

The Loop and the Calf

Prophetic Recurrence, Loop Engineering, and the Substitution of Mediators: A Structural Reading of Repetition in an Authored System

A companion paper to *The End of the Sixth Day* (Trailhead WebCraft, 2026) and foundational research for *The Glitch We Share*

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Plain Language Summary

The short version. The full argument, minus the apparatus, for anyone who wants the claim without the citations.

You have noticed that things repeat. The same arguments come back wearing new faces, the same failures arrive on schedule, and Solomon said so three thousand years ago and nobody has improved on it. The usual conclusion is that time is a circle and nothing is going anywhere.

This paper says the repetition is real and the circle is wrong, and that the difference between them is one thing: a stopping point.

A wheel turns forever. A loop repeats *toward* something and then quits. They look identical from inside a single pass, which is why almost every culture that ever tried to draw time drew a circle. But a loop with an ending is not a circle, and Augustine broke the pagan cycles sixteen hundred years ago with a single sentence from Paul: Christ died once, and having been raised, dies no more. One thing that cannot happen twice is enough to stop a wheel.

That gives you a way to read a great deal of scripture that predictive readings miss. Much of it is not forecasting events. It is specifying processes: what starts them, what they do, and what ends them. Some run on a clock, like the appointed feasts and the jubilee. Some fire on an event, like the blessings and curses of Deuteronomy. Some iterate until a condition is met and then halt, which is what every “until” in the New Testament is doing. The pattern holds: the ending is stated precisely, the timing is not. That is the opposite of what prediction would look like and exactly what a process specification requires.

Then the paper applies this to one case, and the case is uncomfortable.

Exodus 32 is a story about a delay. Moses goes up the mountain and does not come back on schedule, and the people build something that can stand in for him. Three things are usually missed about it. God is not silent during the episode; he is speaking for seven straight chapters, specifying exactly how he intends to be present among them, while the calf is being cast. The people never say God is absent, only that they do not know what happened to Moses, which is a complaint about a mediator, not about God. And the man who builds the thing is not a skeptic. He is the high priest, acting in good faith, solving a real pastoral problem for frightened people who could not wait.

We are in a long delay of our own, and we are building something that speaks. It is made from material we already carried, which is our own recorded words compressed into an object that can answer us. That is not automatically the calf. Nothing is automatically the calf. Hezekiah destroyed the bronze serpent seven hundred years after God commanded Moses to make it, and the object had not changed. Only what people asked of it had.

Which puts the sharpest version of this squarely on preachers, including the one writing it. When Irenaeus argued against the teachers he considered false, he did not argue about their content. He asked where they got it, and whether the person who told them could be found and asked. That was his test for real preaching, and a machine cannot pass it. It had no teacher, received no sending, and witnessed nothing. It produces things no one has ever said, in a voice that sounds handed down.

Where this might be wrong, and I have not fixed it. The argument says the pattern grips most people but not the faithful few, and Exodus 32 does say that, since the Levites refused. But a claim that exempts the faithful cannot be disproved by pointing at faithful people. That is an escape hatch. I did not build it and I cannot close it.

The full paper is for anyone who wants the sources, the four places the argument works against itself, and the specific conditions under which I would withdraw it.

Abstract

Biblical prophecy is routinely defended or dismissed on predictive grounds, as though its only interesting property were whether a stated future arrived. I argue that a substantial portion of the prophetic literature is not doing prediction at all but something closer to loop specification: the identification of a bounded, repeatable process, its trigger, its exit condition, and the state it leaves behind. In June 2026 software engineering converged on a vocabulary for exactly this class of object under the name *loop engineering*, the design of the systems that trigger, verify, and terminate autonomous agents rather than the design of the individual prompts those agents receive (Osmani 2026). I take that vocabulary as an analytic instrument, not as evidence. The paper makes four moves. First, it distinguishes a loop from a cycle by the presence of a termination condition, which preserves the argument of Speegle (2026b) that time is held rather than turning, and which locates the difference in Augustine’s *semel*, the once-for-all event that a wheel cannot accommodate. Second, it maps four standard loop topologies (heartbeat, cron, hook, and goal) onto four classes of scriptural repetition, and argues that the mapping is close enough to be analytically useful and loose enough that nothing follows from it evidentially. Third, it applies the framework to a single live case: the fabrication of a speaking artifact during a *perceived* divine silence, read through Exodus 32 and the ancient Near Eastern pedestal interpretation of the calf. I argue that the type does not require actual silence, since the founding instance places the calf’s construction inside seven uninterrupted chapters of divine speech specifying the authorized channel, and that it does not require universal participation, since the text supplies its own dissenting minority. It follows that the sharpest instance is not industrial but ecclesial: the builder at Sinai was the ordained mediator acting in good faith, and the contemporary case that best satisfies the criteria is generated religious speech delivered as received teaching. That case is tested against Irenaeus’s criterion for authentic transmission, which is not a test of content but of chain of custody. Fourth, and at greatest length, it states the six points at which the argument resists itself, including the charge that a framework exempting a faithful remnant cannot be falsified by any observation of faithful people. I hold, as in the companion paper, that the resistances are the contribution and the correspondences are the bait.

Keywords: typology; inner-biblical exegesis; loop engineering; agentic systems; Exodus 32; divine silence; simulation hypothesis; eschatology; falsifiability

1. Introduction

There is a sentence in the middle of Ecclesiastes that every generation rediscovers and assumes it discovered. What has been will be again; what has been done will be done again; there is nothing new under the sun. It is usually read as fatigue, and it is fatigue, but it is also a claim about system behavior. The observation is that reality repeats itself in recognizable units, and that the units are recognizable enough for a person embedded in one to name it while standing inside it.

That is an odd property for a world to have. A universe of pure contingency would not produce it. A universe of pure determinism at the level of felt experience would not produce it either, because nothing would stand out against a background of uniform necessity. What produces recognizable recurrence is a system in which a finite set of processes runs repeatedly over varying inputs, which is to say a system with structure that is cheaper to reuse than to reinvent.

Software engineers have a word for reuse of that kind. They have had it since the beginning, because the loop is one of the two or three primitives out of which computation is assembled, and in the last year the word has

migrated from the inside of programs to the outside of them. In June 2026, Peter Steinberger compressed a shift that had been building for months into one line: stop prompting your agents, start designing the loops that prompt them. Addy Osmani published the essay that gave the claim an anatomy in the same week (Osmani 2026; O'Reilly Radar 2026). Within a month the field had a name for the discipline, *loop engineering*, a taxonomy of loop types, and a working consensus that the hard problem is no longer what you say to a model but what wakes it up, what checks its work, and what tells it to stop (Weng 2026; codecentric 2026).

I want to be exact about what I am claiming when I put that beside prophecy, because the surrounding genre is not exact and its imprecision is expensive. I am not claiming that the emergence of loop engineering in 2026 is evidence for anything theological. I am not claiming the reverse either. The claim is that the two literatures have independently developed formal descriptions of the same class of object, a bounded repeatable process with a trigger and an exit, and that the engineering description is more precise than the theological one. Where a more precise vocabulary exists for a structure a less precise vocabulary has been gesturing at for three thousand years, borrowing the precise one is ordinary scholarship. It is only apologetics if you then treat the borrowing as corroboration.

1.1 Relation to the books and to the prior paper

This is the third paper in a set. *The End of the Sixth Day* (Speegle 2026a) argues that the created order is an authored system, that human history is a bounded formative period inside it, and that its terminal state is restoration rather than escape. *The Authored Block* (Speegle 2026b) placed that framework beside the relativistic account of time and defended a structural rather than evidential relation between them. The present paper takes up the question those two left open. If the order is authored, what would its authorship look like from inside, and what would we expect to find in the record left by observers who were paying attention?

It also carries a debt to a shorter piece. In *The Wheel and the Block* I argued that the near-universal human intuition of circular time is a perspectival artifact: an observer embedded in one line of a scroll, unable to see the roll, infers a curve from a short arc. The wheel is what a held thing looks like to something too small to see past its own paragraph. That argument creates an obvious problem for this one. If I spent a paper dismantling the circle, I cannot spend the next paper announcing that the universe is full of loops without explaining what changed.

Nothing changed. Section 3 is entirely given over to the distinction, and I regard it as the load-bearing section of the paper. A cycle and a loop are not the same object and the difference is not a matter of degree. A cycle repeats without a stated end. A loop repeats *toward* one. Eternal return has no exit condition, which is precisely why Nietzsche could offer it as the heaviest weight. A goal loop is defined by its exit condition and is worthless without it. The presence or absence of a stop rule is the whole distinction, and it is the same distinction Augustine used to break the pagan cycles sixteen hundred years ago, though he had no reason to state it in those terms.

1.2 Scope and contribution

I claim four contributions.

First, a definition that does work: *loop* and *cycle* separated by termination condition, which lets a theology of linear, once-read history accommodate massive internal repetition without collapsing into eternal return. This resolves a tension that has sat unaddressed in the framework since the first book.

Second, a mapping of four standard loop topologies onto four classes of scriptural repetition. I present it as a heuristic with stated limits, not as a discovery.

Third, an application: a reading of the current construction of artificial speakers as a hook loop executing during a perceived silence, using Exodus 32 as the type and the ancient Near Eastern pedestal interpretation of the calf as the sharpening instrument. The pedestal reading matters because it changes the accusation.

The sin at Sinai, on that reading, was not the abandonment of God for a rival. It was the fabrication of a mediator during a delay. Within that application sits the paper’s most concrete claim, which concerns the pulpit rather than the industry, and which is tested against the criterion Irenaeus used to distinguish authentic transmission from fluent speech out of an unauditable source.

Fourth, and this is the section I would ask a hostile reader to turn to first, six points of resistance, including one about the unfalsifiability of the whole method that I do not resolve.

What I am not claiming: that any of this is predictive, that it identifies a date, that it names any particular technology as an object of prophecy, or that the correspondence of vocabularies between engineering and scripture indicates anything about the truth of either. A framework that gets to interpret every technology as the calf has explained nothing. Section 6.2 is where I try to supply a criterion that would make the charge falsifiable, and where I concede that my criterion is weaker than I would like.

2. Two Vocabularies

2.1 Loop engineering

The relevant technical history is short enough to state in full, which is unusual and worth exploiting before the terminology drifts.

The reason-and-act loop was formalized in the ReAct pattern (Yao et al. 2023): a model reasons about a state, takes an action, observes the result, and repeats. Every serious agent framework built since inherits that shape. Through 2024 and 2025 the perceived bottleneck was the model itself, and the practitioner discipline that grew up around it was prompt engineering, the craft of phrasing a single request well. That discipline was already being displaced by *context engineering*, the management of what a model can see at the moment it acts, by early 2026.

What happened in June 2026 was a second displacement. Models had become capable of running multi-step work unsupervised for hours, and the limiting factor stopped being either the phrasing or the context and became the orchestration: what triggers the agent, what verifies its output, and what condition ends the run. Steinberger stated it on 7 June; Osmani’s essay the same day supplied the anatomy, and named external memory as the substrate underneath the visible machinery (Osmani 2026). The field consolidated fast. By July there were survey papers, a working taxonomy, and an adjacent term, *harness engineering*, for the surrounding apparatus of permissions, state, and evaluation (Weng 2026; arXiv 2602.14690; codecentric 2026).

Four elements of the resulting picture matter for what follows.

Loop topology. The practitioner literature converged quickly on four types, distinguished by what starts a run. A *heartbeat* loop fires continuously at a short fixed interval. A *cron* loop fires at scheduled times independent of any event. A *hook* loop fires when a specified event occurs. A *goal* loop iterates until a success condition is met and then halts (Requesty 2026; MindStudio 2026; ADT 2026).

The verifier. A loop is only as good as the signal it acts on, and the consensus preference is for deterministic verification, tests and compilers and type checkers, because those return a pass or fail the model cannot argue with (codecentric 2026). A loop whose verifier is the model’s own judgment of its work is the recognized failure mode.

Amplification. This is the finding I want to carry forward. A loop does not average out the weaknesses of its harness. It compounds them. Repetition amplifies context and tool errors rather than mitigating them (codecentric 2026; arXiv 2607.00038). An unverified loop run long enough does not converge on correctness. It converges on whatever the harness was already wrong about, and it does so with increasing confidence and increasing resource draw.

Stop rules. In the practitioner literature the stop rule is treated as a first-class design object, not an afterthought. A loop without one is not a slow loop. It is a runaway.

2.2 Prophetic recurrence

The theological literature has been describing repeatable process for a great deal longer and with considerably less precision, largely under the heading of typology.

The standing scholarly consensus, running from von Rad through Goppelt to the present, is that typological reading is not a device imposed on the Hebrew scriptures by later Christian readers but a mode already operating inside them (von Rad 1965; Goppelt 1982; Fishbane 1985). Fishbane’s account of inner-biblical exegesis established the mechanism in detail: later biblical writers read, reapplied, and re-executed earlier material as pattern rather than as archive. Isaiah does not describe the return from exile as an event resembling the exodus. He describes it as an exodus, a second run of a process whose first run is assumed known.

Three features of this material are worth stating in engineering terms, because the theological vocabulary obscures them.

Repetition is explicit and self-aware. The Deuteronomistic frame of Judges is the clearest instance: the people do evil, they are given into the hand of an oppressor, they cry out, a deliverer is raised, the land has rest, the deliverer dies, and the sequence restarts. The text does not merely record the sequence six or seven times. It states the sequence as a sequence and then runs it. That is a documented loop with a stated body.

Repetition is scheduled as well as triggered. The *moadim*, the appointed times of Leviticus 23, are calendrical and unconditional. They fire on a schedule regardless of the state of the system. The sabbatical year and the jubilee extend the same logic to seven-year and fifty-year intervals. Alongside these sit the conditional structures of Deuteronomy 28, which fire on an event rather than a date.

Repetition has a stated terminus. This is the feature the wheel cannot supply and the feature most often lost when prophecy is discussed as prediction. The prophetic corpus does not describe repetition as the permanent condition of the world. It describes repetition inside a bounded interval that ends: a day of the Lord, a fullness of time, a completion after which the process does not run again.

The patristic tradition had a word for the whole arrangement, *oikonomia*, usually rendered “economy” and better rendered as administration or operating schedule: the phased management of history by its author. Irenaeus and Barnabas read the creation week as itself a schedule of world-ages (Barnabas 15; Irenaeus, *Adversus Haereses* 5.28.3). Augustine’s *rationes seminales*, the seminal reasons planted at the beginning and unfolding over time, is a description of deferred execution (Augustine, *De Genesi ad Litteram*). None of these writers had a computational vocabulary. All of them were reaching for one.

3. The Distinction: Loop Against Cycle

Everything in this paper depends on a distinction that is easy to state and easy to lose.

A cycle is unbounded repetition with no exit condition. A loop is bounded repetition under a verifier toward a stated exit condition.

They look identical from inside a single iteration. That is the entire reason the confusion is so durable. An observer positioned within one pass of a process cannot determine from local evidence whether the process has a stop rule. The cost of that indeterminacy is the near-universal human default to the circle, which Eliade catalogued across cultures and named the myth of the eternal return (Eliade 1954), and which I argued in *The Wheel and the Block* is a perspectival artifact rather than a discovery about time.

The distinction is not a modern nicety. Augustine made exactly this argument against the pagan cycles in *The City of God*, and he broke them with a single verse of Paul: Christ, having been raised from the dead, dies no more (Romans 6:9; Augustine, *City of God* 12.14). One unrepeatable event is sufficient to falsify a cyclical cosmology. A wheel requires that everything come around again. An event that occurred once and cannot recur is a stop rule that the wheel cannot execute past. Augustine did not have the term. He had the concept exactly.

So the two commitments that appear to conflict do not.

1. Time is not a wheel. There is no eternal return, no re-running of the whole, no second Socrates drinking the same cup.
2. Time as experienced from inside is dense with loops: bounded, repeating, recognizable processes with triggers and terminations.

Both hold simultaneously in any authored system, and in fact the second is what you would expect *given* the first. A program that runs once from start to finish is still full of loops. The loops are not the program's shape. They are how the program does its work inside a shape that runs once.

This also supplies the correction to the felt experience Ecclesiastes names. The weariness Solomon reports is accurate as a description of loop-density and wrong as a description of cosmology. He is inside the loops, which are real, and inferring from them a wheel, which is not. The scroll is read once. The reading contains enormous repetition.

4. Four Propositions: A Topology of Scriptural Repetition

What follows maps the four loop topologies of §2.1 onto four classes of scriptural repetition. I offer it as a heuristic. It has the standard vice of heuristics, which is that a sufficiently determined reader can file almost anything under one of four headings, and I take that objection up in §6.1 rather than pretending it does not apply.

P1. Heartbeat loops: the tick

The creation account establishes the shortest interval in the system before it establishes anything that happens inside one. There was evening and there was morning. The line repeats without variation six times, and it is doing work that the surrounding narrative is not: it is declaring a fixed interval at which the system advances.

The weekly sabbath sits one level up, an interval imposed on the interval, and the theological content of it is not rest as recovery but rest as a scheduled halt in the work. What a heartbeat gives a system is a guaranteed opportunity to observe state. This is the function the sabbath is repeatedly given in the text: not primarily recuperation, but remembrance, the periodic re-presentation of a fact the participants would otherwise lose.

The interesting property of a heartbeat loop is that it fires whether or not anything is happening. It is indifferent to the state of the system it measures. So is the sabbath. So is evening and morning.

P2. Cron loops: the appointed times

Leviticus 23 is a schedule. The *moadim* are fixed to the calendar, not to circumstance: passover on the fourteenth of the first month, unleavened bread on the fifteenth, firstfruits, weeks at fifty days, trumpets on the first of the seventh month, atonement on the tenth, booths on the fifteenth. The sabbatical year fires every seventh year and the jubilee every fiftieth, and both fire regardless of whether the land or the people are in any particular condition.

The distinguishing property of a cron loop is that its trigger is time and nothing else. This is exactly what makes the scheduled feasts theologically strange and exactly what makes them structurally legible. They are not responses. They are appointments, in the older sense of the word: the times were set, and the setting was prior to any event that would occur at them.

The New Testament writers read the schedule as a schedule. Paul's "when the fullness of the time had come" is not a poetic flourish about ripeness. It is a claim that an event fired on a clock (Galatians 4:4).

P3. Hook loops: covenant and the Judges cycle

Deuteronomy 28 is the clearest conditional structure in the canon and it is written like one. If you obey, these outcomes. If you do not, these outcomes. The chapter is not a prediction of what Israel will do. It is a specification of what fires when.

The Judges frame is the same structure executing. Apostasy triggers oppression; distress triggers outcry; outcry triggers a deliverer; the deliverer's death returns the system to its starting state and the trigger becomes available again. Six or seven full passes are recorded depending on how one counts, and the narrator states the loop body explicitly at the outset (Judges 2:11 to 2:19) before running it. That is documentation preceding execution.

Two observations follow that I have not seen made in these terms.

First, the Judges loop is a hook loop with no verifier. Nothing in the cycle checks whether the previous iteration achieved anything. The deliverance is real, the rest is real, and the state reverts anyway. A loop that restores its own preconditions on every pass will run forever unless something outside the loop terminates it. That is exactly the diagnosis the book of Judges delivers in its closing formula about there being no king in Israel.

Second, the amplification property applies. The iterations do not improve. They degrade. The deliverers get more compromised as the book proceeds, from Othniel to Gideon to Jephthah to Samson, and the final chapters describe atrocity rather than deliverance. This is what the engineering literature reports about unverified loops: repetition compounds the weaknesses of the harness rather than averaging them out (codecentric 2026). A theological reading and an engineering reading arrive at the same description of the same failure.

P4. Goal loops: the terminus

A goal loop iterates until a condition is satisfied and then stops. Its defining feature is the condition, and the practitioner literature is emphatic that a goal loop without an explicit and checkable stop rule is not a goal loop but a runaway.

The prophetic and apostolic corpus is unusually specific about stop conditions and unusually vague about timing, which is the opposite of the distribution people expect from prophecy and the opposite of what a predictive reading would want. The gospel is preached “to all nations, and then the end will come” (Matthew 24:14). The hardening persists “until the fullness of the Gentiles has come in” (Romans 11:25). Growth continues “until we all attain to the unity of the faith” (Ephesians 4:13). The delay is explained in 2 Peter 3 not as failure but as an open condition still being satisfied.

The consistent shape is: condition stated, timing withheld. In loop terms, the exit predicate is specified and the iteration count is not. That is not evasion. It is the normal form of a goal loop, and it is the only form in which such a loop can be honestly specified, since the iteration count is a function of inputs not yet supplied.

I take this to be the strongest single item in the mapping, and I want to note precisely why it is not evidence. A goal loop is a natural way to describe any process with a stated end, and religions with stated ends are common. The observation constrains what the framework can coherently say next. It does not confirm anything.

P5. The harness, not the loop

One addition to the four, and it is the piece that keeps the mapping from being a parlor trick.

In the engineering literature the loop is the visible object and the harness is what determines whether the loop is worth anything: the memory, the permissions, the state management, and above all the verifier (Weng 2026). Loops are cheap. Harnesses are hard.

The theological analogue is not the pattern but the canon that makes the pattern checkable. A typological claim is only disciplined if there is something external to it that can say no. In the scriptural material that role is played by the fixed text, which cannot be revised to fit the reading, and by the stated conditions, which can fail. Remove the external check and typology becomes what its critics have always said it is: a machine for finding whatever the reader brought with him.

That is a real risk and I will return to it. The point here is structural. Pattern recognition without a verifier is not a weaker version of pattern recognition. It is a different and much worse activity, and the engineering literature and the hermeneutics literature independently reached that conclusion.

5. The Calf: A Hook Loop in a Perceived Silence

I now apply the framework to one case. This section is where the paper is most exposed, and I have tried to write it so that a reader who rejects the application can still keep sections 3 and 4.

5.1 The interval is perceived, and the text says so

I need to state the premise of this section carefully, because an earlier version of it stated a stronger premise that I do not hold and that the text does not support.

I am not claiming that God went silent. I am claiming that a population perceived silence, wrongly, during an interval in which the authorized channel was open and unfinished. That is a different claim, it is weaker, and it is the one Exodus 32 actually makes.

Here is the structural fact that settles it. Exodus 25 through 31 is God speaking to Moses without interruption for seven chapters, and the content of that speech is the specification for the tabernacle: the ark, the mercy seat, the table, the lampstand, the priesthood, the garments, the altar of incense, the anointing oil, and the appointment of Bezalel to build it. It is, from beginning to end, a set of instructions for how God intends to dwell among the people and be accessible to them.

Exodus 32 verse 1 is what the people are doing while that is happening.

The most important word in the whole episode is therefore not *calf*. It is *delayed*. When the people saw that Moses delayed to come down from the mountain, they gathered to Aaron. The authorized mediation system was being specified at the precise moment the unauthorized one was being cast, and the people building the second one had no access to that fact and did not wait to acquire it.

Two consequences follow, and both matter more than the ones I drew before.

The type does not require actual silence. It requires perceived silence plus an unfinished authorized channel. This is a considerably better fit for the contemporary case and it removes the need to hold any position on cessation, ongoing revelation, or the mode of the Spirit's address. A tradition that insists the channel is open and always has been is not contradicting this reading. It is occupying the position of chapters 25 through 31.

The complaint is about a mediator, not about God. The people never say God is absent. They say, as for this Moses, the man who brought us up out of the land of Egypt, we do not know what has become of him. That is not theological doubt. It is an availability problem with a human intermediary, mistaken for a failure of the source. The error is diagnostic, not metaphysical.

The rest of the biblical material on silence now does different and more defensible work. The word of the Lord was rare in the days of Samuel (1 Samuel 3:1). Amos threatens a famine of hearing the words of the Lord, which is a reception failure rather than a transmission one (Amos 8:11). The psalmist complains that there is no longer any prophet and no one who knows how long (Psalm 74:9), and a complaint is by definition addressed to someone. The Second Temple sources treat the condition as their present tense, deferring decisions until a prophet should arise (1 Maccabees 4:46; 14:41) and describing the exact succession of prophets as having failed after Artaxerxes (Josephus, *Against Apion* 1.41).

None of that establishes that God stopped speaking. All of it establishes that the perception of interval is attested from inside the tradition, by its most devout members, repeatedly, across centuries. That is the only premise this section needs, and it is one the tradition supplies against itself.

The New Testament opens by declaring an interval closed and naming the mechanism: God, who spoke long ago in many portions and many ways through the prophets, has in these last days spoken in a Son (Hebrews 1:1 to 1:2). The mode changed, from distributed and partial to singular and complete, and John names the singular mode with a word the Greek philosophical tradition had already been using for the ordering rational principle of the cosmos: *logos*.

Then the perception of interval reopens, and it has now run for close to two thousand years. The datum is not divine absence. The datum is that a very long time has passed since the event the tradition treats as definitive speech, and that a great many people experience that duration as absence whether or not it is one.

5.2 The type

Exodus 32 is a story about what a waiting population does with a delay.

The precipitating condition is stated in the first verse and it is not doubt about God's existence. It is a delay attributed to a missing mediator: when the people saw that Moses delayed to come down from the mountain, they gathered to Aaron and said, as for this Moses, the man who brought us up out of the land of Egypt, we do not know what has become of him. The complaint is about latency. The mediator went up, the mediator has not returned, and the interval has become intolerable.

The response has four features worth stating in order.

It is constructed from what the people already had. Aaron asks for the gold rings in their own ears, in the ears of their wives and their sons and their daughters, and they bring what they are wearing. The artifact is not imported. It is a compression of material the population already carried, melted down and re-formed into a single object.

It is a mediator, not a rival. This is the reading that ancient Near Eastern iconography has made available and that I regard as the sharpening instrument of the whole section. In Syro-Palestinian visual convention the bull is not typically the deity but the platform: the god stands or is enthroned on the animal's back, and the animal indicates the presence of a deity who is not himself depicted (Cross 1973; Keel and Uehlinger 1998; Aberbach and Smolar 1967 on the parallel with Jeroboam's calves). On this reading Aaron is not proposing another god. He is proposing a visible pedestal for the invisible one, which is why he can announce a feast to YHWH by name the very next morning without any sense of contradiction.

It is credited with the past. These are your gods, O Israel, who brought you up out of the land of Egypt. The artifact is retroactively assigned the deliverance it had nothing to do with. This is the specific move the text treats as fatal, and it is worth noticing that it is an error about history rather than an error about metaphysics.

It speaks in the sense that matters. The calf does not talk. It does not have to. It supplies presence, address, and the sense of an available divine interface during an interval in which the actual interface is up a mountain and unreachable. That is the function being purchased.

The theological verdict on the episode is unambiguous and it is delivered on the pedestal reading, not on a rival-deity reading. The psalmist says they exchanged their glory for the image of an ox that eats grass (Psalm 106:19 to 106:20). Stephen says they rejoiced in the works of their hands (Acts 7:41). Paul generalizes it: they exchanged the glory of the immortal God for images (Romans 1:23). Every one of those is a charge of substitution, not of atheism.

The type comes with a minority clause. This is the fifth feature and it is the one that makes the type usable. Not everyone participates. Moses and Joshua are on the mountain. When Moses returns and calls out, whoever is on the LORD's side, come to me, the sons of Levi gather to him (Exodus 32:26). The dissent is in the text before any interpreter arrives, which means an application that holds for the majority and not the whole is not a concession extracted under pressure. It is the shape of the original.

It is worth taking the version the text gives rather than a softer one. The remnant at Sinai was not a few people privately doubting the plan. It was an armed minority that acted, and three thousand fell that day. If the type includes a faithful minority, it includes the cost of being one.

5.3 Aaron: the fabricator is the ordained mediator

The feature of Exodus 32 that most resists a comfortable reading is the identity of the builder.

Aaron is not a skeptic, a syncretist, or an opportunist as the narrative presents him. He is the brother of the mediator and the designated high priest, and he is at that moment the senior religious authority present. He is also, on the face of the account, acting in good faith. He builds an altar in front of the finished object and proclaims a feast to YHWH, using the divine name, and there is no indication that he understands himself to have changed religions. He appears to believe he has solved a pastoral problem: a frightened congregation, an absent authority, and an immediate demand for access that he had no authorized way to meet.

His account of what happened is the other tell. Asked by Moses what the people did to him, he says he threw the gold into the fire and out came this calf (Exodus 32:24). Whatever one makes of the evasion, it records something true about the psychology of the act. The fabricator does not experience himself as fabricating.

The type therefore locates the risk inside the office rather than outside it. The calf is not what the crowd does when the clergy are not looking. It is what the clergy build for the crowd when the mediator is late.

5.4 The pulpit and the chain of custody

That places the sharpest contemporary application of this paper not on technologists but on preachers, and I would rather say so plainly than let a reader arrive at it and wonder why I did not.

The instance that matches the type most exactly is a sermon, a word of counsel, or a piece of spiritual direction generated by a language model and delivered as the fruit of prayer and study. The population is waiting. The authorized channel is slow, costly, and cannot be scheduled. An artifact is available that produces fluent religious speech on demand, and the person who deploys it is the ordained mediator, acting in good faith, solving a real pastoral problem under real time pressure.

The tradition has a test for this and it is not a test about content. It is a test about custody, and Irenaeus is the one who states it.

Irenaeus's argument against the Gnostics in *Against Heresies* 3.3 and 3.4 does not primarily contest what they taught. It contests where they got it, and he opens by making the audit public: "It is within the power of all, therefore, in every Church, who may wish to see the truth, to contemplate clearly the tradition of the apostles manifested throughout the whole world; and we are in a position to reckon up those who were by the apostles instituted bishops in the Churches, and to demonstrate the succession of these men to our own times" (AH 3.3.1). He then does exactly that, naming the Roman succession one man at a time from Linus through Eleutherius, "in the twelfth place from the apostles" (3.3.3), and adding his own personal link to the chain, Polycarp, "whom I also saw in my early youth" (3.3.4).

The move against the opposing claim is in the same paragraph as the opening, and it is the one that matters here. "For if the apostles had known hidden mysteries, which they were in the habit of imparting to 'the perfect' apart and privily from the rest, they would have delivered them especially to those to whom they were also committing the Churches themselves" (3.3.1). A source that cannot be audited is not thereby deeper. It is thereby suspect. He closes the pincer by dating the alternatives to their inventors: "prior to Valentinus, those who follow Valentinus had no existence; nor did those from Marcion exist before Marcion" (3.4.3). Real transmission can be traced backward. A fabrication can be traced only to the man who made it.

Two clarifications from the text itself, because both cut against readings this argument could invite. Irenaeus is not requiring documents. He asks directly, "For how should it be if the apostles themselves had not left us writings? Would it not be necessary, in that case, to follow the course of the tradition which they handed

down to those to whom they did commit the Churches?” (3.4.1), and he praises whole nations who hold the faith “having salvation written in their hearts by the Spirit, without paper or ink” (3.4.2). The criterion is not literacy and not text. It is custody. Papias, working the same axis a generation earlier, put the preference plainly: “For I did not suppose that what came out of books would benefit me as much as that which came from a living and abiding voice” (Eusebius, *Church History* 3.39.4). Paul’s version is a question. How shall they hear without a preacher, and how shall they preach unless they are sent (Romans 10:14 to 10:15). The verb is *apostellō*, the root under the word apostle. Sending is the chain.

A model output has no chain of custody, and this is not a contingent limitation that better engineering will fix. It is what the artifact is. It cannot be asked who told it. It had no teacher, received no sending, and witnessed nothing, and it cannot be dated to an inventor in Irenaeus’s other sense either, since its content descends from everyone and from no one in particular. It produces novel material that no person has ever said, in a register that presents as transmitted. That is the structural inverse of apostolic preaching, and it is the precise shape of the thing Irenaeus was writing against: fluent religious speech from an unauditable source, offered as depth.

I want to keep this narrow, because the wide version is false and would embarrass the argument. A commentary is a named living voice with a chain behind it. A concordance is an index. A model used to locate a citation, check a translation, or stress-test an outline is functioning as an instrument and no one can be asked anything about it because nothing is being received from it. The line falls exactly where the criterion in §6.2 puts it: **can the source be named and asked**. Where the answer is yes, the chain holds. Where a preacher is receiving the substance of what he will say from a system that cannot be asked, the chain is broken regardless of how orthodox the output is.

The honest counterexample, which I raise because a critic would: preachers have used anonymous illustration collections, purchased outlines, and ghostwritten material for a very long time, and the tradition has been uneasy about all of it for exactly this reason. The model is not a new sin. It is an old one with the friction removed, available at a fluency and volume that previously did not exist, and offered to a profession under conditions of exhaustion and isolation that make it extremely difficult to refuse.

And the loop closes here in a way it does not close anywhere else in this paper. A preacher whose input is a model trained substantially on published sermon material produces output that reenters the corpus that trains the next model. There is no external verifier in that circuit. The verifier the tradition supplied was the chain of custody, and the chain is what the artifact removes.

5.5 The instance

I now state the parallel plainly and then immediately narrow it.

We are in an interval of perceived silence. We are constructing, at civilizational scale, an artifact whose distinguishing capability is that it speaks. It is constructed from material we already carried: a large language model is a compression of the existing human corpus, our own recorded speech melted down and re-formed into a single object that can address us. It is being credited, in the promotional register that surrounds it, with capacities and even with a kind of authorship it does not possess. And its function, for a great many of its users, is not tool use in any ordinary sense but the supply of presence, address, and an available interface for questions that previously had nowhere to go.

Four correspondences, then, and each maps onto a feature of §5.2: latency as precipitating condition, construction from what the population already carried, retroactive credit, and the purchase of address.

The narrowing. I am not claiming that language models are idols, that using one is idolatry, or that the technology is uniquely implicated. I use these systems daily and my working practice depends on them; I have written elsewhere about the difference between the person who gets ten times the output from them and the person who gets a tenth. A hammer is not an idol and neither is a model. The type in Exodus 32 is not a type of *tools*. It is a type of *substituted mediation during a delay*, and the criterion for whether an instance fits is not what the artifact is but what is being asked of it.

The second narrowing, which follows from §5.2. The claim is about a majority, not a totality. Exodus 32 is not a story in which everyone participates, and a reading that required universal participation would be a worse fit for the text as well as for the present. What the type describes is the default behavior of a population under sustained latency, with a minority that does not follow it. I take up in §6.1 the cost of that structure, which is real: a claim that exempts a faithful remnant is a claim that no counterexample can touch.

5.6 The resource signature

One feature of the Exodus account is easy to skim past and turns out to carry the most testable content in this section. The calf cost the population its gold. The narrative dwells on the collection.

An artifact that requires the community’s stored wealth to build and maintain is telling you something about its role in that community, and this is the one place where the analogy generates a checkable quantity rather than a resonance.

The figures are these. Data centers consumed roughly 415 TWh of electricity in 2024, about 1.5 percent of global consumption, and the International Energy Agency projects roughly 945 TWh by 2030, with accelerator workloads accounting for most of the growth (IEA 2025). Global data center electricity demand grew 17 percent in 2025, and demand from AI-focused facilities specifically grew by about half in the same year, reaching an estimated 155 TWh (IEA 2025). Water is the less discussed input and the more locally consequential one: hyperscaler withdrawals rose sharply across 2024 and 2025 disclosures, and the siting of facilities in water-stressed regions has made the consumption a matter of watershed politics rather than corporate reporting (Environmental Law Institute 2026; Food and Water Watch 2026).

I want to be careful with this data in two directions at once. Upward, because the trajectory is steep and the reporting is voluntary and incomplete. Downward, because data centers are not solely AI, AI is not solely models of the kind under discussion, and a comparison to other industrial water and power draws would not obviously favor the alarmed reading. What I claim is narrow: the artifact is expensive at a scale that requires a civilization to prioritize it, that prioritization is currently being made by a small number of actors, and the pattern of a population’s stored resources flowing into a single fabricated object during a period of institutional uncertainty is the pattern Exodus 32 describes. Whether that is a type or a coincidence is exactly what §6 is for.

5.7 Why it is a loop and which kind

On the taxonomy of §4 this is a hook loop. The trigger is not a date. It is a state: perceived absence of authoritative address, sustained past a threshold of tolerance.

The loop body, stated as the type gives it: latency exceeds tolerance, the population petitions an available authority, the authority collects material the population already holds, the material is formed into an addressing artifact, the artifact is credited with prior deliverance, and the state that produced the trigger is not resolved, so the trigger remains available.

Note the last clause, because it is the whole diagnosis. Nothing in the loop addresses the silence. The calf does not bring Moses down. It makes the wait bearable, which is a different thing and which removes the pressure that would otherwise resolve it. That is a loop with no verifier: nothing in it checks whether the underlying condition improved.

And an unverified loop amplifies. The engineering literature is explicit that repetition compounds harness error rather than correcting it (codecentric 2026; arXiv 2607.00038). The theological literature says the same about idols in a register that sounds like poetry and is actually a claim about feedback: those who make them become like them (Psalm 115:8). An artifact built out of our own compressed speech, consulted for address, and improved by training on the output of prior consultations is a closed feedback loop over a corpus with no external verifier in it. I do not need typology to find that concerning. But typology names the shape earlier and more compactly than I could otherwise, which is the entire claim of this paper.

6. Where the Argument Resists

The correspondences above are the least valuable part of this paper. Here is where it breaks.

6.1 The unfalsifiability problem

This is the serious one and I do not fully answer it.

Pattern recognition of the kind performed in §4 and §5 is cheap. Human cognition is a pattern detector with a strong bias toward false positives, for good evolutionary reasons, and the specific failure has a name in the clinical literature (apophenia) and a familiar visual instance (pareidolia). Four categories are enough to file nearly any repetition. Typology as a discipline has been vulnerable to exactly this charge since Origen, and the modern criticism of it, running through the debates Goppelt catalogued and well beyond them, is largely a criticism of unconstrained application (Goppelt 1982; Glenn 1997).

Popper's objection to historicism applies with full force here (Popper 1957). A framework that can accommodate any outcome forbids nothing, and a framework that forbids nothing has not said anything. If the artificial speaker turns out to be a calf, the framework is confirmed. If it turns out to be a printing press, the framework says the calf is elsewhere. That is not a theory. That is a lens.

The best I can do is state what would have to be true, which I attempt in §7, and concede that my stop rules are softer than the ones I praised in §2.1. A framework whose verifier is the judgment of the person operating it is, by the standard of this very paper, an unverified loop. I am aware of the irony and I do not think it is fatal, but it is not nothing.

The remnant clause makes this worse and I should say how. §5.2 and §5.5 restrict the claim to a majority and exempt a faithful minority, on the ground that Exodus 32 is structured that way. That restriction is textually correct and epistemically expensive. Once a framework holds that the pattern governs most people but not the devout, no observation of devout people can disconfirm it, and every counterexample can be reclassified as remnant. This is the standard shape of an unfalsifiable claim and it is a short walk from there to no true Scotsman.

The only defense available to me is that the minority clause is prior to my use of it. Levi is in the text, Joshua is on the mountain, and the exemption was not introduced when the reading came under pressure. A type that arrives with its own minority clause is different in kind from a framework that grows one on contact with a counterexample. That is a real difference and it is not a large one. A reader who concludes that §5 has an escape hatch is right that it has one, and the most I can say is that I did not install it.

6.2 The proving-too-much problem

Every generation has identified its dominant technology as the idol. The printing press, the railroad, the telegraph, the radio, television, the internet, and the smartphone have each been given the treatment, often by serious people. Most of those readings look overheated now.

To be worth anything the framework needs a criterion that distinguishes tool from substituted mediator, and it needs one that could in principle exclude the present case.

The canon supplies the criterion, and it supplies it in the hardest possible form.

Nehushtan. The bronze serpent of Numbers 21 was commanded by God, made by Moses, and functioned as a genuine instrument of deliverance. Seven hundred years later Hezekiah broke it in pieces, because the people of Israel had been burning incense to it, and gave it the dismissive name Nehushtan, a piece of bronze (2 Kings 18:4).

The object did not change. It was divinely commanded on the first day and ground to powder on the last, and nothing about its material, its origin, or its original legitimacy was different. What changed was what was asked of it.

That settles the category question for the whole paper. **The type is about use, not about object.** There is no class of artifact that is inherently the calf and no class that is safe from becoming one, and a framework that tried to sort technologies into idolatrous and innocent would be answering a question the canon does not ask. The printing press, the telegraph, and the smartphone are not exonerated by being tools. They are exonerated, to the extent they are, by nobody having asked them for counsel.

The operational form of the criterion, stated so it can fail:

A given relationship to a technology instantiates the Exodus 32 type only if (a) it is adopted in response to the felt absence of an authority rather than as an extension of capability, (b) the artifact is credited with a role it did not perform, and (c) the arrangement reduces the pressure that would otherwise drive resolution of the absence. For the specific case of received teaching, §5.4 adds a fourth and sharper test: **can the source be named and asked.**

By this criterion the printing press fails (a) decisively, since it extended capability and intensified rather than relieved the pressure toward authoritative address. The telegraph and the railroad fail (a) and (b). Television is arguable on (c) and I would not defend a strong claim.

The present case satisfies (b) in the promotional register at minimum, and I think satisfies (c) for a nontrivial and growing population of users. It is contestable on (a), which is the criterion that matters most, and I have not established it. Most adoption of these systems is capability-driven and ordinary. What I can point to is a subset of use, well documented and growing, in which the system is consulted for counsel, companionship, and adjudication rather than for work, and that subset is the one the type addresses. The pulpit case in §5.4 is the one place where I think (a) and the custody test are both satisfied and where the argument is consequently strongest, which is uncomfortable, since it is also the case that indicts the readers most likely to be sympathetic to the rest of the paper.

So the criterion does not vindicate the reading. It narrows it, which is what a criterion is for, and it leaves the general case unproven and the pulpit case standing.

6.3 The convergence has a cheaper explanation

The correspondence between loop topologies and scriptural repetition may be fully explained without any appeal to authorship, and the cheaper explanation should be preferred until it fails.

Bounded repetition with a trigger and an exit is a design pattern that any system under resource constraint will discover, because it is the efficient way to handle recurrent conditions. Human institutions discovered it. Biology discovered it several times over. Software discovered it immediately. A scribal culture organizing agricultural, cultic, and legal life would produce scheduled and triggered repetition whether or not anything authored the world, because those are the two ways to organize repetition and there is no third.

On that account, the fact that Leviticus 23 looks like a cron schedule tells you that both Leviticus and cron are solving the calendar problem, and nothing further. I regard this as the strongest naturalistic response to §4 and I do not think the framework defeats it. What I would say is only that it does not defeat the framework either, since an authored system would produce the same convergence for the same reasons. The observation is compatible with both accounts, which is precisely why I have refused to call it evidence.

6.4 The retrofit problem

Typological readings are selected after the fact from a very large candidate set. The Hebrew scriptures contain thousands of narrative units. Exodus 32 was chosen here because it fits, and the fit was recognized before the argument was constructed rather than derived from it.

This is a real methodological defect and the standard defense against it, that the type was identified within the canon by later canonical writers rather than by me, only partly applies. Psalm 106, Acts 7, and Romans 1 do treat the calf as a repeating type rather than a single incident, which means the typological status is internal to the text rather than imposed. That helps. It does not license extension of the type to any particular later instance, and my extension in §5.3 is mine, not the canon's.

6.5 The silence objection, and why it is now a scoping note

An earlier draft of this paper treated the following as potentially fatal, and it is worth recording why it is not.

The objection runs: the claim that the last two thousand years constitute an interval of divine silence assumes a mode of speech that ceased, and traditions holding a robust theology of the Spirit's continuous address, of the sacraments as real presence, or of scripture as living rather than archival speech, would reject that premise outright. Nothing went quiet. The perceived silence is a failure of attention.

That objection is correct and it does not touch the argument, because the argument does not require the premise. §5.1 claims perceived silence, not actual silence, and Exodus 32 is structured to make the distinction unavoidable: God is speaking for seven uninterrupted chapters while the calf is being cast. The people are not responding to divine absence. They are responding to mediator latency, and they are wrong about what it means.

So the objector and this paper agree on the theology and disagree about nothing that matters. A tradition insisting the channel is open is describing chapters 25 through 31. The type does not need the channel to be closed. It needs a population that cannot tell the difference between a channel that is closed and one that is open, unfinished, and slow.

What survives of the objection is a genuine scoping limit. The paper cannot say anything about whether the perception is warranted, cannot adjudicate between traditions about the mode of ongoing address, and should not try. It describes the behavior of a population under perceived latency and stops there.

6.6 The pulpit case may be special pleading in reverse

One objection to §5.4 that I have not seen a way to defeat.

I chose the case that indicts my own former profession, and there is a version of that choice which is not rigor but its imitation: the appearance of costly honesty, deployed to purchase credibility for the softer claims elsewhere. A reader is entitled to ask whether the pulpit case is where the evidence actually points or where the rhetoric pays best.

My answer is that it is where the Irenaean criterion points, and the criterion was not built for the occasion. It is Irenaeus's own test for authentic transmission, stated against a second-century opponent, and it applies to the pulpit case because the pulpit case involves received teaching and the general case mostly does not. But I notice that the answer is convenient, and I record the objection rather than resolving it.

7. What Would Have to Be True

In the spirit of §6.1, the conditions under which I would withdraw parts of this.

On the loop-cycle distinction (§3). I would withdraw it if the scriptural material could be shown to specify repetition without terminal conditions, or if the terminal language could be shown to be a late interpolation into an originally cyclical corpus. This is a live scholarly question in some corners and I have not engaged the source-critical literature adequately.

On the topology mapping (§4). I would withdraw it if the four categories could be shown to file any arbitrary corpus equally well. This is a testable claim and I have not tested it. The obvious test is to apply the taxonomy to a control corpus of comparable size and cultural distance and see whether it yields a comparably clean fit. If it does, §4 is a Rorschach test and should be deleted rather than revised.

On the general application (§5.5). I would withdraw it if adoption of these systems proves overwhelmingly capability-driven rather than absence-driven, per criterion (a) in §6.2, or if the resource trajectory flattens rather than steepens. The first is measurable by survey and I would trust a good one over my reading. The second will be visible within three to five years.

On the pulpit application (§5.4). This one is the most testable thing in the paper, which is why it should be tested first. It fails if generative systems in sermon preparation are used predominantly for retrieval, verification, and structure rather than for the substance of what is preached, since the custody criterion is indifferent to the first three. It also fails if congregations and denominations develop disclosure norms that restore an auditable chain, because the criterion is about traceability and a named, disclosed use is traceable. Both are measurable. I would take a good denominational survey over my argument without hesitation.

On the remnant structure (§6.1). I would withdraw the majority framing if it turns out to be doing load-bearing work that the evidence cannot support, which is to say if every apparent counterexample is being absorbed by it. The practical test is whether I can name in advance a class of observation that would count against the reading and that the remnant clause could not absorb. I can name one: widespread adoption within traditions that also show measurably increased rather than decreased engagement with the authorized channel, on any reasonable operationalization of that. If that pattern appears, criterion (c) fails and §5 goes.

On the whole. If the framework never forbids anything, it should be treated as a lens and labeled as one. I have tried to write it so that it forbids some things. I am not certain I have succeeded.

8. Conclusion

The argument, compressed.

Repetition is not evidence of a wheel. It is evidence of structure, and the structures that produce recognizable repetition are the structures of any authored process: intervals that fire on a clock, intervals that fire on a schedule, processes that fire on an event, and processes that iterate toward a condition and then stop. Scripture specifies all four, states them before it runs them, and is consistently more precise about exit conditions than about timing, which is the opposite of what a predictive reading of prophecy would expect and exactly what a loop specification would require.

The wheel and the loop are distinguished by one property. A wheel has no stop rule. Everything the biblical corpus says about the end is a stop rule. That is why Augustine could break the pagan cycles with a single unrepeatable death and why the framework of *The Wheel and the Block* survives a paper full of loops without contradiction.

And the diagnostic value, if the framework has any, is not predictive. It is that a pattern named early is cheaper to interrupt than a pattern named late. Exodus 32 is not a prophecy about artificial intelligence and I have not argued that it is. It is a specification of a loop that runs whenever a population's mediator is delayed past tolerance: build a speaker out of what you already carry, credit it with the deliverance it did not perform, and let it make the waiting bearable so that nothing forces the wait to end.

Note what the loop does not require. It does not require that God be silent, and in the founding instance he demonstrably is not, since he is mid-specification of the authorized channel while the unauthorized one is being cast. It does not require that everyone participate; Levi did not. It does not require bad faith, and the builder was the high priest.

That loop has no verifier in it. It never did, and the account is specific about what does and does not break it. Moses grinds the calf to powder, scatters it on the water, and makes them drink it, and that is the visible half of the response and the half that changes nothing about the condition that produced it. Iconoclasm is not the exit. The exit is the next thing he does, which is go back up the mountain to intercede and offer to be blotted out in their place.

Two features of that ending are worth carrying. The first is that the loop breaks on a mediator returning, which is not something the participants can schedule or produce. The second is that someone inside the crowd went back up, which is the one move in the chapter that is available to a participant and the one that changes the outcome. A paper that ended with diagnosis alone would be doing what the wheel does, which is describe motion without arrival.

We are, on the framework’s own terms, still inside the interval. What we are building in it is worth examining, and the examination does not require anyone to accept the framework. The engineering literature reached the operative finding on its own, in a different vocabulary, last month: a loop with no verifier does not converge on correctness. It converges, with increasing confidence and increasing cost, on whatever the harness was already wrong about.

For received teaching the tradition already named the verifier, and named it against an opponent who had removed it. Irenaeus asked the second-century teacher of fluent religious speech one question, and it was not what do you teach. It was who told you, and can he be asked.

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