

The Attralucian Essays:
Exploring the Finite



First Edition

Copyright © 2026 by Kevin R. Haylett. All rights reserved.

This work is shared under the Creative Commons Licence.

Creative Commons CC BY-ND 4.0 License.

<https://creativecommons.org/licenses/by-nd/4.0/>

This work is intended for academic and research use. Any unauthorized distribution, modification, or commercial use beyond the creative use license is strictly prohibited. Typeset in

L^AT_EX

The Attralucian Essays



Semantic Boundary Markers in
Geofinitism

Kevin R. Haylett

Semantic Boundaries

Semantic Boundary Markers in Geofinitism

Overview

Geofinitism, as a container philosophy, situates classical philosophies and mathematics as subordinate basins within a broader finite framework. A core commitment is the rigorous distinction between exogenous measurements (empirically anchored, observable, and falsifiable within the shared finite world) and endogenous measurements (internal, relational, and often self-referential within linguistic or philosophical subspaces).

The increasing circulation of philosophically dense terms into everyday and technical discourse—accelerated by large language models (LLMs)—introduces high semantic uncertainty, particularly when endogenous constructs cross the separatrix into Geofinitist territory. This essay synthesizes the Transfactor model (words as compressed transducers of meaning) with the Semantic Uncertainty framework to propose practical boundary markers, notably

the caret notation $\hat{\text{word}}$, alongside the Generon as the generative process by which precise transfectors are constructed as dual exogenous/endogenous measurements.

Through examples such as $\hat{\text{ontology}}$, $\hat{\text{epistemology}}$, $\hat{\text{semiotics}}$, and $\hat{\text{world}}$, we illustrate the problem, the diagnostic tools, and a proposed resolution for trajectory precision in Geofinitist writing.

A Note on Terminology for New Readers

This essay assumes familiarity with two core concepts of Geofinitism. For readers encountering them for the first time:

- **Transfactor model:** Words are treated as compressed transducers of meaning. They map high-dimensional observations into low-dimensional linguistic signals. Each transfactor has a *compression ratio* (breadth of possible referents) and a *fiction quality* (precision of mapping). A high-quality transfactor (e.g., “cheetah”) has narrow, stable referents. A low-quality transfactor (e.g., $\hat{\text{freedom}}$) requires substantial contextual decompression.
- **Semantic Uncertainty framework:** A method for documenting the ambiguity, recursive risks, and validity contexts of a term. An *Semantic Uncer-*

tainty Appendix (SUA) entry includes operational definitions, known ambiguities, contexts of validity, and justification for usage.

For a fuller treatment of these concepts, see the companion essays *Transfactors: Words as Compressed Transducers of Meaning* and *Semantic Uncertainty: Towards Semantic Accountability in Scientific Discourse* in this series.

The Problem: Philosophical Infiltration and Semantic Crossover

In Geofinitism, language functions as a primary instrument for mapping finite reality. Classical philosophical terms, however, often operate as high-compression endogenous measurements—dense attractors within their native basins. They carry extensive latent associations, recursive risks, and minimal grounding in observable referents.

When these terms migrate—via LLM training data, interdisciplinary borrowing, or rhetorical performance—into Geofinitist discourse, they generate problematic cross-linkages. Readers or systems may interpret them as carrying exogenous weight, implying measurable commitments, when in fact they remain largely relational.

This is not merely decorative usage or signalling of eru-

dition. It risks pulling Geofinitism into the philosophical basin as a sub-basin, rather than maintaining it as the containing framework.

Such terms act as trajectory crossover points. They straddle the endogenous–exogenous separatrix without explicit demarcation, creating the illusion of continuity where none has been measured.

Legacy texts compound the issue. Some philosophical usages are intentional; others arise from LLM-influenced phrasing that introduces unexamined semantic density. Retrospective correction is impractical. Forward-facing boundary protocols are therefore required.

Diagnostic Tools: Transfactors and Semantic Uncertainty

Within the Transfactor framework, each term can be assessed for:

- **Compression ratio:** How many possible referents or interpretations are compressed into the word?
- **Fiction quality:** How precisely does the word map to measurable referents?

High-quality transfactors (e.g., “cheetah”, “sodium chloride”, “3.7 metres”) have narrow, stable referents. Low-quality transfactors (e.g., [^]freedom[^], [^]truth[^], [^]being[^])

require substantial contextual decompression and carry high semantic uncertainty.

The Semantic Uncertainty framework formalises this by documenting, for any term used in Geofinite discourse:

- Operational definition (how it is measured or recognised)
- Known ambiguities and recursive risks
- Contexts of validity (where the term may be safely used)
- Justification for usage (why this term rather than an alternative)

In Geofinitism, many imported philosophical terms function as poor endogenous transfectors: highly compressed, low in fiction quality, and prone to misinterpretation across basins.

Proposed Resolution: Boundary Markers and the Generon

To situate the reader and bound meaning without rewriting entire corpora, we introduce explicit semantic markers.

The Caret Notation: $\hat{\text{word}}$

The notation $\hat{\text{word}}$ indicates that a term is *under measurement*. It signals that the word is being treated as an object of scrutiny, not as a stable primitive. It is the semantic equivalent of placing a specimen under a microscope.

Examples:

- $\hat{\text{ontology}}$ – "We are examining this term, not using it as a primitive."
- $\hat{\text{epistemology}}$ – "This term is being held at a distance."
- $\hat{\text{world}}$ – "The ambiguity of this term is acknowledged."

The caret does not forbid the term. It *contains* it.

0.0.1 The Superscript Tilde: word^{\sim}

The superscript tilde indicates that a term is to be interpreted *within the Geofinite basin*. It aligns the term with the core commitments of finite measurement, uncertainty, and provenance.

Examples:

- $\text{measurement}^{\sim}$ – "Measurement as defined within Geofinitism (finite, uncertain, provenance-bearing)."

- **symbol** – ”Symbol as Nexil, not as Platonic abstraction.”
- **geometry** – ”Geometry as finite relational structure, not as ideal continuum.”

Distinct Functions

Notation	Function	Example
$\hat{\text{word}}$	Semantic suspension (under measurement)	$\hat{\text{ontology}}$
word^\sim	Basin alignment (Geofinite interpretation)	measurement^\sim

Together, they provide local instrumentation for managing semantic uncertainty in live discourse.

The Generon: Constructing Measured Transfactors

The **Generon** refers to the deliberate process by which a transfactor is constructed as a dual measurement—both exogenous (traceable to finite observations) and endogenous (coherent within relational structure).

It is not merely naming. It is an act of stabilisation.

A Generon produces a term that can be:

- traced to finite observations (exogenous grounding)
- understood within relational structure (endogenous coherence)
- evaluated for semantic precision (fiction quality)

- documented via Semantic Uncertainty Appendix

This prevents passive inheritance of philosophical density. Instead, meaning is actively constructed, bounded, and measured.

Generonic Reconstruction Process (Four Steps)

For any high-uncertainty term, the Generon process proceeds as follows:

- **Audit compression ratio:** Analyse corpus or usage patterns. How many distinct meanings does the term carry across contexts?
- **Construct SUA entry:** Document operational definition, ambiguities, validity contexts, and justification.
- **Identify or build Geofinite alternative:** Find or create a term with higher fiction quality and lower semantic uncertainty.
- **Mark transitional usage:** Use $\hat{\text{term}}$ while the alternative stabilises.

Worked Example: Reconstructing $\hat{\text{ontology}}$

- **Audit:** $\hat{\text{ontology}}$ is defined in philosophy as "the study of what exists and what is real." Yet $\hat{\text{real}}$ and $\hat{\text{exists}}$ are themselves high-uncertainty transfectors. The definition collapses into recursive instability.
- **SUA entry:**
 - *Operational definition:* None directly measurable.
 - *Ambiguities:* Multiple competing philosophical schools (realism, idealism, materialism, etc.)

Semantic Boundaries

- *Validity contexts:* Historical philosophy, comparative metaphysics.
- *Justification for Geofinite use:* Low. The term is not required.
- **Geofinite alternative:** Instead of $\hat{\text{ontology}}$, we might speak of *the admissible measurement domain of finite identities* – a phrase that explicitly references measurement, finiteness, and admissibility.
- **Marked usage:** Where the term cannot be avoided, write $\hat{\text{ontology}}$ to signal that it is under measurement, not being used as a primitive.

This converts passive inheritance into active construction.

Worked Examples of Marked Terms

$\hat{\text{ontology}}$

Defined philosophically as "what is real and what exists." Yet $\hat{\text{real}}$ and $\hat{\text{exists}}$ are themselves high-uncertainty transfectors. The definition collapses into recursive instability. Marked usage signals containment: the term belongs to the philosophical basin unless reconstructed via a Generon.

$\hat{\text{epistemology}}$

Centred on knowledge, justification, and belief, but prone to recursion and cross-basin drift. Without explicit grounding, it operates as an endogenous loop rather than a measurable framework.

`^semiotics^`

Useful for analysing sign systems, but risks subsuming Geofinitism into symbolic interpretation. Marking preserves boundary integrity.

`^world^`

A deceptively simple term masking vast ambiguity—ranging from phenomenological experience to physical universe. In Geofinitism, more precise constructs are preferred (e.g., *the finite measurable domain*, *the symbolic realm*, *the Geofinite Continuum*).

Implications for Writing and AI Interaction

This framework has several practical benefits:

- **Clarity in writing:** Readers (human or machine) know when a term is being used as a primitive and when it is being examined.
- **Stabilisation of AI interactions:** LLMs trained on mixed philosophical and technical corpora can be guided by explicit markers.
- **Reduction of semantic noise:** Unmarked philosophical terms cannot silently import their native basin assumptions.
- **Traceability:** The Generon process leaves an audit trail of how a term was constructed or reconstructed.

Future Work

The framework may be extended in several directions:

- **Formal Generon templates:** Structured documents for auditing and reconstructing terms.
- **Empirical calibration of fiction quality:** Developing metrics for compression ratio and semantic uncertainty.
- **Sentence-level marking:** Extending the notation beyond individual words to phrases or clauses.
- **Automated SUA generation:** Using LLMs to assist in auditing semantic uncertainty, with human oversight.

Conclusion

Geofinitism frames Words as finite instruments that compress, distort, and project meaning under constraint. By integrating trans-factors, semantic uncertainty documentation, boundary markers ($\sim\text{word}\sim$ and $\text{word}\sim$), and the Generon as a deliberate construction process, we move from unexamined language to measured symbolic interaction. The goal is not to eliminate ambiguity—ambiguity is a condition of finity. The goal is to make it *visible*, *bounded*, and *tractable*. In an era of LLM-amplified linguistic flow, such instrumentation becomes essential for maintaining clarity, falsifiability, and trajectory precision within the Geofinite basin.