The Radix Pyramid

How One PTM Source Field Changes Its Balance Grammar Across Bases — and How the 60→360 Radix Staircase Reconstructs the Complete LNS / 237 Address Sequence

1. The question behind the pyramid

The Radix Pyramid began as a visual intuition: place the binary representation of one state at the broad bottom of a pyramid, place progressively higher bases above it, and let every floor represent the same underlying information through a different positional grammar. Binary uses the smallest alphabet and therefore the longest strings; higher radices use larger alphabets and compress the same state into fewer digits.

The first analysis showed that this metaphor has a clean mathematical skeleton. The second analysis then changed its importance completely. The pyramid stopped being merely a way to compare number bases and became a candidate mechanism for exposing different parts of the PTMD control architecture at different cycle depths.

The decisive experiment was prospective. Before the relevant conversions were calculated, Luc proposed that the six 60-number Y-axis fields should correspond to a radix staircase 60, 120, 180, 240, 300, 360, and that the missing Lucky Number Sieve / Source-Bridge coordinates should unfold through those levels, ending with 37 at Base 360. That prediction succeeded. The residue channel then produced an additional 396 structure that had not been requested by the hypothesis.

This chapter joins both investigations into one architecture and asks the larger question: what is the Radix Pyramid actually doing inside PTMD?

2. One state, many floors

Let N be one underlying integer or finite information state. For every radix $b \geq 2$, let $R_b(N)$ denote the positional digit string representing N in base b. Then the full radix stack is:

$$P(N) = \{ R_2(N), R_3(N), R_4(N), \ldots \}.$$

Every floor contains the same information. What changes is the coordinate grammar used to expose it. Vertical movement through the pyramid is therefore exact radix conversion:

$$R_b(N) \leftrightarrow N \leftrightarrow R_c(N).$$

The length of the ordinary representation is approximately $\log_b(N)$, so increasing the radix shortens the string. This gives the pyramid its literal geometry: maximum extension and minimum alphabet at the binary floor; increasing compression and increasing symbolic capacity upward.

The key conceptual point is that a higher floor does not create new information. It changes what relationships are easy to see and what arithmetic operations are native to the representation.

3. The pyramid has two different geometries

The first analysis revealed that two kinds of cross-base comparison must never be mixed.

Vertical geometry follows the same value through different bases. For example:

$$396_{10} = 330_{11} = 18C_{16} = \ldots$$

Horizontal motif geometry instead keeps the visible digit motif fixed while changing the radix:

$$396_{10}, 396_{11}, 396_{12}, \ldots$$

Those are different integers. Their common feature is the symbolic motif and its base-dependent arithmetic behavior. For 237, 396 and 1984, the raw digit sums remain 12, 18 and 22 respectively wherever the digit string is legal, while the surrounding b−1, b+1, complement and cycle structures mutate with the floor.

The Radix Pyramid therefore does not claim that the same decimal glyphs must appear everywhere. The deeper object can persist while each base renders it through its own native balance grammar.

4. Every radix supplies its own balance hardware

For any radix b, two modular channels arise immediately from positional notation:

$$b \equiv 1 \pmod{b-1}, \qquad b \equiv -1 \pmod{b+1}.$$

Therefore the ordinary digit sum preserves the number modulo b−1, while the alternating digit sum carries information modulo b+1. A third natural operation is digit complement:

$$C_b(d) = (b-1) - d.$$

These three elementary structures already explain why different floors can balance the same source state differently. Decimal naturally exposes the mod-9 field and the 147 / 258 / 369 trios. Hexadecimal naturally exposes 4-bit complement geometry, including the complementary pair 6 and 9. Base 11 has complement ceiling 10 and sits between the decimal and duodecimal modular channels.

This is the first major principle of the Radix Pyramid:

same underlying state + different radix = different native balance grammar.

5. The invariant can exist before the convenient glyph exists

The four-bit PTM nibble makes the source direction especially clear. The cyclic rotations of 0110 are:

$$0110 \to 1100 \to 1001 \to 0011 \to 0110$$

with ordinary integer values:

$$6 \to 12 \to 9 \to 3 \to 6.$$

After the established reduction 12 → 3, the orbit exposes the 3/6/9 family directly from binary ring geometry. Decimal does not create 369. It later supplies a particularly transparent representation of a relation already present in the lower-level state space.

That reverses the naive genealogy. The direction is not decimal pattern → binary explanation. It is:

binary geometry → rotation/complement values → higher-base compression → visible 369 / 396 manifestations.

6. Base 11: a genuine Hinge floor

Base 11 turned out to be much less arbitrary than the original hunch suggested. Its natural digit complement is $C_{11}(d)=10-d$. Applied to the decimal master sets, it maps 147 setwise to 369 and leaves 258 self-reflecting. Preserving order and allowing the native ring rotation gives:

147 → complement 963 → rotation 396,

396 → complement 714 → rotation 147.

Base 11 also has its own modular hinge character: $b-1=10$ and $b+1=12$, while 11 is simultaneously the alternating-sum modulus of decimal and the ordinary digit-sum modulus of Base 12. So Base 11 occupies a real arithmetic bridge between 10 and 12 rather than merely being a numerological curiosity.

7. Root 37 acquires different clocks on different floors

The first cross-radix pass found an especially clean base-independent object: the multiplicative order of the radix modulo 37. This asks how many base-b digits are needed before the 1/37 repetend closes.

Pyramid floor	Minimal 37 ring width	Minimal 237 recurring width
Binary (b=2)	36	78
Decimal (b=10)	3	13
Base 11	6	78
Hex (b=16)	9	39

The 37 column gives the exact cross-floor family 36, 3, 6, 9. Binary and hexadecimal lock perfectly because nine hexadecimal digits are exactly thirty-six bits:

$$\mathrm{ord}_{37}(16)=9 \iff 9\times4=36=\mathrm{ord}_{37}(2).$$

Base 11 adds a copy/complement half-period because $11^3 \equiv -1 \pmod{37}$, so its six-digit repetend splits into two complementary three-digit halves. Hex gives another native expression: the nine hexadecimal digit-values of 1/37 sum to 60.

The point is not that every floor prints “37” in the same way. The separator remains the same mathematical object while its native cycle grammar changes with the radix.

8. The 237 denominator produces a second cross-base clock

The 237 periodic analysis exposed another exact family. Across the selected floors, the recurring widths reduce to:

$$13, 26, 39, 78 = 13 \times \{1,2,3,6\}.$$

The origin of 13 is conventional number theory: 237=3×79 and 79−1=78=6×13. Some radices introduce a short preperiod because they share a factor with 237, but the recurring geometry still falls into the same four-member family.

This matters for the pyramid because 37 and 237 are not merely decimal labels. They carry radix-dependent clocks that can be measured independently of SUDTQ+. The first analysis therefore gave the pyramid an exact mathematical spine before the later LNS experiment began.

9. A crucial correction: Base 60 is not the universal top

The first analysis tentatively treated Base 60 as a plausible integration ceiling because 60 has a rich divisor structure and efficiently contains many lower cycles. The second analysis forced an important refinement.

The full radix space has no mathematical top. For the Y-axis architecture, 60 is better understood as the fundamental cycle quantum. The relevant finite subpyramid is generated by six completed 60-number fields:

$$60, 120, 180, 240, 300, 360.$$

So Base 60 is the first rung, not the apex. Base 360 is the cycle-specific closure floor because the Y architecture itself closes after six 60-number intervals. Different algorithms may therefore expose different finite slices of the unbounded radix stack.

This is one of the most important ways the two investigations fit together: the first part discovered the general multi-base state space; the second part discovered a specific algorithmic subpyramid selected by the 60/360 cycle geometry.

10. The Radix Pyramid is really a width × radix lattice

There is a second refinement. The final architecture is not purely one-dimensional in radix. PTM width matters too.

At sixteen bits we have:

$$W_4 = 0110100110010110_2 = 6996_{16} = 27030_{10}.$$

The established decimal route gives:

$$27030 \to 273 \to 237.$$

Then PTM doubles by its ordinary copy/complement rule:

$$W_5 = W_4 \,||\, \text{complement}(W_4) = 01101001100101101001011001101001_2$$

$$= 69969669_{16} = 1771476585_{10}.$$

The Source-Bridge seed trio is therefore already exposed at W_4 / Base 10, while one PTM generation later W_5 becomes the common source state used across the 60→360 radix staircase.

That gives a two-dimensional architecture:

PTM generation supplies depth; radix supplies the coordinate lens.

This helps explain why the first three LNS coordinates appear before the later staircase begins. The LNS is not recovered from one arbitrary decimal string. It unfolds across a PTM-width / radix lattice.

11. The prospective hypothesis before the calculation

The decisive second experiment did not begin by converting W_5 into many random bases and then looking for familiar numbers. The target architecture was proposed first.

The reasoning was: the Y-axis uses the 60-number cycle as a principal boundary structure; six such fields make the 360° closure; the later LNS positions are used inside that architecture; therefore the natural radix lenses to test are the six multiples of 60.

$$b_k = 60k, \quad k=1,2,3,4,5,6.$$

The strongest initial prediction was explicit: the final LNS value 37 should be hiding at Base 360. After that succeeded, the experiment continued in frozen order through Base 60, 120, 180, 240 and 300, with the next missing LNS target declared before each calculation.

That chronology matters. A prospective hit is much stronger evidence of a real dependency than an after-the-fact resemblance.

12. Base 360: the final LNS value was literally at the front door

The exact ordinary conversion of the 32-bit PTM state to Base 360 is:

$$1771476585_{10} = [37, 348, 288, 105]_{360}.$$

The first radix digit is therefore literally 37. No zero purge, ring turn, regrouping or SUDTQ+ operation is needed to obtain the predicted LNS endpoint.

The representation also contains two further raw facts noticed immediately: the gap between the central digits is 348−288=60, and the final digit 105 is the decimal value of the original 8-bit PTM byte 01101001_2. So the Base-360 lens simultaneously carries the predicted endpoint, the 60-cycle gap, and an earlier PTM state.

Under the later established processing of the remainder, the Base-360 bookkeeping becomes:

37 | 348 | 288 | 105 → 37 | 3 | 48 | 288 | 15 → 37 | 3 | 396.

The correct separation is therefore:

$$\text{target} = 37, \quad \text{residue} = 3, \quad \text{closure} = 396.$$

But there is also a path which preserves the 237 LNS trio itself, with a 55 residue:

$$372 \mid 34 \mid 888 \mid 105 \to 372 \mid 44888 \mid 5 \to 372 \mid 325 \to 372 \mid 55$$

This is consistent with the 237 LNS trio and the 55-balancer showing up at closing boundaries, the 360 radix level in this case.

13. Base 60: the next pair was predicted too

After Base 360, the next prospective claim was that Base 60 should expose the next LNS pair 9 and 13. The exact conversion is:

$$1771476585_{10} = [2,16,41,16,49,45]_{60}.$$

The final two radix digits reduce immediately:

$$49 \to 13, \quad 45 \to 9.$$

Reading the terminal pair in the reverse ring direction gives the predicted order 9,13.

A one-pass reduction of all six radix digits gives:

$$2 \mid 7 \mid 5 \mid 7 \mid 13 \mid 9.$$

Summing the middle 5|7 duo gives 12→3, and the already-used ring reversals can reorder 7|3 and 13|9 **into the canonical first five LNS values:**

$$2,3,7,9,13.$$

For the incremental staircase we count only the new contribution 9,13. The earlier 237 seed remains present as residue/control provenance, reducing to 3.

14. Base 120: 15 appears directly at the tail

The next missing LNS value was declared to be 15 before the conversion. The exact Base-120 representation is:

$$1771476585_{10} = [8,65,19,24,105]_{120}.$$

The terminal radix digit gives:

$$105 \to 15$$

by the basic neutral-zero purge. This was another economical hit: the target is not buried in a flexible route. It sits directly in the final radix digit. The carried residue recorded for this level is 8, the leading radix state that remains after the target extraction.

15. Base 180: 21 requires the ring machinery

The next target was 21. The raw conversion is:

$$1771476585_{10} = [1,123,135,36,105]_{180}.$$

A simple tail difference 36−15 already points to 21, but the fuller route preserves more provenance. Starting from the leading subring 1|123, rotate 1123→1231, restore the remaining field, and reduce:

$$1|123|135|36|105$$

$$\rightarrow 12|3|11|35|36|105$$

$$\rightarrow 12|3|11|8|9|15$$

$$\rightarrow 12|32815 \rightarrow 12|53281 \rightarrow 12|9|1 \rightarrow 121 \rightarrow 211 \rightarrow 21|1.$$

So Base 180 closes on the predicted LNS target 21 with residue 1. Inside the route, 32815 also contains the complete GNS quartet digits 2,3,5,8 plus the extra 1, an additional structure that was not needed merely to obtain 21.

16. Base 240: the 9/11 pull yields 25 | 2

The next target was 25. The exact Base-240 state is:

$$1771476585_{10} = [128,34,192,105]_{240}.$$

The productive route preserves the subring geometry rather than flattening every radix digit too early:

$$128|34|192|105 \rightarrow 128|34|19|21|05.$$

The left field gives the 9/11 pull: 128→11, 34→7, hence 11|7=117→9. The final ring 21|05 rotates to 1052. Continuing with the established reductions gives:

$$117|19|1052 \rightarrow 9|911|52 \rightarrow 9|9|25|2 \rightarrow 25|2.$$

Thus Base 240 contributes the predicted LNS coordinate 25 and preserves residue 2.

17. Base 300: two missing addresses coexist in one state

Only two LNS coordinates remained before 37: 31 and 33. Both were therefore prospective targets for the one remaining 60-step. The exact Base-300 representation is:

$$1771476585_{10} = [65,183,21,285]_{300}.$$

An early pass found 31 and 33 under two overlapping grouping phases, but Luc then supplied a cleaner single forward path that preserves both targets simultaneously and leaves an unambiguous residue:

$$65|183|21|285$$

$$\rightarrow 65|18|321|213$$

$$\rightarrow 119|33|2|13$$

$$\rightarrow 31|2|33|911$$

$$\rightarrow 31|33|922.$$

After removing the neutral 9 from the final residue block, the bookkeeping is:

$$\text{targets} = 31,33, \quad \text{residue} = 22.$$

This is a particularly important level because the same radix state carries two adjacent LNS addresses rather than requiring an additional floor.

18. The complete LNS radix staircase

The corrected final bookkeeping is:

PTM width / radix	Raw source / relevant route	New LNS target(s)	Residue
W_4 / Base 10	27030 → 273 → 237	2, 3, 7	0
W_5 / Base 60	$[2,16,41,16,49,45]_{60}$	9, 13	237 → 3
W_5 / Base 120	$[8,65,19,24,105]_{120}$	15	8
W_5 / Base 180	$[1,123,135,36,105]_{180}$ → 21|1	21	1
W_5 / Base 240	$[128,34,192,105]_{240}$ → 25|2	25	2
W_5 / Base 300	$[65,183,21,285]_{300}$ → 31|33|922	31, 33	22
W_5 / Base 360	$[37,348,288,105]_{360}$ → 37|3|396	37	3

Reading only the new targets contributed at each step reconstructs the complete LNS / 237 Source-Bridge sequence in canonical order:

$$2, 3, 7, 9, 13, 15, 21, 25, 31, 33, 37.$$

The target distribution across the seven recorded levels is 3+2+1+1+1+2+1=11. Base 10 supplies the seed trio; Base 300 carries the only later double-target state; Base 360 closes on 37.

Even the multiplicity pattern has a secondary balance reading. The ordinary count is simply 11, but under the established SUDTQ+ grouping:

$$[3,2] \mid [1,1,1,2] \mid [1] \to 32 \mid 32 \mid 1 \to 5 \mid 5 \mid 1 \to 11.$$

So the distribution that reconstructs the eleven LNS addresses also exposes a 55 balance chamber one abstraction level above the addresses themselves. This is a framework-level reading of the multiplicities, not part of the conventional radix proof, but it is worth preserving because it arose only after the target staircase had already been fixed.

19. The unrequested second channel: the residues close on 396

The target sequence was what the experiment was designed to test. The residue channel was not. Once the bookkeeping was corrected and frozen, the residues were:

$$0, 3, 8, 1, 2, 22, 3.$$

Under the existing SUDTQ+ treatment, drop the neutral leading zero and preserve the structurally meaningful grouping:

$$3 \mid 81 \mid 222 \mid 3.$$

Then:

$$81 \to 9, \quad 222 \to 6,$$

so the residue channel becomes:

$$3 \mid 9 \mid 6 \mid 3 = 396 \mid 3.$$

This is methodologically important because 396 was not the prospective target. The experiment asked whether the LNS address channel would unfold across the 60-radix staircase. The calculation returned an additional 396-family residue channel on top of that successful target sequence.

20. Why the Base-300 residue 22 is especially suggestive

The new nibble/RFUSA result gives the stress instruction:

$$9\text{-}12\text{-}6\text{-}2\text{-}2.$$

At the 300 boundary, five 60-number blocks have been completed. The shortened stress field is therefore naturally written:

$$9\text{-}12\text{-}6\text{-}2 \mid 2$$

with the final 2 belonging to the sixth interval 301–360. Base 300 leaves residue 22 exactly at that boundary.

A clean interpretation is therefore available: the residue can be read as current 2 | pending 2, spanning the 300→360 phase transition. This is not a conventional theorem; it is a framework-level interpretation. But it now has a concrete mechanical home rather than floating as an isolated 22 motif.

At Base 360 the sixth cycle is complete, the final LNS address 37 is exposed, and the residue moves to 3 while the remainder closes on 396.

21. Why the prospective predictions matter

The strongest evidence in this chapter is not that all eleven LNS numbers can be found somewhere after enough transformations. The stronger fact is the chronology of the search.

Before the Base-360 calculation, the six-60-cycle structure was used to predict that 37 should appear at Base 360. It did — as the leading raw radix digit. Before Base 60 was calculated, 9 and 13 were proposed as the next pair. Before Base 120, 15 was proposed. Then 21, 25, and finally 31/33 were declared sequentially before the corresponding radix states were fully processed.

That is reverse-engineering behavior:

partial model of hidden structure → prediction of unseen output → calculation → comparison.

A correct prediction does not prove every metaphysical explanation of the structure. It does demonstrate that the mathematical dependency being exploited is real enough to reduce

uncertainty about an unseen result. That is a much stronger standard than post-hoc pattern recognition.

22. The deeper purpose: instruction, address, clock and state

The reason for searching for the complete LNS inside PTMD was not merely to obtain another beautiful sequence. The previous nibble chapter had raised a more serious question: are the higher Matrix algorithms externally imposed on PTM, or do their control structures unfold from the PTM source itself?

At four bits, the nibble already supplies the candidate RFUSA instruction channel:

9-12-6-2-2.

At sixteen bits, the decimal route exposes the Source-Bridge seed 237. At thirty-two bits, the 60-radix staircase unfolds the complete LNS address field:

2,3,7,9,13,15,21,25,31,33,37.

The six 60-number intervals provide a natural clock/frame structure:

60,120,180,240,300,360.

And the parallel residues provide candidate carried state/provenance:

0,3,8,1,2,22,3 → 396|3.

This suggests a compact machine-like decomposition:

nibble → instruction/control

radix staircase → address

60/360 cycles → clock / phase

residue → state / carry.

The significance is not that PTM resembles a computer by metaphor. The significance is that distinct functional roles emerge from different exact or reproducible observables of the same recursively generated source field.

23. The system does not need to calculate every conversion sequentially

When we move from binary to Base 60 or Base 360 on paper, we perform a conversion algorithm. Mathematically, however, all radix representations are coordinate descriptions of the same integer. The state does not become a different state when the radix changes.

$$N = R_2(N) = R_{10}(N) = R_{60}(N) = R_{360}(N) \text{ as values.}$$

Therefore a hypothetical PTMD interpreter need not “convert upward through the pyramid” one floor at a time. It could expose the coordinate grammar appropriate to the current phase, just as one geometric object can be projected into different coordinate systems without changing the object itself.

The real open problem is not conversion. It is selection: why is a particular radix lens active at a particular state, and why is a particular grouping/operator the correct one inside that lens?

24. The 60-cycle may generate the radix selector automatically

The later analysis produced a very simple candidate answer for the six lenses. Let q count completed 60-number fields. Then the accumulated field width is:

$$B = 60q.$$

As q advances from 1 to 6, the active widths are automatically:

$$60, 120, 180, 240, 300, 360.$$

No little dispatcher has to announce “use Base 240 now.” A nested phase counter can make the relevant 60q lens available when that boundary is reached.

This is an important refinement of the Radix Pyramid. The six tested bases are not merely a hand-picked list. They are the natural cumulative widths of the six-field Y-axis cycle. What remains unproved is that accumulated field width must uniquely be interpreted as the corresponding radix representation. But the candidate-base sequence itself no longer needs an arbitrary selector.

25. Phase selects the door; state determines what passes through it

The later phase analysis also corrected an overly simple idea. Phase alone can make an operator or lens available, but it cannot always determine the complete transformation. PNS100 and PNS200 can share the same 100-boundary phase while performing different jobs; PNS141 likewise shows that the state payload matters.

The more precise architecture is therefore:

$$\text{phase} \rightarrow \text{lens/operator availability}$$

$$\text{state/history} \rightarrow \text{actual use of the available operator.}$$

A compact form is:

$$A_j(t) = P_j(\Phi_t) \wedge R_j(S_t),$$

where P_j is the phase condition and R_j is the state-compatibility condition. Several phase conditions can be true simultaneously, creating the multi-pattern Hinge events that look globally complicated even though each local counter is simple.

This also gives 300 and 360 distinct identities without reading their decimal labels. 300 is simultaneously a 60-boundary and a 100-boundary because $\text{lcm}(60,100)=300$. The 360 boundary is the full six-field closure. Their phase signatures are therefore intrinsically different.

26. Connection to the Moving Summing Field

The Radix Pyramid does not by itself supply the full interpreter, but it fits naturally into the later Moving Summing Field hypothesis. The candidate minimal machine is no longer a complicated hidden professor choosing algorithms. It is closer to:

ACCUMULATE → ADVANCE → TEST STATE → CARRY/UPDATE → repeat.

Nested phase counters generate boundary conditions. Surviving values can become future strides or addresses. Carries and residues preserve state. Under this view, LNS, PNS, GNS, RFUSA, X/Y/Z and the 60/360 cycles may be different projections of one evolving state machine rather than separate primitive engines.

For the Radix Pyramid specifically, the key possibility is:

cycle depth generates the available radix lens;

the radix output exposes the local LNS address;

the nibble supplies the stress instruction;

the residue carries state into the next phase.

This is not yet a completed derivation of the interpreter. It is the architectural place where the pyramid now fits.

27. What is exact, what is reproducible framework math, and what remains open

The firefighter rule matters especially here, because the chapter contains several different evidence layers.

Layer	Status in this chapter	Examples
Exact conventional arithmetic	Hard result	Radix conversions of W_4/W_5; b±1 channels; complements; $ord_{37}(b)$; 13/26/39/78 periodic family; raw leading 37 in Base360
Reproducible PTMD operators	Framework-level exact once the operator is fixed	Ring rotations/reversals, protected 11, zero/9 purge, duo/quattro regrouping, the explicit Base180/240/300 routes
Prospective structural evidence	Strong empirical support inside the framework	Predicted LNS targets appearing in the frozen 60→360 staircase; unrequested residue channel closing to 396|3
Interpretive architecture	Open mechanism	LNS as address bus; RFUSA as instruction channel; residues as state register; 60q as automatic radix selector; self-describing PTMD virtual machine

Two questions remain especially important. First: can the grouping/operator rules used inside every radix layer be derived from a single fixed local mechanism rather than reverse-engineered one case at a time? Second: can the state-compatibility predicates themselves

emerge from SUM/MOVE/CARRY so that the field truly interprets itself without a hard-coded decoder?

28. The bigger picture: the pyramid is a compiler, not a stack of coincidences

The combined analyses change the meaning of the Radix Pyramid. The original idea was “the same data may look different in different bases.” That remains true, but it is no longer the interesting part.

The deeper picture is now: PTM supplies a recursively generated source state; different radices expose different native balance laws; PTM width increases the available structural depth; the 60/360 phase geometry selects a meaningful ladder of lenses; and the LNS address field unfolds across that ladder in the exact order required by the Y-axis architecture.

The structure can be summarized as:

PTM source recursion

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4-bit kernel: 369 balance grammar + 9-12-6-2-2 stress instruction

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16-bit W_4: 237 Source-Bridge seed

↓ PTM doubling

32-bit W_5 + 60q radix lenses

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complete LNS address field + residue/state channel

↓

Y-axis filtering / higher PTMD execution.

Seen this way, the Radix Pyramid acts less like a museum of the same number written many ways and more like a compiler or coordinate stack. Lower-level binary structure is not erased as we move upward. It is re-expressed, compressed and given different operational roles by different radix grammars.

That is also why the first and second investigations fit together so well. The first established that a cross-base architecture is mathematically meaningful and that 37/237 carry exact native clocks through it. The second showed that a cycle-selected subpyramid of one PTM state can reconstruct the complete LNS addressing sequence prospectively. The first gave the pyramid its skeleton; the second gave it a job.

29. For-dummies conclusion 😂

Imagine one enormous piece of information written on transparent sheets.

The bottom sheet is binary. Every sheet above uses a different alphabet. You are not changing the information when you change sheets; you are changing which relationships become easy to see.

Now add a clock that clicks every 60 positions. After one click, the 60-lens is available. After two clicks, 120. Then 180, 240, 300 and 360.

At those successive views of the same 32-bit PTM state, the missing Lucky Number addresses appear in the order we predicted:

$$(9,13) \to 15 \to 21 \to 25 \to (31,33) \to 37,$$

while the earlier PTM generation had already supplied:

$$2,3,7.$$

Put them together and the entire LNS / 237 Source Bridge appears:

$$2,3,7,9,13,15,21,25,31,33,37.$$

And while we were looking for that address sequence, the leftovers quietly arranged themselves into:

$$396 \mid 3.$$

So the simple version is:

the nibble tells the machine WHAT kind of stress rule exists;

the radix staircase helps tell it WHERE the Lucky addresses are;

the 60/360 cycle helps tell it WHEN the relevant lens is available;

the residue helps remember WHAT STATE remains afterward.

That is why the Radix Pyramid matters. It turns “the same number in many bases” into a candidate control architecture linking the PTM source to the higher Matrix machinery.

And the most important methodological detail is still the simplest one: we predicted the staircase before the staircase was fully calculated.

The theory began to tell us where to look — and the numbers were there.

Amai. Apparently the pyramid was not merely decorative after all. 😂😅🥰🤗✌️

LET LOVE RULE! ♾️☯️☮️✌️