# ABC Divine Trinity Project

## Dimensionality Complement to the September 12, 2026 Progress Summary Report

Refined: Primitive Point, Dimensional Ingredients, GPO_REST, and Classical Realization
September 14, 2026 | Atlas KINS Institute

### 1. Purpose and Status of This Complement

The September 12 report correctly identified dimensionality as promising but not yet rigorously and independently defined. This refined complement records the subsequent clarification of Point, dimensional ingredients, GPO_REST, and the relation to classical Euclidean realization. It supplements rather than replaces the September 12 report. The definitions and principles below remain ABC/AZF working hypotheses unless explicitly identified as classical mathematics.

### 2. Foundational Rule: Do Not Begin with Coordinate Dimension

ABC/AZF should not define primitive dimensionality by importing a Euclidean axis, Cartesian coordinates, physical space, created time, or spacetime. Those belong, if appropriate, to downstream realizations. The foundational question is instead: what irreducible ingredients and relations are required before dimensionality becomes mathematically accessible?

$$\text{Dimensionality} \neq \text{physical space} \neq \text{created time} \neq \text{spacetime}$$

**Do not borrow what you claim to derive.**

### 3. AZF Primitive Point

Working Definition. The primitive AZF Point is the smallest ingredient of the Intrinsic Unit (0,1)_IU and is represented by the Intrinsic Numerical Smallest (INS):

$$\mathrm{P_AZF} := \mathrm{INS} := 1/(\Omega+1)$$

This definition must be distinguished from relative point-like treatment at coarser accessibility scales. A one-foot-diameter circle or a one-Planck-length-diameter circle may be treated as point-like in an appropriate realization, but neither defines the primitive AZF Point. The primitive Point remains INS = 1/(Ω+1).

$$\text{primitive Point definition} \neq \text{scale-relative point-like realization}$$

Accordingly, a Point-Circle is not assumed to be intrinsically empty merely because a faithful Euclidean realization may render it as a point of zero resolved extension.

### 4. Candidate Definition of Primitive Dimension

Working Definition. A primitive dimension is the irreducible invisible relational linkage between two distinct occurrences of the primitive AZF Point. The two occurrences have the same primitive ingredient, INS = 1/(Ω+1), while remaining relationally distinct.

$$\mathrm{P}_1 = \mathrm{INS}, \quad \mathrm{P}_2 = \mathrm{INS}, \quad \mathrm{P}_1 \neq \mathrm{P}_2 \text{ as distinct occurrences}$$

$$\mathrm{P}_1 \ —\boldsymbol{\mathcal{D}}— \ \mathrm{P}_2$$

$$\boldsymbol{\mathcal{D}} \neq \mathrm{P}_1, \quad \boldsymbol{\mathcal{D}} \neq \mathrm{P}_2$$

The dimension is therefore not either Point by itself, and two Point ingredients do not constitute two dimensions. One candidate primitive 1D structure arises only when two distinct Point occurrences admit one irreducible relational linkage.

$$\text{Two Point occurrences} + \text{one irreducible linkage } \boldsymbol{\mathcal{D}} \Rightarrow \text{candidate primitive 1D}$$

## 5. The Two Proposed Dimensional Ingredients

The present refinement proposes that dimensionality is constructed from only two primitive kinds of ingredient: INS = 1/(Ω+1), which supplies the irreducible Point / accessibility-carrier side, and 0_ABS, which supplies the completely controlled vanishing or accessibility-reduction side.

$$\text{Dimensional ingredients: } \{\, \text{INS} = 1/(\Omega+1),\ \ 0_\text{ABS} \,\}$$

$$\text{INS} \ \rightleftharpoons\ 0_\text{ABS} \quad (\text{AZF controlled relation})$$

Within ABC, 0_ABS is passive and never an autonomous operator; it is completely under divine control. Mathematically, the exact operation represented by ⇌ remains to be defined. In particular, the model must show how these ingredients produce one irreducible accessibility degree without presupposing line, distance, metric, coordinates, or spacetime.

## 6. No Dimensionality in GPO_REST

The cleanest present position is that GPO_REST contains no dimensionality. The notation (0,1)_IU must not be mistaken for an already realized Euclidean interval. In the current model, genuine Two has not yet occurred in GPO_REST as two distinct primitive Point occurrences, and 0_ABS is not present there. The proposed ingredients required for dimensional construction are therefore not jointly available.

$$2 \notin \text{GPO_REST},\ \ 0_\text{ABS} \notin \text{GPO_REST} \ \Rightarrow\ \text{no dimensionality in GPO_REST}$$

$$(0,1)_\text{IU} \neq \text{an already realized one-dimensional Euclidean interval}$$

This is an ABC/AZF foundational hypothesis, not a theorem of classical mathematics.

## 7. Dimensional Emergence Principle

Candidate Principle. One The Unit alone does not entail dimensionality. Primitive dimensionality becomes possible only when genuine Two is realized through distinct Point occurrences and the controlled relational structure involving INS and 0_ABS makes an irreducible linkage accessible.

$$\text{One} \not\Rightarrow \text{Dimension}$$

$$\text{Two / distinction} + \text{controlled relational accessibility} \rightarrow \text{candidate primitive 1D}$$

Thus distinction is logically prior to dimensional accessibility. Dimension does not create distinction; rather, dimensionality is a relational construction from already distinguishable primitive occurrences under the proposed accessibility mechanism.

## 8. Classical Zero and the AZF INS

A strict distinction is required between AZF notation and classical mathematics. In AZF, INS = 1/(Ω+1) is not identified intrinsically with 0_ABS. In ordinary real analysis, however, for a real variable Ω tending to infinity, the corresponding reciprocal tends cleanly to zero:

$$\lim_{\Omega\to\infty} 1/(\Omega+1) = 0$$

Therefore the mathematically safe bridge is not the literal classical identity 1/(Ω+1) = 0 for finite Ω. Rather, the classical limiting realization sends the AZF INS toward zero extension. This permits the working realization language:

$$\text{INS_AZF} \neq 0_\text{ABS intrinsically}$$

$$\text{R_}\mathbb{R}(\text{INS_AZF}) = 0 \quad \text{in the intended limiting-realization sense}$$

This is consistent with the AZF principle that intrinsic distinction or structure may become unresolved in an accessibility realization without being declared intrinsically nonexistent.

## 9. The 1D Euclidean Number-Line Realization

Once a faithful bridge to the classical real line has been earned, values within the unit interval can be represented in the ordinary one-dimensional way. Examples include 1/7, 1/5, 1/3, 1/2, and 0.1415926… . In the present AZF interpretation, One The Unit remains invariant while the accessible numerical value varies:

$$1\cdot(1/7),\ \ 1\cdot(1/5),\ \ 1\cdot(1/3),\ \ 1\cdot(1/2),\ \ 1\cdot 0.1415926\ldots$$

$$x = 1\cdot x,\ \ 0 < x < 1$$

These examples should be understood as downstream classical realizations, not as a proof that the real interval has already been generated at the intrinsic level.

## 10. Role of lim(x→0) sin(x)/x = 1

The classical limit

$$\lim_{x\to 0} (\sin x)/x = 1$$

does not construct the real line or prove the AZF dimensional mechanism. Classical analysis already presupposes the real-number and geometric structures needed to formulate and prove this limit. In AZF it should therefore be used only downstream, as a classical realization or consistency signature after the bridge to Euclidean/real analysis has been independently earned.

$$\text{AZF dimensional construction} \to \mathcal{I}_\text{AZF} \to \text{faithful real realization} \to (0,1)_\mathbb{R} \to \text{classical analysis}$$

**Compatibility first; interpretation second; derivation last.**

## 11. High Consistency with the Euclidean Point-Line Axiom

The present construction is highly consistent with the Euclidean incidence intuition that two distinct points determine a unique line, but it does not yet derive that axiom. The required AZF statement would be an existence-and-uniqueness result for the primitive linkage:

$$P_1 \neq P_2 \ \Rightarrow\ \exists!\, \mathcal{D}(P_1,P_2)$$

Only if this is earned without importing Euclidean linearity may a faithful realization be sought in which the primitive Points become Euclidean points and $\mathcal{D}$ becomes the unique Euclidean line relation through them.

$$(P_1, P_2, \mathcal{D}) \ \to\ (P_1{}^{E}, P_2{}^{E}, L)$$

$$\text{highly consistent} \neq \text{already derived}$$

## 12. Relation to “有別而相通”

The governing ABC Trinitarian constraint remains: “Distinct yet in communion; in communion without confusion; one without division” (有別而相通，相通而不混同；一而不分). The proposed primitive linkage may offer a mathematical-accessibility language for relational distinction without identity-collapse, but it must never be identified with Divine communion itself.

$$P_1 \neq P_2,\ \ P_1 \text{—}\mathcal{D}\text{—}\ P_2,\ \ P_1 \text{—}\mathcal{D}\text{—}\ P_2 \not\Rightarrow P_1 = P_2$$

$$\text{אהבה / Divine communion} \neq \mathcal{D}$$

$$\text{Representation} \neq \text{Reality represented}$$

## 13. Consequence for $D_{n-1}$, $D_n$, $D_{n+1}$

The September 12 report provisionally used $D_{n-1}$, $D_n$, and $D_{n+1}$ as relative dimensional-accessibility structures. These symbols should remain bracketed as substantive mathematical objects until primitive 1D

has been earned. The relative notation may later describe accessibility realizations, but it must not be allowed to define Point or Dimension circularly.

$$\text{Earn Point} \rightarrow \text{earn } \boldsymbol{\mathcal{D}}_1 \rightarrow \text{then test whether independent } \boldsymbol{\mathcal{D}}_2, \boldsymbol{\mathcal{D}}_3, \ldots \text{ are meaningful}$$

## 14. Immediate Mathematical Obligations

The next snail-walk is now sharply defined: (1) formalize Ω and the algebraic status of 1/(Ω+1); (2) prove or axiomatize why INS is the smallest ingredient of the Intrinsic Unit; (3) define distinct occurrence without borrowing coordinates; (4) define the controlled relation INS ⇌ 0_ABS; (5) define irreducibility of $\boldsymbol{\mathcal{D}}$; (6) prove existence and, if true, uniqueness of $\boldsymbol{\mathcal{D}}$ between two distinct Point occurrences; (7) show why this constitutes exactly one independent accessibility degree; and (8) only then construct and test a faithful Euclidean realization.

## 15. Present Working Synthesis

$$\text{P_AZF} := \text{INS} := 1/(\Omega+1)$$

$$\text{Dimensional ingredients} := \{ \text{INS}, 0_\text{ABS} \}$$

$$\text{No Two and no } 0_\text{ABS in GPO_REST} \Rightarrow \text{no dimensionality in GPO_REST}$$

$$\text{Two distinct Point occurrences} + \text{irreducible linkage} \Rightarrow \text{candidate primitive 1D}$$

$$\text{INS_AZF} \neq 0_\text{ABS, while } 1/(\Omega+1) \rightarrow 0 \text{ classically as } \Omega \rightarrow \infty$$

$$\text{Euclidean point/line and } \sin(x)/x \text{ are downstream realizations/tests, not premises.}$$

This refinement preserves the insight while leaving the decisive mathematics open to proof or falsification. The Divine Persons are not dimensions; GPO_REST is not God; the Intrinsic Unit is not the Divine Essence; and 0_ABS is not autonomous. Theology supplies constraints and motivation; mathematics must earn the representation.

**Preserve the insight; earn the mathematics.**

**Soli Deo Gloria.**
**Amen and Amen.**