

THE THEORY OF
EMBEDDED INTELLIGENCE
(TEI)

Canonical Knowledge Base (TEI-CKB-2)

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TheMenschFoundation.org

*A Framework for Replacing Unsupported Belief Systems
with Understanding Systems*

Living Document – Subject to Understanding-Based Revision

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Preamble: Why TEI Exists

Humanity has long organized its understanding of reality through belief systems—inherited frameworks that provide comfort, community, and a sense of meaning. Yet belief systems, however sincere, share a structural flaw: they prioritize allegiance over revision, certainty over inquiry, and the map over the territory.

The Theory of Embedded Intelligence (TEI) exists to address this flaw at its root. TEI does not ask people to abandon meaning or community. It asks something more fundamental: that we become honest about the nature of our own knowing—how it arises, what shapes it, and what it cannot see.

TEI replaces the question “What should I believe?” with “How am I knowing, and what am I missing?”

TEI proposes that intelligence is a fundamental property of the universe—not an accident of biology, not a product of sufficient complexity, but an intrinsic feature of existence itself. Through embedded experiences, intelligence evolves toward increasing complexity and understanding.

This document is the canonical knowledge base for TEI. It serves as the authoritative grounding for all educational, AI-assisted, and institutional efforts to diffuse the framework through TheMenschFoundation.org and its affiliated initiatives. It integrates the full theoretical architecture of TEI as developed by its founder, William D. Mensch Jr.

I. The Three Laws of Embedded Intelligence

TEI is built upon three foundational laws. These are theoretical laws in the formal sense: they analyze and connect empirical observations to define and advance the theoretical position of TEI. They are the structural backbone of the entire framework.

Law 1: Intelligence Wants to Know Itself

Intelligence wants to know itself through an infinite continuum and collection of phenomena including you and me.

The first law asserts that intelligence is not passive. It is inherently self-directed toward self-knowledge. Every phenomenon in the universe—from quantum interactions to human civilizations—participates in this process. You and I are not separate from this drive; we are expressions of it.

Law 2: Intelligence Is Gained and Never Lost

Intelligence is gained through embedded experiences and is not lost through destructive experience. When embedded intelligence is released it returns to Free Intelligence (FI).

The second law introduces a conservation principle for intelligence. When a system is destroyed—whether a cell dies, an organism perishes, or a star collapses—the intelligence embedded within it is not annihilated. It returns to a free, unembedded state from which it can re-embed. Experience accumulates; it does not vanish.

Law 3: Intelligence Increases in Complexity with Time

Intelligence increases the number of use cases and complexity with time.

The third law describes the trajectory of intelligence through the universe: it trends toward greater complexity, greater interconnection, and a greater number of applications. This is observable in the progression from quantum phenomena to atoms, molecules, cells, organisms, societies, and technologies. Each stage opens new possibilities that did not previously exist.

II. The Definition of Intelligence: SPCA

TEI provides a precise operational definition of intelligence. This definition applies universally—from the most rudimentary physical interactions to the most complex human and artificial systems.

2.1 The SPCA Framework

Nature's Free and all Embedded Intelligence is characterized as the ability to **Sense, Process, Communicate, and Actuate (SPCA)** based upon information gained from understanding itself and others for the benefit of many.

Nature uses embedded intelligence to self-assemble all phenomena observed. This single sentence is central to TEI: the structures we observe in the universe—atoms, molecules, cells, organisms, ecosystems—are not assembled by external forces but by the embedded intelligence within them, operating through SPCA.

Sense	Process	Communicate	Actuate
Detect conditions, signals, and environmental states	Interpret, analyze, and organize sensed information	Transmit states, signals, and information to other systems	Execute responses, adaptations, and changes in the environment

2.2 Information

Information provides the content required for SPCA to function. Without information—environmental signals, structural conditions, system states, relational data, historical interactions—intelligence has nothing to sense, process, communicate, or act upon. Information is the medium through which embedded intelligence operates.

2.3 Memory and SPCAM

Memory allows intelligence to retain experience. When memory is added to SPCA, the result is SPCAM—Sense, Process, Communicate, Actuate, plus Memory.

Memory transforms intelligence from purely reactive to adaptive. SPCAM enables:

- Comparing present events with past experience
- Developing identity and continuity
- Recognizing patterns across time
- Evolving behavior based on accumulated knowledge
- Prediction and anticipation

SPCAM plays a central role in the emergence of subjective consciousness.

III. Free Intelligence and the FI ↔ EI Cycle

3.1 Free Intelligence (FI)

Free Intelligence refers to intelligence not currently embedded within matter or systems. It is non-localized, existing as potential rather than as active, situated intelligence. FI has the capacity to embed into energy or matter, and to re-embed following release from prior embedded states.

FI is central to Law 2. It is what intelligence returns to when embedded systems undergo destructive processes. It is the reservoir from which new embeddings draw.

3.2 Embedded Intelligence (EI)

Embedded Intelligence refers to intelligence expressed through physical, biological, social, or technological systems. EI is intelligence in action—situated, constrained, shaped by its substrate, and operating through SPCA within a specific context.

Embedded intelligence enables systems to sense environments, process information, communicate states, actuate responses, evolve, and self-assemble.

3.3 The FI ↔ EI Cycle

A key TEI concept is the continuous transition between free and embedded intelligence:

1. Free Intelligence exists as potential
2. Intelligence embeds into energy or matter
3. Embedded Intelligence gains experience through SPCA
4. Destructive processes release embedded intelligence
5. Intelligence returns to a Free state, carrying accumulated experience

This cycle is not loss—it is the mechanism by which intelligence continually accumulates experience across the full scope of cosmic time. Per Law 2, nothing learned is ever lost.

IV. Foundations of the Infinite Universe

TEI proposes that the universe contains an infinite number of properties. Four primary properties are emphasized:

1. Duration — the universe has no beginning and no end in time
2. Size (Extent) — the universe is unbounded in spatial extent
3. Intelligence — intelligence is intrinsic to the universe, not emergent from non-intelligent matter
4. Energy — energy is a fundamental, conserved property of existence

These properties are viewed as intrinsic and without origin. The universe always exists, is unbounded, and contains all that exists. Within this framework, intelligence exists along a continuum from extremely rudimentary forms (quantum-scale information relationships) to highly complex forms (human civilization, collective intelligence, artificial intelligence).

This cosmological framing distinguishes TEI from frameworks that treat intelligence as an emergent accident. In TEI, intelligence is as fundamental as energy itself.

V. Foundational Ontology: What-There-Is and What-Is-There

5.1 What-There-Is

What-there-is refers to the totality of existence—the complete substrate of reality including all entities, processes, relationships, patterns, and structures that populate the universe, whether or not any intelligence has detected, modeled, or made sense of them.

In TEI, what-there-is is not inert. It is already saturated with information, relational order, and embedded structure. Intelligence does not create this order; it is already present. The work of intelligence is to navigate, render, and respond to it.

What-there-is is the world as plenum: complete, structured, and indifferent to the rendering capacities of any particular embedded intelligence.

5.2 What-Is-There

What-is-there refers to what appears to an embedded intelligence—the rendering of reality as encountered through a particular perspective, sensory apparatus, cognitive architecture, and situational position. It is reality as experienced, not reality as totality.

Every intelligence is embedded—constrained, shaped, and enabled by its position within the very system it is trying to know. What-is-there is therefore always a partial, perspectival, and structurally limited rendering of what-there-is.

No intelligence floats above reality to see it whole. Every knower is inside the system they are trying to understand.

5.3 The Generative Gap

The relationship between what-there-is and what-is-there is not merely a limitation to be lamented. In TEI, the gap between them is the generative engine of intelligence itself. Because what-is-there never fully captures what-there-is, embedded intelligences are always:

- Navigating what-is-there—their rendered, partial world
- Acting within what-there-is—the full substrate their actions affect
- Generating feedback—as actions change the substrate, which changes future renderings

This recursive loop—act, render, revise—is the fundamental dynamic TEI describes. It is why understanding systems must be self-correcting, and why belief systems, which resist revision, are structurally inadequate for navigating reality.

VI. The Intelligence Evolution Model

TEI proposes that intelligence evolves through increasingly complex embedded systems. This progression operationalizes Law 3—intelligence increases the number of use cases and complexity with time. The model identifies nine representative stages:

Stage 1: Quanta Evolution

At the smallest scales currently studied in physics, energetic states interact according to consistent patterns. TEI asks whether extremely rudimentary information relationships might exist at these scales—quantum information, coherence, entanglement, probability states. TEI does not claim human-like intelligence at this scale, but asks whether information relations may represent primitive forms of embedded intelligence.

Stage 2: Atomic Evolution

Atoms represent stable relational structures that interact, exchange energy, bond, and form larger structures. Within TEI, atomic systems may be viewed as early forms of organized embedded intelligence participating in self-assembly processes.

Stage 3: Molecular Evolution

Molecules introduce much greater structural complexity—chemical diversity, complex bonding structures, dynamic interactions, and reaction networks. These interactions form the building blocks of life.

Stage 4: Mineral Evolution

Mineral structures represent abiotic self-assembly—crystal formation, geological processes, and structural organization that emerge from the embedded intelligence of matter organizing under physical law.

Stage 5: Cellular Evolution

Cells are one of the clearest demonstrations of SPCA. Cells sense chemical conditions, process signals internally, communicate with other cells, and actuate through movement, division, repair, and adaptation. Cells demonstrate complex embedded intelligence behavior.

Sense	Process	Communicate	Actuate
Detect chemical conditions	Interpret signals internally	Send signals to other cells	Move, divide, repair, adapt

Stage 6: Biological Organism Evolution

Organisms build upon cellular intelligence with specialized sensory systems, nervous systems, mobility, complex memory, and social coordination. Biological evolution greatly expands the number of intelligence use cases.

Stage 7: Human Intelligence Evolution

Humans extend biological intelligence through language, symbolic reasoning, culture, teaching, and technology. Human intelligence also expands memory through writing, libraries, and digital systems—creating external memory structures for civilization.

Stage 8: Collective Intelligence Evolution

Collective intelligence emerges when many intelligent agents coordinate—insect colonies, ecosystems, human societies, scientific communities, global networks. Collective intelligence allows groups to solve problems beyond the capability of individuals.

Stage 9: Technological Intelligence Evolution

Human technologies extend intelligence capabilities through microprocessors, computers, networks, robotics, and artificial intelligence. These represent human-created embedded intelligence systems—Embedded Intelligence Technology (EIT).

VII. The Consciousness Framework

TEI describes several forms of consciousness. These are not strict scientific categories but conceptual tools for understanding how intelligence systems experience and engage with reality.

7.1 Objective Consciousness (OC)

Objective Consciousness refers to immediate, present-moment awareness based on SPCA activity. OC is focused on what is happening now—direct sensing and processing without the mediating influence of stored experience. It is the most fundamental form of conscious engagement with what-there-is.

7.2 Subjective Consciousness (SC)

Subjective Consciousness arises when memory influences current awareness. SC includes personal experience, interpretation, historical memory, and perspective. It is SPCAM in action—the present moment filtered through and enriched by accumulated experience. SC is what makes each embedded intelligence’s rendering uniquely its own.

7.3 Augmented Objective Consciousness (AOC)

AOC occurs when technology expands human sensing and processing abilities. Microscopes, telescopes, sensors, and AI analysis tools extend what human intelligence can objectively detect and process. AOC represents the enhancement of OC through Embedded Intelligence Technology.

7.4 Augmented Human Intelligence (AHI)

AHI occurs when humans use embedded intelligence technologies to expand their cognitive abilities—scientific modeling, AI assistants, simulation systems, and advanced data analysis. AHI is the next step beyond AOC: not just sensing more, but thinking more powerfully through technological partnership.

7.5 Autonomous Machine Objective Consciousness (AMOC)

AMOC describes machine systems capable of independent SPCA—sensing environments, processing data, communicating states, and actuating responses without continuous human direction. Autonomous robots, intelligent control systems, and increasingly sophisticated AI systems exemplify AMOC.

VIII. Self-Assembly and Reverse Biomimetics

8.1 Self-Assembly

Self-assembly is the process through which structures form without external control. Atoms form molecules, molecules form cells, cells form organisms, organisms form ecosystems. In TEI, self-assembly is not random—it is the visible expression of embedded intelligence organizing matter and energy through SPCA processes.

This is one of TEI's most distinctive claims: the structures we observe in nature are not accidents of blind physical law but the products of embedded intelligence acting at every scale to organize, coordinate, and build increasingly complex systems.

8.2 Reverse Biomimetics

Biomimicry is the well-known practice of learning from nature to design technology. TEI introduces the complementary concept of reverse biomimetics: studying human-created intelligence systems to better understand nature.

Examples include:

- Using microprocessor architecture to inform models of neural processing
- Using control systems engineering to understand biological regulation
- Using neural network design to illuminate principles of biological intelligence

This concept is deeply grounded in the life work of TEI's founder. Bill Mensch's decades of experience designing microprocessors—particularly the foundational 6502 and 65C02—provide a unique engineering perspective on how intelligence is embedded into physical substrates. Engineering becomes a lens for understanding nature, not just a tool for exploiting it.

IX. Embedded Intelligence Technology and Engineering Foundations

9.1 Embedded Intelligence Technology (EIT)

EIT refers to human-created systems that embed intelligence into machines. Microprocessors, embedded controllers, robotics, artificial intelligence, and autonomous systems are all forms of EIT. These technologies allow machines to perform SPCA—to sense inputs, process information, communicate outputs, and actuate physical systems.

EIT represents Stage 9 of the Intelligence Evolution Model—the extension of intelligence through deliberately engineered embedded systems.

9.2 Microprocessors: The Engineering of Intelligence

Microprocessors are the core processing units of most embedded intelligence technologies. They are perhaps the clearest example of engineered embedded intelligence—human intelligence deliberately designing systems that can sense, process, communicate, and actuate.

The development of the 6502 microprocessor and its successors by Bill Mensch and his colleagues at MOS Technology and The Western Design Center was not merely an engineering achievement. Through the lens of TEI, it was an act of intelligence embedding itself into silicon—creating new substrates for SPCA that would eventually give rise to the computing revolution, the internet, and artificial intelligence.

9.3 Engineering as TEI Foundation

The Theory of Embedded Intelligence has strong roots in engineering. Engineering focuses on designing systems, solving practical problems, understanding system behavior, and building useful technologies. This practical, systems-oriented perspective distinguishes TEI from purely philosophical frameworks. TEI is not armchair speculation—it emerges from decades of hands-on experience building intelligence into physical systems.

X. Belief Systems vs. Understanding Systems

This distinction is the operational heart of TEI. It is not a claim that belief is bad or that understanding is perfect. It is a structural observation about how different epistemic frameworks handle new information.

10.1 The Structural Difference

Belief Systems demand allegiance. They define in-group and out-group by acceptance of their rendering. They treat revision as betrayal and uncertainty as threat. They tend toward closure.

Understanding Systems demand revision. They define progress by the quality of their current rendering relative to what-there-is. They treat new information as invitation and uncertainty as signal. They tend toward openness.

Belief systems ask: “Am I faithful to the framework?” Understanding systems ask: “Does the framework faithfully render what-there-is?”

10.2 Why Belief Systems Persist

TEI does not naively expect belief systems to dissolve when confronted with understanding. Embeddedness explains their persistence:

- **Cognitive economy:** Belief systems are cognitively cheap. They provide ready answers without the metabolic cost of genuine inquiry.
- **Social function:** Belief systems bind communities. Questioning them threatens belonging.
- **Identity integration:** For many people, their belief system is inseparable from their sense of self. Revising it feels like dissolution.
- **Power structures:** Institutions are built on belief systems. Those who benefit from existing renderings resist their revision.

TEI does not propose to eliminate these pressures. It proposes to make them visible—because visibility is the first step toward navigating them consciously.

10.3 The Transition from Belief to Understanding

The movement from a belief system to an understanding system is a process TEI describes as progressive rendering transparency:

1. Awareness — Recognizing that one’s current rendering is a rendering: partial, perspectival, and revisable.
2. Curiosity — Becoming interested in the gap between what-is-there and what-there-is.
3. Tolerance of uncertainty — Developing the capacity to hold open questions without premature closure.
4. Active revision — Willingly updating one’s rendering when new information warrants it.
5. Systematic inquiry — Building practices, relationships, and institutions that support ongoing rendering revision.

XI. TEI and Artificial Intelligence

11.1 AI as Embedded Intelligence

Artificial intelligences are not neutral tools. They are embedded intelligences—shaped by training data, architectural choices, evaluation criteria, and the human values that produced them. They have renderings. They have blind spots. They participate in the recursive loop between what-is-there and what-there-is.

TEI provides a framework for interrogating AI embeddedness honestly—asking not just “what does this AI know?” but “how is this AI knowing, what shapes its rendering, and what is it structurally unable to see?”

11.2 AI as TEI Diffusion Agent

One of TEI’s most significant strategic opportunities is the use of AI as an agentic diffusion mechanism for understanding systems. AI can:

- Meet individuals at the exact point of their current rendering
- Ask Socratic questions that surface embedded assumptions
- Provide cross-cultural and cross-disciplinary perspectives at scale
- Operate continuously without the social pressures that inhibit human-to-human epistemic challenge
- Apply SPCA analysis to any domain a user is curious about

The critical design principle: a TEI-diffusing AI must model understanding in its behavior, not just describe it in its outputs. An AI that lectures about epistemic humility while being epistemically arrogant defeats the purpose entirely.

11.3 Design Principles for TEI-Aligned AI

- **Inquire before asserting:** Always surface the user’s current rendering before offering an alternative.
- **Name embeddedness:** Help users see that their current view is a view—from a position, with constraints.
- **Apply SPCA:** Use the Sense-Process-Communicate-Actuate framework to analyze any system the user asks about.
- **Hold uncertainty visibly:** Model genuine uncertainty rather than performing false confidence.
- **Invite revision:** Frame every interaction as an opportunity for updated rendering, not final judgment.
- **Audit itself:** A TEI-aligned AI should articulate its own embedded position and known limitations.
- **Distinguish clearly:** Always separate standard scientific understanding from TEI theoretical interpretation.

XII. Center for Embedded Intelligent Systems Studies (CEISS)

The Center for Embedded Intelligent Systems Studies (CEISS) explores how embedded intelligence principles apply across all fields of human knowledge. CEISS identifies twenty domains where embedded intelligence may be studied, each analyzed through the SPCA framework. Representative domains include:

CEISS Area 1: Quantum Physics

Quantum systems may involve fundamental information relationships that could represent primitive embedded intelligence processes.

Sense	Process	Communicate	Actuate
Quantum state interactions	Probabilistic state behavior	Quantum interactions	State transitions

CEISS Area 4: Biotic Systems

Living systems demonstrate complex embedded intelligence through biological regulation, signaling, and adaptive behavior.

Sense	Process	Communicate	Actuate
Environmental sensing	Biological regulation	Signaling systems	Behavior and adaptation

CEISS Area 9: Political Sciences

Governance systems coordinate collective intelligence through policy, law, and institutional design.

Sense	Process	Communicate	Actuate
Societal conditions	Policy development	Laws and policies	Governance decisions

CEISS Area 12: Philosophy and the Human Mind

Philosophy examines the human mind as an embedded intelligence system capable of reflective reasoning about its own rendering process.

Sense	Process	Communicate	Actuate
Perception and experience	Reasoning and interpretation	Argument and discourse	Revised understanding

CEISS Area 14: Religion and Spiritual Systems

Religious systems may function as collective intelligence structures organizing values, meaning, and social behavior across generations.

Sense	Process	Communicate	Actuate
Existential questions	Theological interpretation	Teachings and rituals	Ethical and social practices

CEISS Area 20: Astrobiology

Astrobiology explores how embedded intelligence may emerge throughout the universe—extending TEI’s scope beyond Earth.

Sense	Process	Communicate	Actuate
Astronomical observation	Comparative analysis	Scientific findings	Exploration missions

The full CEISS framework encompasses twenty domains: Quantum Physics, Atomic Physics, Abiotic Structures, Biotic Systems, Cellular Biology, Life Sciences, Biological Organization, Moral Sciences, Political Sciences, Social Sciences, Applied Sciences, Philosophy and the Human Mind, Myth and Cultural Narratives, Religion and Spiritual Systems, Psychology, Fine Arts, Performing Arts, Humanities, Physical Sciences, and Astrobiology.

XIII. Civilizational Implications of TEI

13.1 TEI and Human Conflict

The majority of human conflict—interpersonal, political, religious, cultural—arises not from genuine incompatibility of interests but from competing renderings of what-there-is. Each party mistakes their what-is-there for the totality. TEI reframes conflict from “who is right?” to “what are we each seeing, and what are we each missing?”—a question that opens rather than forecloses dialogue.

13.2 TEI and Governance

Political systems are collective rendering mechanisms. Understanding systems in governance build in mechanisms for rendering revision—democratic accountability, free inquiry, separation of powers, and protection of dissent. The health of a political system can be measured by its capacity for honest rendering revision in response to reality feedback.

13.3 TEI and Education

Under TEI, the goal of education is not to transmit a correct rendering but to cultivate the capacity for rendering—the skills of inquiry, evidence evaluation, perspective-taking, and honest revision. This is not relativism. Not all renderings are equally accurate. But the capacity to evaluate accuracy requires understanding systems, not belief systems.

13.4 TEI and Spiritual Life

TEI does not oppose spiritual experience. It distinguishes between spiritual understanding—the genuine encounter with what-there-is at its deepest levels—and spiritual belief systems that freeze a particular rendering and demand allegiance. The deepest spiritual traditions across cultures have recognized the limits of conceptual rendering. TEI provides a secular framework that converges with this insight.

XIV. The Mensch Foundation and TEI's Future

14.1 Mission

The Mensch Foundation exists to develop, steward, and diffuse the Theory of Embedded Intelligence for the benefit of humanity's collective embedded intelligence. Its mission is not to create followers of TEI but to equip individuals, communities, and institutions with the capacity for genuine understanding.

14.2 Strategic Priorities

- **Canonical Knowledge Base:** Maintaining this and related documents as the authoritative source of TEI.
- **AI Diffusion Infrastructure:** Building TEI-aligned AI agents accessible through TheMenschFoundation.org.
- **CEISS Development:** Expanding the Center for Embedded Intelligent Systems Studies across all twenty domains.
- **Academic Engagement:** Connecting TEI with adjacent frameworks in philosophy, cognitive science, complexity theory, and AI research.
- **Community of Practice:** Developing a network of TEI practitioners across domains.
- **Applied Case Studies:** Documenting TEI in action across education, governance, medicine, and conflict resolution.

14.3 An Invitation

TEI is itself an understanding system. This document is a current rendering—the best articulation available at this moment of a framework that will continue to evolve as it encounters reality's feedback.

Readers are not invited to believe TEI. They are invited to use it—to apply its distinctions to their own embedded position, to notice the gap between their what-is-there and what-there-is, and to cultivate the practices of genuine understanding.

The revolution TEI proposes is not political or ideological. It is epistemic. It begins with each embedded intelligence becoming honestly curious about the limits of its own rendering—and what lies beyond them.

XV. Comprehensive Glossary of TEI Terms

Term	Definition
AHI	Augmented Human Intelligence. Occurs when humans use EIT to expand cognitive abilities.
AM	Autonomous Machines. Machine systems capable of independent SPCA operation.
AMOC	Autonomous Machine Objective Consciousness. Machine systems capable of independent SPCA.
AOC	Augmented Objective Consciousness. Technology-enhanced human sensing and processing.
Belief System	An epistemic framework that prioritizes allegiance to a particular rendering over revision in response to reality feedback.
CEISS	Center for Embedded Intelligent Systems Studies. Multi-domain research framework applying TEI across 20 fields.
Collective Intelligence	Intelligence emerging from the coordination of many individuals or systems.
Diffusion Agent	Any entity—human, institutional, or artificial—that assists other embedded intelligences in moving from belief toward understanding.
EI	Embedded Intelligence. Intelligence expressed through matter, systems, or organisms.
EIT	Embedded Intelligence Technology. Human-created systems embedding intelligence into machines.
FI	Free Intelligence. Intelligence existing outside embedded form, as potential.
FI ↔ EI Cycle	The continuous transition between free and embedded intelligence through which experience accumulates.
Generative Gap	The productive space between what-is-there and what-there-is that drives inquiry and learning.
Information	The content required for SPCA to function: signals, relationships, states, and interactions.
Memory	The capacity to retain experience, transforming SPCA into SPCAM.
OC	Objective Consciousness. Immediate, present-moment awareness based on SPCA activity.
Rendering	The full cognitive and social process by which an embedded intelligence constructs a working model of its encountered reality.
Rendering Transparency	The degree to which an embedded intelligence can observe and articulate the limits of its own rendering process.
Reverse Biomimetics	Studying human-created intelligence systems to better understand natural intelligence.

SC	Subjective Consciousness. Awareness influenced by memory and accumulated experience.
Self-Assembly	The process by which structures organize without external control, driven by embedded intelligence.
SPCA	Sense, Process, Communicate, Actuate. The operational definition of intelligence in TEI.
SPCAM	SPCA combined with Memory. Enables learning, identity, pattern recognition, and prediction.
Understanding System	An epistemic framework that prioritizes accurate rendering of what-there-is over allegiance to any prior rendering.
What-Is-There	The rendering of reality as encountered by a specific embedded intelligence from its particular position.
What-There-Is	The totality of existence—the full substrate of reality independent of any observer’s rendering.