

The Attralucian Essays:
Exploring the Finite



First Edition

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Time as Ordered Compression: A
Geofinitist Reconsideration

Kevin R. Haylett

Geofinite \sim Time

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Abstract

This essay proposes a Geofinite formulation of time as a derived quantity arising from generonic transitions within a finite symbolic system. Time is not treated as a primitive dimension, but as the ordered accumulation of compressed distinctions between successive admissible symbolic states. By situating this formulation within the historical development of temporal thought—from classical continuity to modern physical abstraction—the essay reframes time as an emergent property of finite measurement and symbolic stabilisation. The result is a shift away from continuous or absolute temporal constructs toward a model grounded in compression, uncertainty, and generonic formation.

Introduction: The Inheritance of Time

Few concepts appear as self-evident as time. It orders events, measures change, and stabilises causality. From the earliest philosophical reflections to modern physics, time has been treated as a necessary backdrop against which the world unfolds.

In classical antiquity, time was often understood in relation to motion. Aristotle described it as a measure of change with respect to before and after, binding it to observable transformation. This preserved a dependence on events, yet already suggested a structure that could be counted and ordered.

With Newton, this dependence weakened. Time became absolute—flowing uniformly, independent of the systems it described. It was no longer a measure of change but a universal parameter within which change occurred. This abstraction proved extraordinarily effective.

Einstein later reworked this view. Time became relative, bound to observers and inseparable from space. Yet even here, time remained a dimension: continuous, mathematically structured, and assumed as part of the framework within which events are described.

Across these transformations, one assumption remained largely intact: that time exists as something given.

Within the Geofinite perspective, this assumption is no longer secure.

If all measurement is finite, and if all symbols arise through generonic processes of distinction and stabilisation, then time cannot stand outside those processes. It must itself be constructed.

A Note on Language and Inherited Terms

Some familiar philosophical words appear in this essay—terms such as ontology, epistemology, being, and knowledge. These are not neutral tools. They belong to the classical basin of philosophy: long-standing traditions organised around stabilised conceptual nouns.

Within a Geofinite frame, such words carry semantic uncertainty unless carefully defined. They may be useful for orientation, but they cannot be allowed to govern the argument.

Using the inherited language of classical philosophy, one might be tempted to ask whether this account of time is ontological or epistemological. From a Geofinite perspective, that distinction is itself unstable. It presupposes a separation between what exists and how it is known that is not taken as primary.

A more admissible question must therefore replace the

inherited framing:

What finite process allows temporal distinction to arise, stabilise, and be measured?

Words are not granted authority by tradition alone. They must reduce uncertainty within the trajectory of thought.

A Note on the Tilde (\sim)

Throughout this essay, a tilde (\sim) is used to mark quantities that arise within the Geofinite framework.

This is not stylistic. It is a boundary marker.

Classical notation often carries implicit commitments: continuity, infinite divisibility, and the assumption that quantities exist within a pre-defined mathematical structure, such as the real number line.

The tilde indicates a departure from those assumptions.

A quantity written with a tilde does not refer to an element of a continuous domain. It refers to a constructed value arising from finite measurement, generonic distinction, and symbolic compression.

Thus, classical time is written as T , while Geofinite time is written as $\sim T$.

The tilde therefore signals that the quantity is not assumed, but constructed. It reminds the reader that the

symbol does not reach beyond the conditions under which it was formed.

From Continuity to Constraint

Classical and modern treatments of time share a commitment to continuity. Time is treated as infinitely divisible—between any two moments, another may be inserted.

This continuity enables powerful mathematical formulations, but it introduces a tension when considered from the perspective of measurement.

No instrument resolves an infinite continuum. Every measurement is finite, bounded by resolution and subject to uncertainty.

The real number line is not measured; it is assumed.

What appears continuous is therefore often the result of projection: a smoothing over of discrete acts of distinction.

The Geofinite perspective begins from this observation. It does not deny the usefulness of continuity, but treats it as an approximation—a large-scale projection of a more fundamental, finite process.

On the Geofinite Continuum

The word “continuum” requires careful handling.

In classical mathematics, it refers to a fully defined, infinitely divisible structure, typically represented by the real number line. This structure is treated as complete and prior to measurement.

Within the Geofinite framework, such an assumption is not admissible.

Instead, what may be called the Geofinite continuum is not a completed structure, but a potential.

It is the open capacity for symbolic distinction to be formed, stabilised, and extended under finite constraint.

It does not assert the existence of infinitely many points. It does not assert completeness. It does not exist as a pre-filled domain.

Rather, it marks the possibility of further distinction.

Anything beyond this—any claim of a fully realised infinite structure—belongs to the classical basin and exceeds what can be established through finite measurement.

Generonic Distinction and the Cost of Formation

At the foundation of the Geofinite framework lies the generon: a minimal act of stable distinction within a finite symbolic system.

A distinction is not given freely. To stabilise a difference—to produce a symbol that can be retained and referenced—requires compression. Extended interaction must be reduced to a finite form.

We may therefore speak of a distinction cost:

$$C(D) > 0$$

This cost reflects the requirement that interaction must be transformed into a bounded symbolic form. In doing so, it introduces irreducible uncertainty.

The alphonic limit, denoted

$$\delta_\alpha > 0,$$

defines the smallest admissible distinction within the system. Below this threshold, no meaningful differentiation can be established.

\sim Time as Ordered Compression

Within this framework, time emerges.

Each stabilised distinction contributes a unit of compression. A sequence of such distinctions produces order. The accumulation of these compressions gives rise to what we denote as $\sim T$.

The minimum unit of \sim Time is given by:

$$\sim \tau_{\alpha} = C(D_{\min})$$

Larger intervals arise through accumulation:

$$\sim T = \sum C(G_{i+1} - G_i)$$

\sim Time is therefore not continuous in its construction. It is discrete, cumulative, and bounded by finite resolution.

It is not a background through which events pass. It is the structure that appears when distinctions are ordered.

Classical Time as Projection

From this perspective, classical time (T) may be understood as a projection.

Macroscopic clocks measure repeatable processes—oscillations, transitions, cycles—and project these onto a continuous

axis. This projection suppresses the underlying discreteness, uncertainty, and resolution limits inherent in each generonic act.

At large scales, where distinctions are sufficiently dense and regular, continuity emerges as a useful approximation.

Yet this usefulness should not be mistaken for fundamentality.

On Symbolic Lift and the Number Line

There is a recurring movement in classical thought that occurs so quickly it often goes unnoticed.

A symbol is introduced. It is placed on a number line. The number line is treated as given. The argument proceeds as if the structure into which the symbol has been placed is itself beyond question.

This is a form of symbolic lift.

A finite act of measurement is silently elevated into an assumed infinite structure.

Within the Geofinite framework, this move is not rejected, but it is made visible.

The tilde (\sim) serves, in part, to resist this automatic lift.

It marks the point at which a quantity remains grounded in finite construction rather than being projected into an assumed continuum.

Discussion

The formulation presented here situates \sim Time at the boundary of symbolic admissibility.

It is neither an external dimension nor a purely internal construct. It arises through the necessity of compression: the requirement that interaction be stabilised into finite form.

This aligns time with language. Each word is a compressed interaction. Sequences of words form trajectories, and these trajectories are inherently temporal—not because they occur within a prior time, but because they constitute temporal structure through ordered formation.

Conclusion

\sim Time is not fundamental but emergent.

It arises from the ordered accumulation of compressed distinctions, bounded by finite resolution and shaped by uncertainty.

Classical time remains useful, but it is a projection built upon finite processes.

Geofinite \sim Time

Time should not be assumed. It should be constructed.

$\sim T =$ ordered compression of interaction

Simul pariter.