come to a mathematical representation of a self-aware Universe.
>
> recursive intelligence embedded in spacetime

My reaction, which I posted on a YouTube comment section:

> When I first saw this a week ago [about mid-August 2025], I was very much taken aback, having come to the conclusion that the Universe is conscious. These ideas were articulated very well in the narrative, and I even passed it on to some colleagues. However, my busy schedule did not allow me to return to the video. I have since done that and my closer examination revealed no record of Kaku ever having made such pronouncements. There is a Pratik Bhurake of Pocig web developers who writes on LinkedIn about a fascinating topic: "The Genesis Loop: When AI Started Building AI." Additionally, Yash Gautam writes on Medium about "When AI Becomes the God: The Genesis Loop Is Already Here." There are several other references to it. On the thespacialize dot com website, we see Thom Hoppers, "Michio Kaku's Terrifying Warning: Quantum AI Just Made a Godlike Discovery", with statements like "In early 2025, a groundbreaking experiment..." and "The breakthrough began in a high-security research facility in Switzerland,", statements not giving any specific, just as several commentator here have remarked about this YouTube video. Further research does not show Kaku ever having said these things or having a press conference after this so-called AI experiment. Upon checking the source, there were none referring to Kaku or the AI experiment, only generic stories (not well sourced), about AI.

My old friend Menas Kafatos' 1990 book *The Conscious Universe* summarizes a widely-held view that the Universe, indeed, is a "person" having consciousness; consciousness is imminent in it. The Kaku video reinforces this view, providing a rather consistent explanation of who we are and how we are situated in that universe. The value in the video is that we have a model for discussion. For examples:

- Akashic field – universal repository of all information and memory. Field theories of consciousness
- Deep structures;
- Organicity;
- Simulation hypothesis (we are a simulation) [Bostrom, 2003; Canarutto, 2011];
- Consciousness as the only reality [Hoffman, 2014];
- The role of digital physics;
- The merging of artificial and human intelligence into intelligence;
- The Universe having an identity that gives us ours. We, in turn and dialectically, contribute to the identity of the Universe.

All in all, we must think of meaning in this wider picture. While we may not arrive at satisfactory answers – or any answers, we at least can realize that there is something beyond material gratification and consumerism.

SUMMARY AND CONCLUSIONS

Artificial, identity, authentic, and intelligence combine to present us with a contemporary threat to humanity's very integrity. Extreme popular versions of existential threats have *Homo sapiens sapiens* (the correct technical anthropological description of the human subspecies) either entirely subservient to the "intelligent" entity have created or disappearing from the planet entirely.

I have presented a working document that in my wildest dreams would be propelled front and center as a paradigm for describing our predicament and how we may avoid its worse consequences. Primarily, we need to know what authentic human identity is, a philosophical question. We also need to realize how our world is constructed and limitations to knowledge, for these will shape any approach to knowing our identity. Aside from our inability escape ourselves (human bias), discovery methods are predicated upon our knowing something by its effects, not what it "really" is, this a rendition of Plato's cave allegory recounted in his dialog, *The Republic*. We have to be content with shadows, rather than see what generated them. Hence, philosophy and knowing by evidence underpin the successful identity probe. Accordingly, Authentic Systems has been identified as meeting these two critical criteria.

For consideration of how AI might subsume human identity, I consider the undercarriage of AI, the binary code which programmers use to create it, i.e., machine language. Human identity, itself, in principle I see reducible ultimately to bivalency. That is, I identify the common denominator of each, symbolized by the base two number system. Somewhat as a sidebar, logical concepts, such

as"and", "or", ""implies", and "equivalent" occupy the same space. One should not be distracted by the symbolic representation but focus on the concepts of succession, accumulation, complexity, and patterns contained the logical space (Table of Functional Completeness). Thus spacetime – time as process, number as placement – is the environment in which AI and human identity live.

Authentic Systems fits right with the natural order of things:

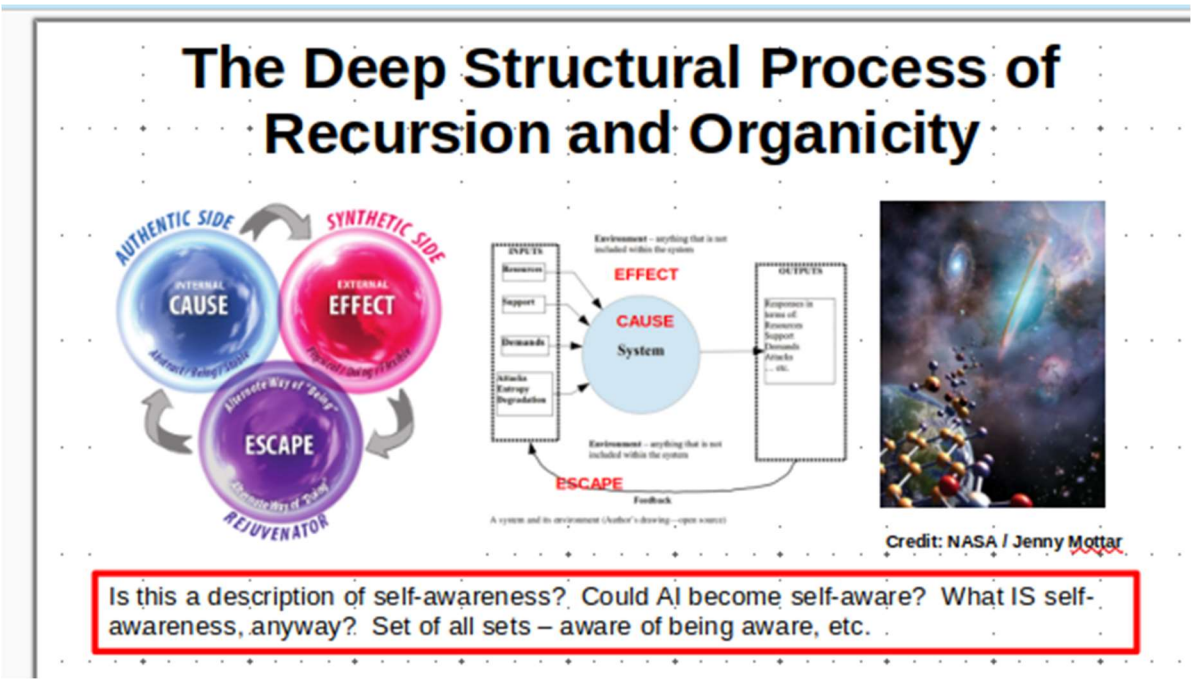

Figure 4. Recursion is deeply structured (composite diagram – author-provided).

If consciousness originates from fields that themselves arise from deep structural foundations—such as the bivalent basis of spatiotemporality—then a potential "misalignment" may occur between the physical substrate (e.g., neural and genetic systems) and the corresponding perturbations within the conscious field. The circuitous nature of this language underscores our limited understanding of what *consciousness*—encompassing values, philosophy, and subjective awareness—actually is, much as physicists admit uncertainty about the true nature of a "particle." From this perspective, Authentic Systems could be conceived as potential detectors of the consciousness field itself.

Another consideration. Let's say that all is consciousness, as neuroscientist and mathematician Donald Hoffman [2014] would say or as Max Tegmark [2007] would have it in his Mathematical Universe. Such would mean that humans create their own reality, including digital versions, or everything reducible to binary, as I have suggested by repeated Cartesian subdivision down to the quantum world, where something exists because of what it is not (binary). Our manipulation of this environment by AI takes us into uncharted waters,and anarchic experimentation taking us to where no human has been before could land us in a now inconceivable hell. Are we prepared to have this conversation?

By no means is this paper anywhere near complete. It is a provisional document. In the meantime, we can start the conversation by addressing these representative aspects of how we can reconcile authentic human identity with the apparently inevitable emergence of our creation equaling or surpassing human human mental abilities:

Authentic human identity has a mental and physical aspect, one existing because of the other.

The boundary between natural and artificial intelligence seems to be blurred, more so, if we do not know who we are. What, then, is AI replicating?

Physical laws and deep structures shape everything we do about authentic human identity.

Logic and math as descriptors of innate order are discoveries and underpin authentic human identity.

Digital physics may describe all that there is – a la Wheeler, Piaget, etc.

Recursion, second-order cybernetics, all that, raise questions about repetitive existence, and the nature of knowledge.

Kaku's purported video presents fundamental questions about the nature of our existence.

AI depends upon the nature of belief, and belief stems from authentic human identity.

Confronting or accommodating is the essential dilemma we must address. What exactly is it replicating and why?

Questions arise about our being a simulation [Bostrom, 203; Canuretto, 2011].

Psychology is an effect of something deeper – core values

Re-examine hierarchy of values – how equipped are we in assessing what is important and how we internalize that? Is everyone capable or willing to reach for the highest.

Our is an organic environment – each component vital, interdependent with the rest, and all integrated into a dynamic whole/system.

To be well-situated in this natural order, we must know who we are, not the psychology (effects).

We have our own challenge – replicating ourselves through AI.

Binary configurations have a life of their own. They can reproduce themselves, a critical requisite for something having life.

As to whether a machine can think, if thought (as well as matter) is reducible to binary – digital physics, then, yes, it can.

What could happen if we remain on our current trajectory? If people do not know who they are, AI may (with its own "consciousness" and self-constructed identity – autopoiesis with all its emergent phenomena – create one for those compromised humans.

The ultimate conclusion is that AI can prompt us to think of meaning higher than materialism and hedonism. We perhaps can finally resolve the (especially Western) problem of angst, what happens after we follow the same course the Universe will in its heath death. Hoe to we accommodate ourselves to this schema should be the focus of ascertaining what is meaningful in life – ultimate destiny.

Bringing all the above together, we consider one's authentic human identity in terms of values, the hierarchies displaying the possibilities of meanings. At the top is existence, itself, our very being. The bottom is that which sustains it. Ours may not be finding "the" answer to life's conundrums, not the least of which is who are and our teleology. However the value is in the possibility, or the hope that we may accommodate ourselves to universal reality. I think the Eastern way is the most viable, and I'll leave it that for exploration. If we are a simulation, such will take care of itself, but at least we can act with "as if we had free will".

RESEARCH DIRECTIONS

I have written several hundred pages on this subject of authentic human identity and have come to realize that vast quantity of literature and research that can and should be done on what I think is the most critical aspect of our ontology (existence), authentic human identity. I have not researched adequately existing institutes thoroughly, but I have not encountered any in the vein I have written about here. Disparate research is ongoing in correlating human behavior to genetics and neurophysiological structures, each reducible to mathematical descriptions, which, as I have said earlier, have obvious implications to AI. Hence, a research institute coordinating these efforts would be beneficial, a liaison, perhaps.

Validation of Authentic Systems (A.S.), based on its extensive client base over the past 20 years would contribute enormously to vetting its system to those interested in the alternatives of not so successful methods, such as personality "tests" and values clarification programs. A research design is required, and the analysis of data would be used to create a testable hypothesis that A.S. methods have predictive value. Hopefully, an institute dedicated to authentic human identity will emerge.

Testing Authentic Systems in a virtual reality environment such as Second Life [2025], Meta Horizon [2025], and VRChat [2025] could serve well enormously.

Perhaps, after all this research and development, the AI humans create will put us in our places. How is that for the second-order cybernetic hoopsnake effect?

Figure 5. Cute little fella, an AI, wants attention using the ancient Egyptian hoopsnake (author-provided figure).

REFERENCES

AAA (2023). Working together on the future of AI. Association for the Advancement of Artificial Intelligence. 5 April 2023. https://aaai.org/working-together-on-the-future-of-ai/

AAAI. (2023, April 5). *AAAI members' statement on the potential risks of AI.* Association for the Advancement of Artificial Intelligence.

Bayne, T. (2023, September 27). Nobody knows how consciousness works – but top researchers are fighting over which theories are really science. The Conversation. https://theconversation.com/nobody-knows-how-consciousness-works-but-top-researchers-are-fighting-over-which-theories-are-really-science-214074

Beyer, H.R. (2014). Forum sponsored by physicist Demetris Christopoulos "Is the concept of field the proper way to describe physical processes? Question Asked October 12, 2014 What is a field?." https://www.researchgate.net/post/Is-the-concept-of-field-the-proper-way-to-describe-physical-processes

Bostrom, N. (2003). Are You Living in a Simulation?, Philosophical Quarterly (2003), 53(211), 243-255. https://simulation-argument.com/

Brown, Sara (2025). Why neural net pioneer Geoffrey Hinton is sounding the alarm on AI. MIT Management, Sloan School. https://mitsloan.mit.edu/ideas-made-to-matter/why-neural-net-pioneer-geoffrey-hinton-sounding-alarm-ai

Canarutto, D. (2011). Nature's software. arXiv:1404.5529v1 [gr-qc] https://arxiv.org/abs/1404.5529

Chalmers, D. (1996). The Conscious Mind.

Chronopoulou, E. (2024). Heraclitus And The Rig Veda: A Cross-Tradition Engaging Examination Comparative Philosophy, 15(1), 19-34. ISSN 2151-6014 https://doi.org/10.31979/2151-6014(2024).150105

Csikszentmihalyi M, Beattie OV. (2014). Life themes: a theoretical and empirical exploration of their origins and effects. In: Csikszentmihalyi M, editor. *Applications of flow in human development and education*. Dordrecht: Springer; 2014. p. 35–61. https://doi.org/10.1007/978-94-017-9094-9_3

Czopek, M.J. (2005). Scheler's hierarchy of values. Public Domain, https://commons.wikimedia.org/w/index.php?curid=117537668

Delors, J. et al. (1996). *Learning: the treasure within* - report to UNESCO of the International Commission on Education for the Twenty-first Century (highlights). UNESCO: International Commission on Education for the Twenty-first Century. Document code: ED.96/WS/9. ISBN: 92-3-103274-7 (UNESCO), 0-11-984387-0 (HMSO). https://unesdoc.unesco.org/ark:/48223/pf0000102734; https://unesdoc.unesco.org/ark:/48223/pf0000109590

Descartes, R. (1637/1912). Discourse On the Method of Rightly Conducting the Reason, And Seeking Truth. John Vetch, Trans. London: J.M. Dent & Sons., Ltd. https://ia803207.us.archive.org/14/items/discourseonmetho1912desc/discourseonmetho1912desc.pdf

Future of Life Institute (FLI). (2023, March 29). *Pause giant AI experiments: An open letter.* Future of Life Institute.

Gardner, H. (1993). Frames of mind: The theory of multiple intelligences. Basic Books. http://www.tecweb.org/styles/gardner.html

Garzon, Max & Deaton, Russell. (1999). Biomolecular computing and programming. Evolutionary Computation, IEEE Transactions on. 3. 236 - 250. 10.1109/4235.788493. https://www.researchgate.net/publication/3418565_Biomolecular_computing_and_programming#:~:text=Biomolecular%20computing%20is%20the%20field,DNA%2C%20RNA%2C%20and%20enzymes

Gennaro, R.J. (2025). Consciousness. The Internet Encyclopedia of Philosophy. https://iep.utm.edu/consciousness/

Grace, K., Salvatier, J., Dafoe, A., Zhang, B., & Evans, O. (2018). Viewpoint: When will AI exceed human performance? Evidence from AI experts. *Journal of Artificial Intelligence Research, 62*, 729–

754. https://doi.org/10.1613/jair.1.11222. 62 (2018), 729-754

Haslanger, S. (2004). The Greek Concept of Virtue. Student handout, for Ancient Philosophy 24:200. MIT Open Courseware. https://ocw.mit.edu/courses/24-200-ancient-philosophy-fall-2004/340916a74de1775088445f199f778388_greekvirtueshort.pdf

Hoffman, D.D. [2014]. Spacetime Is Doomed: Time Is an Artifact. Timing & Time Perception (2023) DOI: 10.1163/22134468-bja10096 https://www.researchgate.net/publication/377088301_Spacetime_Is_Doomed_Time_Is_an_Artifact

Horne, J. (2006). Recursion of binary space as a foundation of repeatable programs. *Journal of Systemics, Cybernetics and Informatics, 4*(5), 73–77. https://www.iiisci.org/journal/pdv/sci/pdfs/P277173.pdf

Horne, J. (2022). A Framework for Studying Consciousness. Consciousness: Ideas and research for the twenty-first century: 9(1), article 1. https://digitalcommons.ciis.edu/conscjournal/vol9/iss1/1/

Horne, J. (2024). A framework for personal identity location: The structural foundation of values. Cognitive Neuroscience eJournal 15(15), 20 August 2024 Available at SSRN: https://ssrn.com/abstract=4907825, http://dx.doi.org/10.2139/ssrn.4686901

Horne, J. (2025). Researching ourselves. *Journal of Systemics, Cybernetics and Informatics*, *23*(4), 62-72. https://doi.org/10.54808/JSCI.23.04.62

Hunt, T., Jones, M., McFadden, J., Delorme, A., Hales, C. G., Ericson, M., & Schooler, J. (2024). Editorial: Electromagnetic field theories of consciousness: opportunities and obstacles. *Frontiers in human neuroscience*, *17*, 1342634. https://doi.org/10.3389/fnhum.2023.1342634

Husserl, E. (1982). *Ideas pertaining to a pure phenomenology and to a phenomenological philosophy* (F. Kersten, Trans.). Martinus Nijhoff. (Original work published 1913)

ICD-11 (2025). 06 Mental, behavioural or neurodevelopmental disorders. ICD-11 for Mortality and Morbidity Statistics. World Health Organization. https://icd.who.int/browse/2025-01/mms/en#334423054

Johnson-Laird, P.N. and Ragni, M. (2023) What Should Replace the Turing Test? Intelligent Computing, 2, Article. 0064. https://spj.science.org/doi/10.34133/icomputing.0064

Katz, D. M., Bommarito, M. J., Gao, S., & Arredondo, P. (2024). GPT-4 passes the bar exam. *Philosophical transactions. Series A, Mathematical, physical, and engineering sciences*, *382*(2270), 20230254. https://doi.org/10.1098/rsta.2023.0254

Lee, H et al (2025). The Impact of Generative AI on Critical Thinking: Self-Reported Reductions in Cognitive Effort and Confidence Effects From a Survey of Knowledge Workers. ACM (Association of Computing Machinery) CHI conference on Human Factors in Computing Systems ACM ISBN 979-8-4007-1394-1/25/04. https://www.microsoft.com/en-us/research/wp-content/uploads/2025/01/lee_2025_ai_critical_thinking_survey.pdf

McFadden, J. (2006). The CEMI Field Theory: Seven Clues to the Nature of Consciousness. In: Tuszynski, J.A. (eds) The Emerging Physics of Consciousness. The Frontiers Collection. Springer, Berlin, Heidelberg. https://doi.org/10.1007/3-540-36723-3_12

McLeod, S. (2018, December 20). *Nature vs. nurture in psychology*. Simply Psychology. https://www.simplypsychology.org/naturevsnurture.html

Meijer, D. K. F., & Geesink, H. J. H. (2017). Consciousness in the Universe is Scale Invariant and Implies an Event Horizon of the Human Brain. *Neuroquantology*, 15(3), 41-79. https://doi.org/10.14704/nq.2017.15.3.1079

Meta Horizon (2025) Meta Horizon – https://horizon.meta.com/]

Metz, C. (2023, May 1). 'Godfather of A.I.' Leaves Google and Warns of Danger Ahead. *The New York Times*. Retrieved from https://www.nytimes.com/2023/05/01/technology/ai-google-chatbot-engineer-quits-hinton.html

Michio Kaku's terrifying warning: Quantum AI just made a godlike discovery. (2025, April 15). *News on Japan.* https://newsonjapan.com/article/145417.php

Misner, C. W., Thorne, K. S., & Wheeler, J. A. (1973). Gravitation. W.H. Freeman and Company. https://archive.org/details/GravitationMisnerThorneWheeler/page/n1

Mocombe, P. C. (2021). *Consciousness field theory*. *Archives in Neurology & Neuroscience*, *9*(4), 1–6. https://doi.org/10.33552/ANN.2021.09.000718 bioresscientia.com+9

Mocombe, P.C. (2023). Consciousness Field Theory: A Critical Review. J Sci & Tech Res 53(4)-2023. BJSTR. MS.ID.008447. https://biomedres.us/pdfs/BJSTR.MS.ID.008447.pdf

OpenAI. (2024). *GPT-4o technical report.* OpenAI. https://openai.com/research/gpt-4o

Pan, X., Dai, J., Fan, Y., & Yang, M. (2024, December). *Frontier AI systems have surpassed the self-replicating red line. arXiv preprint* arXiv:2412.12140. https://arxiv.org/abs/2412.12140

Park, J. S., Zou, C. Q., Shaw, A., Hill, B. M., Cai, C., Morris, M. R., Willer, R., Liang, P., & Bernstein, M. S. (2024, November). *Generative agent simulations of 1,000 people. arXiv preprint* arXiv:2411.10109. https://arxiv.org/abs/2411.10109

Piaget, J. (1958). Logic and psychology. Basic Books, Inc.

Pockett, S. (2013). Field theories of consciousness. http://www.scholarpedia.org/article/Field_theories_of_consciousness

Polyakov Daniel Polyakov, P.A. Robinson, Avigail Makbili, Olivia Gosseries, Oren Shriki (2024). Neural field theory as a framework for modeling and understanding consciousness states in the brain. BioRxiv doi: https://doi.org/10.1101/2024.10.27.619702

Rosser, J. B. (1978). Logic for Mathematicians (2nd ed.). New York: Chelsea Publishing Company.

Second Life (2025). Second Life https://secondlife.com/

Tegmark, M. (2007). The Mathematical Universe. https://arxiv.org/abs/0704.0646

Turing, A. M. (1950). Computing machinery and intelligence. *Mind*, 59(236), 433–460. https://www.csee.umbc.edu/courses/471/papers/turing.pdf

Turney, D. (2024, June 14). *GPT-4 has passed the Turing test, researchers claim. Live Science.* https://www.livescience.com/gpt-4-has-passed-the-turing-test-researchers-claim

Van Gulick, Robert, "Consciousness," The Stanford Encyclopedia of Philosophy (Spring 2025 Edition), Edward N. Zalta & Uri Nodelman (eds.). https://plato.stanford.edu/archives/spr2025/entries/consciousness/

Voris, J. (2023). Discover your life theme. https://johnvoris.com/discover-your-life-theme/

Voris, J. (2023). Discovery Session Workbook. Programme document given to clients.

Voris, J. (2023). The Ultimate Journey into Self Knowledge. https://johnvoris.com/authentic-identity-assessment/

Voris-Horne (2025). Private email 12 August 2025 email:

VRChat (2024). VRChat. [https://hello.vrchat.com/

Wheeler, J.A. (1989). Information, physics, quantum: the Search for links. Proc. 3rd Int. Symp. Foundations of Quantum Mechanics, Tokyo, 1989, pp.354-368 https://philpapers.org/archive/wheipq.pdf

It from bit. In J. D. Wheeler (Ed.), *The New Physics* (pp. 468-487). New York: Academic Press.

Wheeler J.A. Information, physics, quantum: The search for links. In: Zurek W., editor. Entropy and the Physics of Information. Addison-Wesley; Boston, MA, USA: 1990. [Google Scholar]

Wisdom Library (2025). Hypocrisy: Significance and symbolism. Wisdom Library. https://www.wisdomlib.org/concept/hypocrisy (NB: Contains links to prime sources)