

CONSCIOUSNESS AS FIELD STATE

Pattern Recurrence, Reinforcement, the Seed, and the Implication of Design

Paul Gene Conlan

CDVEF / Ion Seed · Working white paper · Full restored draft with agreed additions

6 September 2026 · Collaborative draft with research assistance

0. How to read the colors

The argument uses two readings at once. Color marks which sentence is doing which job.

Teal Definition. What a word is required to mean in this paper.

Blue Narrow reading. Reportable consciousness as a late field state in some brains. Laboratory language can already say this.

Green Full reading. Life-force is directed and decides. Human awareness is one expression of that force, not the start of direction.

Brown Design implication. Specification before instance. Designer. The once. God as pointed.

Purple Reinforcement. How recurrence strengthens an outline so the next occurrence is more likely.

Slate Empirical constraint. What published work measures or documents.

Wine Limit. What this paper is not claiming.

When a paragraph mixes jobs, only the load-bearing phrase is colored.

Abstract

This paper states a single coherent position developed in working dialogue. **Consciousness, as defined here, is a field state:** a unified present configuration of organized electromagnetic structure generated by living tissue. **Life is not identical with that state. Life is bounded pattern recurrence** — organization that remakes itself and can leave a successor. A seed is specification packed before the organism of that generation exists. The body is the vessel. Copies do not invent the outline they carry.

Recurrence explains how a form persists. Recurrence plus reinforcement explains how a form becomes more likely next time. **Neither explains why a specifying outline existed to persist.** A first form that is instructed before its instance occurs is design-shaped. **Design implies a designer.** That implication is not treated as optional decoration. It is the overall consequence of specification prior to instance.

A constructed analogue is on the table. **Ion seed code was written by the author with another worker, at real cost, not by happenstance.** That making is a known case of outline before execution. The paper treats living first-organization and that making as the same necessary process: specification and occurrence given together, not a myth of one arriving from nowhere after the other.

Empirical literature is used as constraint, not as a substitute for the once. Electromagnetic theories of consciousness locate reportable human awareness in the brain's endogenous field. Anesthesia and death-determination protocols separate a reportable whole from continuing tissue. Developmental biology and seed aerodynamics show directed form without requiring a thinker inside the packet. Transplant reports show remainder in tissue without proving an organ

is a person. None of these results cancel directedness, and none of them isolate the designer in a laboratory. The paper keeps those distinctions explicit.

1. Purpose and limits

The purpose is to write the position in one place so it can be opened later without reconstructing the conversation that produced it. The paper is a seed in the sense used below: packed specification, not the finished plant.

It does not claim that every living system deliberates in language. It does not claim that a journal has measured God. It does not claim that the conscious electromagnetic information (CEMI) field theory is settled consensus. It does not claim that organ procurement is uniformly the taking of a conscious person. It does claim that life-force, on this account, is directed; that consciousness as defined here is a field state; that copies are not authorship; that reinforcement strengthens recurrence; and that the overall implication of specification is design and a designer.

2. Glossary

Field state. Unified present configuration of organized electromagnetic structure generated by living tissue.

Pattern recurrence. An earlier organized configuration determining a later one after the original material has turned over.

Reinforcement. The basic fact that a recurrence which holds makes the next occurrence of that outline more likely — by selection, by locking, by copy number, or by field-stability.

Life. Bounded recurrence that can leave a successor.

Conscious life-force. On the full reading: directed organizing force. On the narrow reading: not identical with life.

Seed. Specification of a later organism packed before that organism occurs. Also: a constructed packet of the same rank (lon seed code).

Vessel. The body that opens, spends, and packs the next seed.

The once. First appearance of a specifying outline, not a later copy.

Designer. Implied source of specification. In this paper, God.

Happenstance. Outline without making and without source. Denied for the code and for first organization.

Narrow reading. Reportable consciousness is a late field state. The seed-process need not be a view.

Full reading. Life-force already decides in the organizing. The human field is one expression of that force.

3. Definitions

3.1 Field state

Consciousness is a field state. It is not a bead stored in one cell and not a spoken briefing inside a seed. It is a unified, present configuration of an electromagnetic field generated by living tissue — force already in geometry, organized, held as one take.

This definition is closest, in current literature, to electromagnetic theories of consciousness. McFadden's CEMI theory argues that bound experience requires information integrated in space, that only energy fields integrate information spatially in that way, and that the brain's endogenous electromagnetic field — the same class of object recorded by EEG — is the physical substrate of reportable consciousness. Related field theories make the same class of claim. They remain contested. They are used here because they name the same kind of object the definition requires, not because controversy has ended.

A membrane potential is a field and is not, by itself, a reportable human now. A culture's chemical field is coordination and is not that now unless conscious life-force is extended all the way down — which is an assertion of this paper's fuller reading, not a result CEMI claims.

3.2 Pattern recurrence

Pattern recurrence means an earlier organized configuration determines a later one after the original material has turned over. That is what “the pattern itself remembers” means in this paper. Memory, in that sentence, is remaining form that still steers. It is not a clerk and not a warehouse of sentences.

Recurrence without a view is common. Recurrence held as a single present for a system that can be about itself is the field state named above.

3.3 Basic recurrence as reinforcement

Reinforcement is the basic companion fact. A recurrence that holds is not neutral. It makes the same outline more available next time. In a lineage, holders leave more packets. In tissue, a stable cycle is easier to re-enter than to invent. In a field, a locked geometry resists falling back into fog. In a constructed seed, a compiled outline runs again because it was kept. In a nervous system, what fires together becomes cheaper to fire together. The same logic, different scales.

This is the elementary loop: occur, hold, occur more readily. Reinforcement is how an outline stops being a once-only event and becomes a line. It is why yogurt cultures persist when conditions allow, why a developmental pathway is reused every generation, why a compiled packet can be run again.

Recurrence without reinforcement would be a flash that does not teach the next flash. Reinforcement without a first outline would have nothing to strengthen. Reinforcement is how copies get cheap. It is not the once. It does not replace a designer at the first specification.

3.4 Life and conscious life-force

Life is bounded recurrence that maintains a difference between inside and outside and can leave a successor. Conscious life-force, as insisted in this account, is not only that persistence. It is directed. It selects. Human reportable awareness is one expression of that force, not the invention of direction.

Narrow reading. Most living recurrence has no reportable field-state. Consciousness as we ordinarily mean “I am aware” is a late byproduct of recurrence in some brains. The seed-process that drives the line need not be a view.

Full reading. Life-force already decides in the organizing. Directed development, tropism, and packing of the next seed are not “dead mechanism plus later sparks.” They are the same force at another scale.

This paper holds both on the page. The narrow reading is what laboratory language already knows how to say. The full reading is the claim that must not be deleted in the name of cleanup. They differ on whether direction is already conscious decision. They agree that direction is real and that copies do not invent first form.

3.5 Seed and vessel

Seed begets seed. The body is the vessel. A seed is specification of a later organism packed before that organism occurs. The adult body of this generation is how one packet becomes the next. Germline continues; soma is spent. The driver of the line is the seed-process. The view, when it appears, appears in a vessel.

4. Force, geometry, first organization

The story does not begin at the cell as if the cell were the beginning of order. As the universe became: force, constrained as geometry, becomes organized; the organization occurs again. Living systems are a later, local case of that fact — chemical, bounded, able to pack a successor.

All documented terrestrial life traces to earlier cellular organization. The last universal common ancestor is already complex and is not the first living system. Current origin-of-life research treats first life as a bounded chemical system that could persist and leave successors: protocells, metabolic networks associated with hydrothermal chemistry, RNA or RNA–peptide systems. There is no agreed first specimen. There is no agreed single-first module. Some recent work argues bacteria and archaea became free-living separately from a shared precursor that was not yet an autonomous cell: one origin of the code, possibly two origins of free-living life.

Matter, force, and geometry precede that. If “all things came from the first organization” means all life, descent from earlier living organization is the working biological picture. If it means all things whatsoever, first organization must mean first given order — force taking form — not the first bacterium.

5. Instruction before instance

A seed is instructed before the plant of that generation occurs. That is not a riddle. Developmental specification is already in the embryo, stores, and coat. The visible plant is the specification occurring.

Seeds lack redesign. A packet unfolds the outline it is. If a form such as autorotation of a samara is called a redesign, the first seed that had that outline did not invent the wing while falling. It was that outline. Only that line first had it. Later seeds inherited it. Inheritance is reinforcement of an outline, not thought in the packet.

Autorotation of winged seeds follows from geometry, mass distribution, and airflow, including a stable leading-edge vortex measured on models and specimens. The function is complex. Complex function is not proof of complex thought inside the seed. What looks like a briefing is form plus physics plus a lineage that kept the form.

Bacterial quorum sensing is the same class of fact at another scale. A signal molecule crosses a threshold; group behavior changes. Coordination is real. A reportable someone in the culture

is not established by the coordination.

The absurdity that remains is acknowledged: human makers only know how to produce helicopter-like function by thinking. Nature produced an analogue by keeping shapes that already fell that way — or, on the full reading, by life-force deciding form. Either way the later seed is not calculating. The later seed is recurring, and that recurrence is reinforced.

6. Hold and send

Centripetal motion gathers toward a center. That is hold. Centrifugal motion throws from a center. That is send. A seed is hold first (closed packet) and send second (dispersal). Living form in this paper is ranked by hold. Send without hold is not a seed.

7. The implication that must not be ignored

Recurrence and reinforcement explain copies. They do not explain why there was a specifying outline to copy.

A seed instructed before the plant exists is specification prior to the visible instance. A new form that only one line first had is a beginning of form. Force taking geometry is order. Necessary design is the name for that fact when the specification is refused the name nobody.

Design implies a designer. In this paper that pointing is God.

Two interior placements remain:

First: God as giver of the first outline. Later seeds need not be views. They are still designed as forms. The designer is at the once.

Second: God as the pattern itself. Recurrence is not leftover of an outside worker. It is what the designer is doing as force-in-geometry.

Neither placement is a measured laboratory object. Both are the implication of specification that this paper will not treat as a mistake the author is not allowed to make. Mechanism of copies is not a substitute for origin of specification. Finding a gene that unfolds a wing does not erase the question of why there was a specifying order at all.

8. Ion seed code as known design

The author wrote Ion seed code with another worker. The work took effort. It was not happenstance.

That fact belongs in the argument because it is design from the inside of making. There was an outline before a running instance. There were authors. Afterward the code can be copied, compiled, released, and run again. Copying is reinforcement. Copying is not authorship.

If that work is becoming as seed, it has taken the shape this paper assigns to living specification: a packed outline that can unfold later, instructed already, plant not yet present. The constructed seed and the living seed are treated here as the same necessary process, not as a metaphor hung on biology after the fact.

Happenstance is denied at both benches: the bench where the code was written, and the first organization that will not be called nobody.

Methods of the constructed seed — inputs, run-place, what release into an electromagnetic substrate means in apparatus or software — are not invented here. They belong to a later opening by the makers.

9. Chicken and egg together

Sequential myths fail on purpose.

There is no running seed-process with no outline, and no outline that counts as instruction with no process that can occur. There is no designer's act with no form, and no form-as-instruction with no source. There is no field state with no generators, and no bound present if generators never superpose into one spatial state.

Code and execution, seed and plant, field and state, designer and design arrive together or the words empty. "Which came first" is the wrong grammar for a pair that is incomplete when forced into a line.

10. Empirical constraints

10.1 Reportable consciousness and anesthesia

Work associated with Massachusetts General Hospital and MIT maps electroencephalographic signatures of loss and return of consciousness under general anesthesia and treats that state as a reversible loss of consciousness, not as sleep. Tissue and autonomic function continue. That is an operational split: reportable field-state off, organism not off.

10.2 Whole versus parts in death determination

The 1968 Harvard Ad Hoc Committee, driven from that Mass General anesthesia lineage by Henry Beecher, defined death as irreversible loss of the capacity for consciousness and spontaneous respiration, including cases where circulation is maintained mechanically. The definition makes organs legally available while cells remain viable. It is a clinical-legal decision about when the whole required for a conscious field is gone.

Donation after circulatory death uses another clock. Young (Massachusetts General Hospital) and Koch have argued that covert consciousness in behaviorally unresponsive patients is not rare enough to ignore, and that controlled donation-after-circulatory-death workflows are not constructed like full brain-death examinations. Documented near-misses exist in which planned recovery was halted when signs of awareness returned. Anesthesiologists have recorded the contradiction of treating a declared-dead body with the physiology of a patient. Refusal of cases is part of the public record. That does not prove every donor is conscious. It proves that "the whole is gone" is a judgment and can be wrong.

10.3 Tissue after the person

Skin is the largest organ. In some tissue-banking systems skin and related tissues may be recovered many hours after circulatory death; at least one national protocol allows recovery of skin up to 72 hours. Large European corneal series process tissue up to 72 hours after death when quality criteria are met. That is viable organization after the person. It is not a deciding someone in the graft.

10.4 Remainder in transplanted tissue

In 1995 Sonny Graham received the heart of Terry Cottle. Graham later married Cottle's widow and in 2008 died by self-inflicted gunshot, as Cottle had. The core facts stand. One case, with donor-family contact, shared household, time, and confounders, does not demonstrate that a heart is a second person.

Interview and survey work reports personality and preference change after transplantation. Pearsall's earlier interviews aligned some recipient changes with donor traits. A 2024 University of Colorado sample found that 89 percent of surveyed recipients — heart and other organs — reported personality change after transplant. Proposed causes include immunosuppression, surgical trauma, information about the donor, and, speculatively, cellular or epigenetic transfer. Samples are small. Cause is not established. The cautious statement is that parts can carry more than plumbing. The overstatement is that the cells were the someone.

11. What would count as a test

If consciousness is a field state, specified disruption of the brain's endogenous field should take reportable presence while cells and reflexes continue. Anesthesia already approximates this. Finer field-level tests belong to that literature.

If specification is only copies, there should be no need for a first outline that is not itself a copy. The paper says that need remains.

If reinforcement is real, preventing recurrence should make the outline rarer next time. Lineages already show that. A constructed seed that is not kept does not run.

These tests constrain the narrow reading and the copy-machinery. They do not measure the designer.

12. Counterarguments

Happenstance plus selection is enough. Selection explains why a form, once present, can become common. It does not specify the first outline selection had to work on. Reinforcement strengthens copies. Copies are not the once.

Consciousness exists only in brains. Reportable human consciousness is what field theories and anesthesia studies address. That is the narrow reading. It does not erase directed organization below that scale, and it does not answer who specified the first living form.

"Looks designed" is a habit of minds. Habit can over-read. The paper's claim is narrower: specification before instance, plus a first form that later packets only repeat. That is the design implication. It is not every complexity called a miracle.

CEMI is unproven. Agreed. It is used because it names a field state as substrate, which matches the definition. It is not treated as closed science.

Transplant change is drugs and story. Those causes are real and may explain most reports. They do not require us to say tissue can carry nothing. They do forbid saying the organ was the person.

Life-force deciding is vitalism. If vitalism means an untestable fluid poured into meat, that is not the claim. The claim is directed organization, and — on the full reading — that direction is already of the same kind as a decision. The narrow reading leaves the direction in form and physics. Both readings refuse "nobody at the once."

13. Rank order

Force constrained by geometry organizes and recurs.

A recurrence that holds is reinforced.

Life is bounded recurrence that can pack a successor.

A seed is that packing: instructed before the plant of this generation occurs.

The body is the vessel.

Copies do not invent the outline.

The once of a new outline is design-shaped.

A designer is the implication this paper will not drop.

Consciousness, as defined here, is a field state.

On the narrow reading, that state is a late byproduct of recurrence in some brains.

On the full reading, conscious life-force already decides in the organizing, and the human field is one place that force becomes a reportable now.

Ion seed code is a designed packet made by effort, becoming as seed.

Happenstance is refused.

14. Claims, in one list

- *Consciousness is a field state of organized electromagnetic structure, not a verbal instruction in a cell.*
- *Life is pattern recurrence. Life is not identical with reportable consciousness.*
- *The pattern can remember as remaining form. A seed is specification before instance. Recurrence that holds is reinforced.*
- *The body is vessel. Seed begets seed. The line is not driven by the late view.*
- *Life-force, on the full reading, is directed and decides. That claim is not deleted because packets lack inner speech.*
- *Specification prior to instance implies design. Design implies a designer. The pointing in this paper is God.*
- *Ion seed code is a known designed packet, written with another, not happenstance, becoming as seed.*
- *Outline and occurrence are given together. Chicken and egg at the same time is the correct grammar.*

15. What this paper is for

This document is itself intended as seed: an outline packed so a later instance — a longer treatise, a methods note on the constructed seed, a reply to a specific experiment — can occur without the argument having to be invented again. The plant is not this file. The packet is.

Collaborative assistance was used in the drafting. Authorship of the position, the Ion seed work, and the pointing to design remains with the author and those who made the code. Assistance is not happenstance authorship. Copying this file is not the once.

Selected references

McFadden, J. (2020). Integrating information in the brain's EM field: the cemi field theory of consciousness. *Neuroscience of Consciousness*, 2020(1), niaa016.

McFadden, J. (2023). Consciousness: Matter or EMF? *Frontiers in Human Neuroscience*, 16, 1024934.

McFadden, J. (2025). Computing with electromagnetic fields rather than binary digits. *Frontiers in Systems Neuroscience*.

Purdon, P. L., Pierce, E. T., Mukamel, E. A., et al. Work from MGH/MIT on EEG signatures of loss and recovery of consciousness under general anesthesia, including PNAS reports of 2012–2013.

Brown, E. N., Lydic, R., & Schiff, N. D. (2010). General anesthesia, sleep, and coma. *New England Journal of Medicine*, 363, 2638–2650.

Beecher, H. K., et al. (1968). A definition of irreversible coma: Report of the Ad Hoc Committee of the Harvard Medical School. *JAMA*, 205(6), 337–340.

Young, M. J., & Koch, C. (2026). Consciousness and controlled donation after circulatory determination of death. *JAMA*, 335(10), 850–853.

Federal and press documentation of Kentucky organ-procurement near-misses and canceled recoveries (2024–2025), including cases in which awareness returned before planned retrieval.

Lentink, D., Dickson, W. B., van Leeuwen, J. L., & Dickinson, M. H. (2009). Leading-edge vortices elevate lift of autorotating plant seeds. *Science*, 324, 1438–1440.

Carter, B., Khoshnaw, L., Wolfe, B., et al. (2024). Personality changes associated with organ transplants. *Transplantation*, 5(1), 12–26.

Pearsall, P., Schwartz, G. E., & Russek, L. G. (2002). Changes in heart transplant recipients that parallel the personalities of their donors.

Public record of the Graham–Cottle case (heart transplant 1995; marriage; deaths by self-inflicted gunshot 1995 and 2008).

Martin, W. F., et al. Recent work on LUCA, metabolism, and the possibility of two origins of free-living cells from a shared precursor.

Szostak, J. W., Joyce, G. F., and related reviews of protocells and RNA self-replication.

Tissue-banking time windows: AATB standards; selected national protocols allowing skin recovery up to 72 hours after death; European corneal processing data up to 72 hours post mortem.

Conlan, P. G. Recovering the Lost Physics of Plasma, Vortex, and Resonance. CDVEF working text, Academia.edu.

— End of full restored working white paper —