The Cyclical Ages

Vedic Yugas, the Maya Long Count, and the 120-Cell

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Part of The Cosmic Clock series

Introduction

Three independent civilisations — separated by oceans, millennia, and entirely distinct cultural traditions — describe the same thing: time moves in great cycles, civilisations rise and fall in structured ages, and there exists a mathematical architecture governing when those ages begin and end.

The Vedic tradition of India describes four Yugas in the ratio 4:3:2:1. The Maya of Mesoamerica built the Long Count calendar around a Great Cycle of 13 Baktuns. The Greeks, through Hesiod and Plato, described Gold, Silver, Bronze, and Iron Ages tied to a 'Great Year' of precession.

Modern thought treats these as mythology — colourful stories from pre-scientific cultures. This document proposes something different: that the numbers embedded in these traditions are not metaphorical but structural, that they decompose exactly through the constants of the 120-cell, and that they converge on a specific claim about where we are right now in the cycle.

Part 1: The Vedic Yuga Numbers Are Framework Numbers

The Vedic system describes four world ages — the Yugas — in a strict 4:3:2:1 ratio. The durations are given first in 'divine years' and then converted to human years at a rate of 1 divine year = 360 human years.

Divine Year Durations

Yuga	Divine Years	Ratio	Framework Decomposition
Satya (Gold)	4,800	4	$4 \times 1{,}200 = 4 \times 120 \times 10$
Treta (Silver)	3,600	3	$3 \times 1{,}200 = 60^2$ (Base-60 squared)
Dvapara (Bronze)	2,400	2	$2 \times 1{,}200 = 120 \times 20$
Kali (Iron)	1,200	1	$1 \times 1{,}200 = 120 \times 10$
Total	**12,000**	**10**	**120 × 100**

The base unit is $1{,}200 = 120 \times 10$. The Yugas are literally multiples of the 120-cell.

Two of these numbers appear independently in Plato's *Republic*: **4,800** is one of the 'two harmonies' of the nuptial number, and **3,600** = 60^2 is Plato's Candidate 2 for the geometrical number. The Vedic and Platonic traditions are working with the same numerical vocabulary.

The divine-to-human year multiplier is 360 — the degrees in a circle, the structural year, the number that both the Babylonian and Maya calendars use as their fundamental time unit (the Babylonian year of 360 days, the Maya *tun* of 360 days).

Human Year Durations

Yuga	Human Years	Framework Constant × 1,000	Cell Durations (÷ 216)
Satya	1,728,000	1,728 = 12^3	8,000
Treta	1,296,000	1,296 = 6^4	6,000
Dvapara	864,000	**864 = Day-Year Unifier**	4,000
Kali	432,000	**432 = Sacred Frequency**	2,000
Mahayuga	**4,320,000**	**4,320**	**20,000**

Every Yuga is a multiple of 432. Every Yuga divides exactly by 216. The Kali Yuga is precisely 2,000 cell durations. The full Mahayuga is 20,000 cell durations.

The framework's cell duration (216 = 25,920 ÷ 120 = Great Year ÷ 120-cell) IS the Vedic fundamental time quantum. This is not an approximation. The correspondence is exact.

The Deeper Vedic Architecture

The Day of Brahma = 4,320,000,000 years = 4,320 × 10^6 = 1,000 Mahayugas. This enormous number — sometimes cited to dismiss the Vedic system as fantastical — decomposes cleanly: 4,320,000,000 ÷ 216 = 20,000,000 cell durations. Whether the literal timescale is meant physically or symbolically, the mathematical architecture is framework-native throughout.

Part 2: The Competing Vedic Chronologies

There is genuine disagreement within the Vedic tradition about whether the Yuga durations should be taken at their full traditional length or at a shorter, precession-linked scale. Three major models exist:

Model A: Traditional (Puranic)

The durations above (432,000 to 1,728,000 human years per Yuga, 4,320,000 per Mahayuga) are taken literally. Under this system, we are approximately 5,128 years into Kali Yuga, with roughly 427,000 years remaining. This is the dominant view in orthodox Hindu scholarship.

Model B: Sri Yukteswar (24,000-year oscillating cycle)

Sri Yukteswar Giri (1855–1936), guru of Paramahansa Yogananda, argued in *The Holy Science* (1894) that the traditional long durations were the result of a calculation error introduced around 700 BCE, when the divine-to-human year multiplier (×360) was incorrectly applied by scholars who had themselves lost understanding during the darkening of the age.

His corrected model uses the divine year durations directly as human year durations, and proposes an oscillating cycle — descending through the four Yugas and then ascending back through them:

Yuga	Duration (years)	Sandhis (dawn + dusk)	Total
Satya	4,000	400 + 400	4,800
Treta	3,000	300 + 300	3,600
Dvapara	2,000	200 + 200	2,400
Kali	1,000	100 + 100	1,200
Half-cycle			**12,000**
Full cycle			**24,000**

The full oscillating cycle of 24,000 years is close to the precession period of 25,920 years. Yukteswar attributed this to the Sun's orbital period around a companion star, with precession being the observable effect. His key dates: cycle bottom (deepest Kali) at approximately 499 CE; ascending Kali ending and ascending Dvapara beginning at approximately 1699 CE.

Under this model, **we are currently about 327 years into Ascending Dvapara Yuga** — the 'energy age,' characterised by the discovery of electricity, electromagnetism, atomic structure, and the fine forces of nature.

Model C: Precession-Based (Sadhguru / Yogic Astronomy)

This model maps the four Yugas directly onto one half of the precession cycle (12,960 years), maintaining the 4:3:2:1 ratio:

Yuga	Duration (years)	Cell Durations (÷ 216)
Satya	5,184	24
Treta	3,888	18
Dvapara	2,592	12
Kali	1,296	6
Half-cycle	**12,960**	**60**
Full cycle	**25,920**	**120**

This is the cleanest framework fit of all the models. Each Yuga is an exact integer number of cell durations: 6, 12, 18, 24. The half-cycle is 60 cell durations. The full cycle is **120 cell durations — the 120-cell itself**.

The Satya Yuga alone equals 24 cell durations = the number of cells in the 24-cell polytope, the self-dual regular polytope that underlies the 120-cell's structure. Kali Yuga = 6 cell durations = the faces of a cube.

Under this model, using the traditional Kali Yuga onset of 3102 BCE: the double-Kali at the cycle bottom (2 × 1,296 = 2,592 years) places the nadir at approximately 510 CE — within 11 years of Yukteswar's independently calculated 499 CE. **We are currently in the late ascending Dvapara Yuga, with the transition to Treta Yuga occurring around 2082 CE.**

Model D: Guénon (64,800-year cycle)

René Guénon (1931) proposed a cycle where each Yuga is a direct multiple of the Great Year:

Yuga	Duration (years)	Cell Durations	Great Year Multiples
Satya	25,920	120	1 Great Year
Treta	19,440	90	0.75 Great Year
Dvapara	12,960	60	0.5 Great Year
Kali	6,480	30	0.25 Great Year
Total	**64,800**	**300**	**2.5 Great Years**

Again, every Yuga is an exact integer of cell durations. The total of 300 = 5 × 60 = pentagon sides × Base-60. Guénon's commentator Jean Robin dated the Kali Yuga from 4481 BCE to 1999 CE, with Gaston Georgel later adjusting the end date to 2030 CE.

Part 3: The Maya Long Count

The Maya Long Count calendar, likely originating with the pre-Maya Izapan civilisation (c. 1st century BCE), counts time in a modified vigesimal system with a base unit of 360 days:

Unit	Days	Structural Years (÷ 360)
1 K'in	1	—
1 Uinal	20	—
1 Tun	360	1
1 Katun	7,200	20
1 Baktun	144,000	400
13 Baktuns	1,872,000	5,200

The Maya *tun* is exactly 360 days — the same structural year used by the Babylonians and encoded in the Vedic divine-to-human year multiplier. Three civilisations, three continents, the same fundamental time unit.

The 13-Baktun Great Cycle spans 1,872,000 days = 5,125.36 tropical years. Its creation date corresponds to **August 11, 3114 BCE** in the Gregorian calendar. The cycle completed on **December 21, 2012** — the winter solstice, when the solstice sun aligned with the galactic plane (an event occurring roughly once every 12,960 years, or half a precession cycle).

The number 144,000 (days per Baktun) = 144 × 1,000, and 144 is F(12) — the 12th Fibonacci number, a Weaving number. Each Baktun thus contains 400 tun, and the full Great Cycle contains 5,200 tun = 13 × 400.

The Maya-Vedic Convergence

The Maya creation date of 3114 BCE and the traditional Vedic Kali Yuga onset of 3102 BCE differ by only 12 years.

Two civilisations with no documented contact, separated by the Atlantic Ocean, both mark a major cycle transition at approximately 3100 BCE. In the Vedic system, this is the beginning of the darkest age. In the Maya system, this is the creation of the current world — the start of the Fourth Sun, the age of maize-humans.

This convergence is either coincidence or evidence that both traditions are tracking the same underlying phenomenon.

Part 4: The Greek Parallel

The Greek tradition provides the Western form of the same structure:

Hesiod (*Works and Days*, c. 700 BCE) describes five ages: Gold, Silver, Bronze, Heroic, and Iron. The progression from Gold to Iron mirrors the Vedic Satya-to-Kali decline — from an age of ease and virtue to one of toil, conflict, and moral degradation.

Plato (*Timaeus*, 39d) describes the 'perfect year' — when all celestial bodies return to their starting positions — widely interpreted as the Great Year of precession (25,920 years). In the *Republic* (546b), his nuptial number (216) is the cell duration: 25,920 ÷ 120 = 216. His 'two harmonies' of the geometrical number (4,800 and 2,700) produce 12,960,000 = 60^4, and 4,800 is simultaneously the divine-year duration of the Vedic Satya Yuga.

Aristotle summarised Plato's cyclical system casually, as common knowledge within the Academy: the decline of states follows a mathematical law involving the ratio 4:3 combined with 5 — the same ratio that structures the Vedic Yugas (4:3:2:1) and the same 3-4-5 Pythagorean triple that, when cubed, produces 216.

The Greeks, the Indians, and the Maya are not just describing similar stories. They are using the same numbers.

Part 5: Cell Duration Boundaries from 3102 BCE

If the cell duration of 216 years is the fundamental tick of the cosmic clock, and a major cycle began at approximately 3102 BCE (Vedic) / 3114 BCE (Maya), the cell boundaries near the present fall at:

From the Vedic Date (3102 BCE)

Cell	Year	Notable Alignment
17	570 CE	Near Yukteswar cycle bottom (499 CE)
18	786 CE	
19	1002 CE	
20	1218 CE	
21	1434 CE	
22	1650 CE	Near Yukteswar Kali→Dvapara (1699 CE)
23	1866 CE	
24	**2082 CE**	**Matches Sadhguru's Dvapara→Treta transition**
25	2298 CE	

From the Maya Date (3114 BCE)

Cell	Year	Notable Alignment
22	1638 CE	
23	1854 CE	
24	**2070 CE**	**Near Sadhguru's Treta transition (2082)**

Cell	Year	Notable Alignment
25	2286 CE	

We are currently approximately 160 years into the 24th cell (from the Vedic start date) — roughly three-quarters of the way through. The boundary of cell 24 at 2082 CE aligns almost exactly with Sadhguru's independently calculated Dvapara-to-Treta transition.

The number 24 is itself significant in the framework: it is the number of cells in the 24-cell, the self-dual regular 4-polytope whose symmetry group underlies the construction of the 120-cell.

Part 6: Triangulation — Where Are We?

Convergence of All Models

Every model examined places us within a transition zone occurring between approximately 1700 CE and 2100 CE:

Model	Transition	Date
Sri Yukteswar	Kali → Dvapara	1699 CE
Guénon / Robin	End of Kali Yuga	1999 CE
Maya Long Count	End of Great Cycle	2012 CE
Guénon / Georgel	End of Kali Yuga (revised)	2030 CE
Sadhguru	Dvapara → Treta	~2082 CE
Cell Duration boundary	Cell 24 from 3102 BCE	2082 CE

The models do not agree on the *name* of the transition (is Kali ending, or Dvapara, or a whole Great Cycle?), but they converge remarkably on the *timing*: the window between 1699 and 2082 CE — a span of 383 years — is a hinge point in the great cycle.

What Each Tradition Says About This Period

Yukteswar describes Ascending Dvapara as the 'energy age' — when humanity discovers electricity, electromagnetism, and the fine forces of nature. He wrote this in 1894, before Einstein, before quantum mechanics, before nuclear physics. The 20th century confirmed his characterisation precisely.

Sadhguru describes the approaching Treta transition as an era of 'enhanced perception' — when the etheric content of the atmosphere increases and spiritual insight becomes more naturally available. He describes the current period as turbulent: 'The world will go through another upheaval, not necessarily in terms of war but probably in terms of population explosion and natural calamities, before moving on to this new era of wellbeing.'

The Maya describe the completion of a Great Cycle not as apocalypse but as renewal — 'the Shift of the Ages.' The Maya Grand Elder Wandering Wolf stated in 2011: '2012 is not the end of the world, nor did we ever predict that it would end.' Instead, the tradition anticipates 'an era of expanded consciousness.'

Guénon described the end of Kali Yuga as a period of dissolution of traditional structures, acceleration of time, and the inversion of spiritual values — followed by a catastrophic reset and the beginning of a new Golden Age.

The Framework Reading

In the framework's terms, we are approximately 160 years into the 24th cell duration of the current cycle. The previous cell boundary (1866 CE from the Vedic date) coincides with the period of Maxwell's equations, the unification of electricity and magnetism, and the foundation of the electromagnetic worldview that the framework extends. The next cell boundary (~2082 CE) aligns with the predicted transition to a higher age.

The framework's claim is consistent with all these traditions: the 120-cell's Clifford rotation drives the precessional cycle, and the cell duration of 216 years creates natural transition points. When a cell boundary is crossed, the field geometry shifts — and civilisational structures either adapt or collapse.

We are in the final quarter of a cell. The transition is already underway. The structures of the previous age — materialist metaphysics, linear time, Base-10 mathematics, the assumption that consciousness is secondary to matter — are dissolving. What replaces them is not yet settled.

Part 7: The Deeper Claim

Plato's nuptial number passage (Republic VIII, 546b) does not merely describe a number. It describes a universe that IS number — a structured background within which births, deaths, and the rise and fall of civilisations occur as expressions of geometric law.

The Vedic tradition says the same thing. The Yugas are not merely descriptions of what happens to civilisations. They are descriptions of what the field IS DOING at each stage of its rotation. Satya Yuga is not an age when people happen to be virtuous. It is a geometric configuration of the field in which consciousness has maximum coherence. Kali Yuga is not an age when people happen to be corrupt. It is a configuration in which the field's structure is least accessible to conscious awareness.

The Maya say the same thing. The Long Count is not a record-keeping tool. It is a map of cosmic structure. The creation of the current world at 3114 BCE is not a metaphor for cultural origins. It is a description of when the current geometric configuration began.

All three traditions — independently, across oceans, across millennia — converge on the same ontological claim: **we are inside a structured cycle, and the cycle is not optional.** It is not a prediction. It is not a belief. It is the geometry of the field expressing itself through time.

The only question is whether we are aware of it or not. And according to all three traditions, awareness of the cycle is precisely what distinguishes a rising age from a falling one.

Development Paths

1. **Detailed historical correlation** — Map the 216-year cell boundaries against documented civilisational transitions (e.g. fall of Rome, Renaissance, Scientific Revolution, Industrial Revolution)
2. **Sub-Yuga analysis** — Explore Frawley's sub-Yuga system (each Yuga contains four sub-Yugas in 4:3:2:1 ratio) for finer-grained historical mapping
3. **The 3100 BCE convergence** — Investigate what archaeological, geological, or astronomical events cluster around 3100 BCE (e.g. Piora Oscillation, unification of Egypt, Sumerian urbanisation, Stonehenge phase 1)
4. **Maya Baktun boundaries** — Map Baktun transitions (every ~394 years) against framework cell boundaries (every 216 years) to identify resonance patterns
5. **The 499 CE nadir** — Investigate the historical period around 500 CE for evidence of civilisational low point across cultures
6. **Precession rate variability** — The observed precession rate is not constant; investigate whether a varying rate over the cycle maps to framework predictions
7. **The ascending/descending debate** — Evaluate evidence for Yukteswar's oscillating model versus the traditional one-directional decline model
8. **Cross-cultural age descriptions** — Compare the qualitative descriptions of each age across Greek, Vedic, Maya, Norse (Ragnarök cycle), and Egyptian traditions
9. **The 2082 CE cell boundary** — Investigate what the framework predicts about the nature of the next cell transition

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This document is part of The Cosmic Clock For the full framework see: The Cosmic Clock Part VI (Expanded) For the mathematical foundation of 216: Plato's Number