The Golden Compass and the Lunar Flux

William Blake, Bimetallic Meta-stability, and the Architecture of Value

Daniel Ari Friedman
Active Inference Institute
daniel@activeinference.institute
ORCID: 0000-0001-6232-9096
DOI: 10.5281/zenodo.19335196

April 3, 2026

Contents

1 Abstract: Visionary Epistemology and the Bimetallic Fracture

This manuscript overlays the history of British and American bimetallism with the mythopoetic architecture of William Blake's prophetic corpus, reading the disintegration of the gold–silver standard as a material enactment of the catastrophic cosmological fracture Blake dramatized. We trace this trajectory from the Newtonian *golden compass* of rigid, atomistic metrology, identifying the 1717 Mint ratio (1:15.21) not merely as a failed economic policy but as the operationalization of "Newton's sleep"—a cognitive pathology of pathologically rigid priors that crushed variable sensory evidence of silver's circulation. This Urizenic enclosure unleashed Gresham's entropy, draining silver and hollowing out domestic coinage, leading to the 1797 Bank Restriction and the subsequent 1816 codification of a golden "Single Vision". This entropic pattern resonated transatlantically, reflecting the revolutionary rupture Blake experienced in *America a Prophecy* (1793). The American metallic monetary arc resembeled the British descent into the "Ulro" of fiat abstraction: from Alexander Hamilton's initial 15:1 bimetallic synthesis through the metallic enclosure of the "Crime of 1873," and culminating in William Jennings Bryan's resistance to the "Cross of Gold" (1896). Against the "chimeric measurement" of the Bank of England and modern fiat systems, which rely on the arithmetic of compounding imperial debt, Blake's fourfold view provides a scaffold and vocabulary for resisting the totalizing enclosure of value. We reconstruct Blake's prophetic economics as a sustained phenomenological account and analogy of financialized alienation. Ultimately, this manuscript bridges early industrial commodity fetishism, William Blake's etching, and the contemporary (2020–2026) monetary environment.

2 Introduction: Gold, Silver, and the Architecture of Value

The late eighteenth century witnessed a fundamental restructuring of British metaphysics and global monetary policy, transitioning from the precarious meta-stability of bimetallic (silver and gold) systems through destablized dyanmics papered over with singular usage of gold standards, toward the atomistic abstractions of pure financialization.

Against this escalating monetary abstraction, William Blake's prophetic corpus provides a deep and relentless opposition (which is "true friendship") of the enclosures of quantifiable value. His mythopoetic architecture—ranging from the radicalism of his early illuminated printing to the vast, fourfold ontological framing of his later epics—reads as a phenomenal and material indictment of the financialized commodification of the human energy he characterized as "slave labor." Treating the Mint's sterile mathematical reduction as the mortal enemy of the eternal, imaginative Forges of Los, this manuscript traces the trajectory from the disintegration of the bimetallic synthesis through to the pervasive fiat groundlessness spanning both shores of the Atlantic. The ensuing analysis reconstructs these foundational economic fractures not as rote macroeconomic history, but as an ongoing topological struggle over the very definition of human worth. The historical architectures of money—whether eighteenth-century bimetallism or contemporary digital enclosures—arise not from objective, mechanical necessities of commerce, but from active assertions of cognitive and sociopolitical authority that must be countered by the irreducible power of the imaginative human form.

This dynamic is Gresham's Law in its classical form (developed below): when two metals circulate at a fixed ratio misaligned with market values, the undervalued metal is melted and exported while the overvalued metal remains [Thornton, 1802]. The eponymous principle is named for Thomas Gresham (sixteenth century). In the British context, Newton's domestic ratio of 1:15.21 overvalued gold against continental market ratios near 1:14.5, ensuring artificial gold drove out undervalued silver. By 1715, nearly all the silver Newton recoined during the Great Recoinage (1696–1699) had physically left the country, shipped to France and the East Indies where its bullion weight commanded a structural premium [Quinn, 1996, Quinn and Roberds, 2007]. The physical disappearance of metallic currency set the necessary preconditions for the rise of abstract financial instruments.

2.1 Blake's Critique of Atomistic Commerce and Financial Abstraction

Blake's lifelong critique of materialist atomism—the Epicurean reduction of reality to disconnected, self-moving particles—maps directly onto this escalating monetary abstraction [Schouten de Jel, 2021]. While the Bank of England increasingly relied on fractional reserves, paper issuance, and the arithmetic of compounding imperial debt, Blake saw the fabric of human existence divided into disconnected units of negotiable property. In *London* (Songs of Experience, 1794), the poet hears in "every voice: in every ban, / The mind-forg'd manacles" (Plate 46, lines 7–8; Erdman p. 70) [Erdman, 1988]—the invisible chains that commerce, law, and state finance forge around the human imagination. As Mary Poovey observes, the late eighteenth century saw the fundamental displacement of intrinsic value by relational, speculative paper instruments—a shift that alienated the laboring subject from their own work [Poovey, 2008].

Jon Mee notes that Blake's prophetic reaction to this crisis was grounded in the radicalism of the 1790s, where political dissent fused with critiques of state-sponsored economic policy [Mee, 1992]. Blake's allegiance to this milieu is documented in his annotations to Bishop Richard Watson's *An Apology for the Bible* (1798), defending Thomas Paine against establishment slander: "To defend the Bible in this year 1798 would cost a man his life. The Beast & Whore damn the Bible" (Erdman p. 616) [Erdman, 1988]. E.P. Thompson extends this analysis, reading Blake's deliberate imagery as a materialist indictment of the acquisitive ethic—the systematic division of people and the enforcement of moral bondage through market relations [Thompson, 1993]. The "dark Satanic Mills" of the *Milton* preface (Erdman p. 95) operate simultaneously as the literal industrial factories of the emerging capitalist order, and the institutional "mills" of the established church grinding individuals into doctrinal uniformity. As Joseph Albernaz identifies, measurement technologies—whether the Newtonian standard of 1717 or the impending 1816 Gold Standard—enforce "chimeric regimes." They attempt to ground society in finite materiality while obfuscating humanity's shared groundlessness [Albernaz, 2024].

This structural alienation extends from the macroeconomic sphere into individual perception. Blake viewed the financial systems of his day not merely as flawed economic policies, but as ontological regressions. In his marginalia to Sir Joshua Reynolds' *Discourses* (c. 1808), Blake launches an explicit attack on this ideological inversion: "To the eyes of a miser a guinea is more beautiful than the sun, and a bag worn with the use of money has more beautiful proportions than a vine filled with grapes" (Erdman p. 635) [Blake, 1808]. The golden guinea usurps the celestial sun; the dead container replaces the living vine. The same refusal is stated in *Milton* Plate 26 (quoted under § Illuminated Nonduality) [Erdman, 1988]. For Blake, emergent capitalism and its central bankers represented a conceptual flattening of existence, where the Enlightenment God functioned as a senior accountant processing ledgers of abstract human life rather than participating in its divine creation. The entire structure of bimetallic generation and subsequent monometallic isolation was a symptom of this Urizenic idolatry.

This historical backdrop has been documented by monetary historians like Marc Flandreau and Alexander Del Mar. As

Flandreau argues, bimetallism was an inherently unstable architecture, requiring a precarious international equilibrium to prevent the collapse of domestic coinage [Flandreau, 1996]. Del Mar takes this further, viewing the history of money as a constant struggle between state prerogative (communal sovereignty) and private financial calculus (the monopolization of coinage by mercantile elites) [Del Mar, 1895]. David Erdman, in his foundational *Blake: Prophet Against Empire* (1954), connects Blake's cosmic visions directly to political economy, interpreting Urizen as the "great Work master" who builds his cosmos through "slave labor"—a direct textual indictment of imperial war-financing and the commodification of human energy [Erdman, 1954]. Blake's prophetic works can be read as a mythopoetic articulation of this struggle, a historically consistent political myth that maps the spiritual descent into Ulro to the materialist pressures of Bank Restriction-era credit economies [Mee, 2003, Green, 2007].

2.2 Manuscript Structure and Methodology for the Blakean Monetary Arc

In this manuscript, we explicitly reconstruct the Newtonian Standard, the 1797 Bank Restriction Act [Clapham, 1944, Fetter, 1965], and the 1816 Coinage Act [Redish, 1990] not as rote economic touchstones, but as topological fractures precipitating a systemic regression of the human spirit. We attend to the *minute particulars* of Blake's engagement—his specific textual attacks on gold, his metallurgical imagery, his precise plate compositions—while simultaneously tracing the *generic* structural logic by which a system of rigid quantification must ultimately devour the qualitative life it claims to measure. Blakean prophecy enacts a radical ideological inversion: destroying the atomistic enclosures of Urizen, rejecting the speculative churn of bimetallic generation, and laboring intensely at the Forges of Los to rescue human agency and forge the ultimate "Human Form Divine" (detailed further under § Illuminated Nonduality).

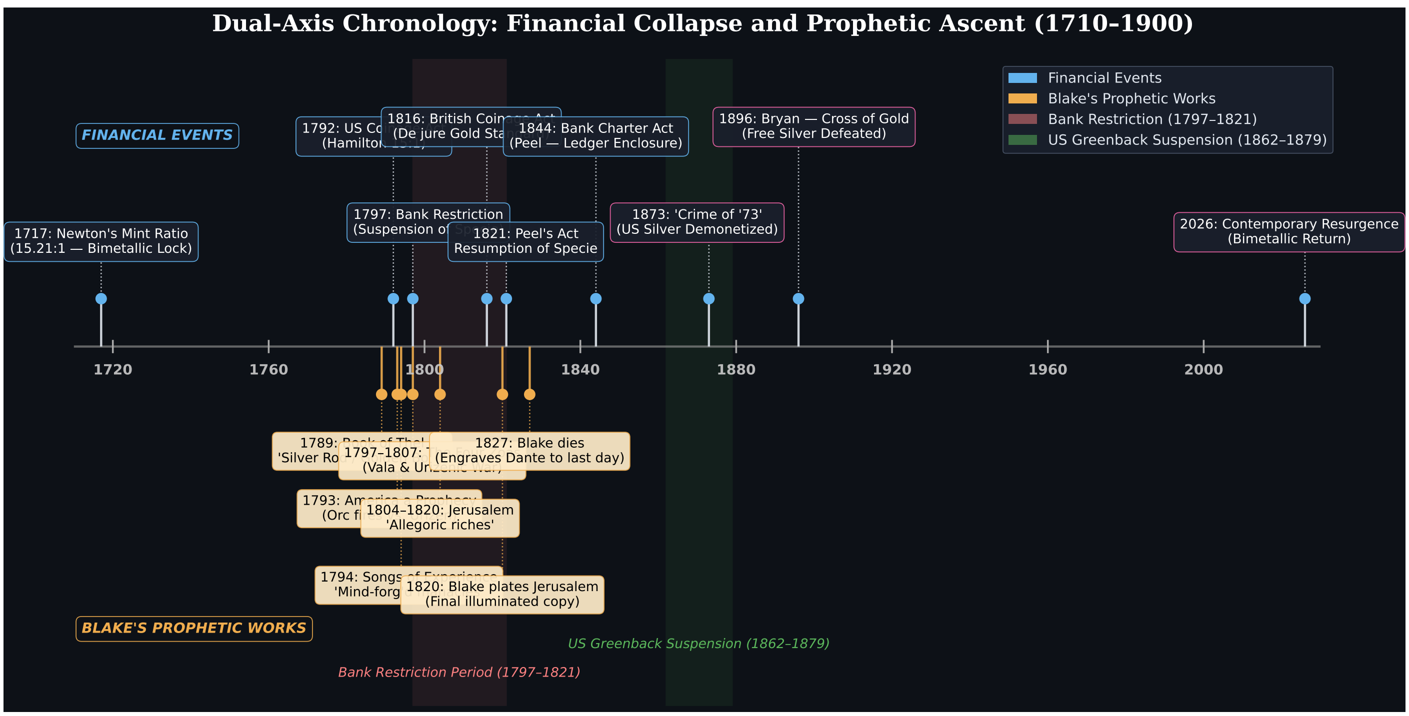

Figure 1: Bimetallic and Prophetic Timeline — Dual-Axis Chronology of Financial Collapse and Prophetic Ascent (1710–1900). Upper axis (Financial Events): progressive disintegration of the bimetallic synthesis from the 1717 Newtonian Standard ($M : 1 : 15.21$) through Hamilton's ratio of 15:1 (1792), the 1797 Bank Restriction, and the 1816 British Coinage Act ($m_S \to 0$), culminating in the "Crime of 1873" and Bryan's "Cross of Gold" (1896). Lower axis (Blake's Prophetic Works): Blake's inverse prophetic trajectory surges in metaphysical urgency—from The Book of Thel (1789) through America a Prophecy (1793), Songs of Experience (1794), The Four Zoas (1797–1807), and Jerusalem (1804–1820). Shaded era bands mark the British Bank Restriction Period (1797–1821) and the American Greenback Suspension (1862–1879)—twin clinamina of paper groundlessness on opposite shores of the Atlantic [Fetter, 1965, Laughlin, 1898].

3 Entropic Architectures: The Historical Instability of Gold and Silver

The architecture of British bimetallic entropy was formally codified on 21 September 1717 by the Master of the Royal Mint, Sir Isaac Newton. Newton, appointed Warden in 1696 through John Locke and Charles Montagu, and promoted to Master in 1699, approached the currency crisis—the continuous outflow of English silver to the East India Company and the continent—with the same geometric precision he applied to the cosmos in his *Principia*. In his report "State of the Gold & Silver Coins of the Kingdom," Newton executed a bureaucratic fiat: he fixed the golden guinea at exactly 21 silver shillings, establishing a domestic gold-to-silver ratio of approximately 1:15.21 [Quinn, 1996].

This valuation led to a Royal Proclamation on 21 December 1717. Newton claimed to have brought the coinage to "a much greater degree of exactness than ever was known before," relying on Trial Plates and mathematical ratios to formally weigh out the realm [Horsefield, 1960]. For William Blake, however, this exactness was not a stabilizing measure but an ontological constraint. Newton's intervention epitomizes the Urizenic instinct: the attempt to arrest the living flux of human exchange by superimposing a geometric grid.

3.1 The Alchemy of the Mint and the Geometry of Death

Newton's role presents a historical paradox that aligns with Blake's mythological critique. While enforcing the mechanistic ratios of the 1717 standard, Newton was simultaneously immersed in clandestine alchemical pursuits, experimenting with transmutations and heterodox theology [Schouten de Jel, 2021]. Yet his public legacy at the Mint stripped currency of its qualitative, alchemical vitality.

Blake isolates this paradox in his 1795 color print *Newton*. The scientist sits naked at the bottom of the ocean, his gaze fixed downward upon a geometric scroll, wielding golden compasses—the exact instruments of the Mint's standardization. As Alan Moore argues in his 2014 Royal Academy commentary on the work, Blake's portrayal is not a literal portrait but an *"idealized essence"* capturing the specific financial tyranny Newton exacted as Warden and Master of the Mint [Moore, 2014]. Newton had overseen the Great Recoinage of 1696, pursued counterfeiters with unusual severity, and helped entrench the institutional habits that would later be read as a quiet shift toward gold dominance.

Just as Urizen creates the material world by division—binding the infinite with the "golden compass" and "brazen quadrant" (*The First Book of Urizen*) [Blake, 1794]—Newton's valuation clamped down upon the living economy. Imposing rigid numerics over the transformative alchemical process, Newton institutionalized the "Single Vision" Blake fought to break. As Moore characterizes it, Newton's metrology installed the parameters of an "internal dungeon" to which all humanity was condemned, enthroning a god of mathematical knowledge whose fiat rendered mankind's living dream-life into pure materialism [Moore, 2014]. The print is not merely an aesthetic critique of empiricism; it is a historically precise indictment of the metrological regime Newton imposed upon the imperial world, linking mechanical materialism to the petrification of divine vision [Albernaz, 2024, Makdisi, 2003].

Furthermore, Newton's 1:15.21 domestic ratio structurally overvalued gold against fluctuating international bullion markets, which hovered near 1:14.5 in France and 1:15 across Europe [Quinn and Roberds, 2007]. A guinea worth 21 shillings in England was priced at roughly 20s 9d in Portugal or France. This mathematical misalignment, rather than fostering stability, guaranteed that gold—particularly Brazilian gold via Portugal—flooded English ports, while "undervalued" silver was siphoned abroad. By 1715, nearly all the silver Newton struck during the Great Recoinage (1696–1699) had vanished to France and the East Indies [Quinn, 1996]. The Bank of England amassed 15.5 tonnes of gold by 1730 from these asymmetric flows, inadvertently shifting Britain toward gold dominance.

3.2 The Triumph of Single Vision in the Bimetallic Standard

The Newtonian standard did not stabilize value; it maximized the margin between statutory decree and market reality, fueling the arbitrage it sought to suppress. It instituted a mechanistic worldview where wealth derived not from prophetic creation or human labor, but from the calculation of metallic ratios. This was the triumph of what Blake termed *Single Vision*—the reduction of qualitative human life to quantitative, fungible units [Erdman, 1988]. As he states in *There is No Natural Religion*, "He who sees the Ratio only sees himself only"—diagnosing how this monometallic ratio-setting collapses perception into narcissistic materialism [Erdman, 1988]. Blake famously begged, "May God us keep / From Single vision & Newton's sleep," recognizing that such restrictive geometry severed the living vine of human interaction, replacing it with the unyielding boundaries of the coin. As Northrop Frye identifies in *Fearful Symmetry*, Blake's opposition to this regime was a fully articulated philosophical telos: Fourfold Vision as the restoration of imaginative creativity operating against the "tyranny of custom" and the "placid ovine herd" of market-driven uniformity [Frye, 1947].

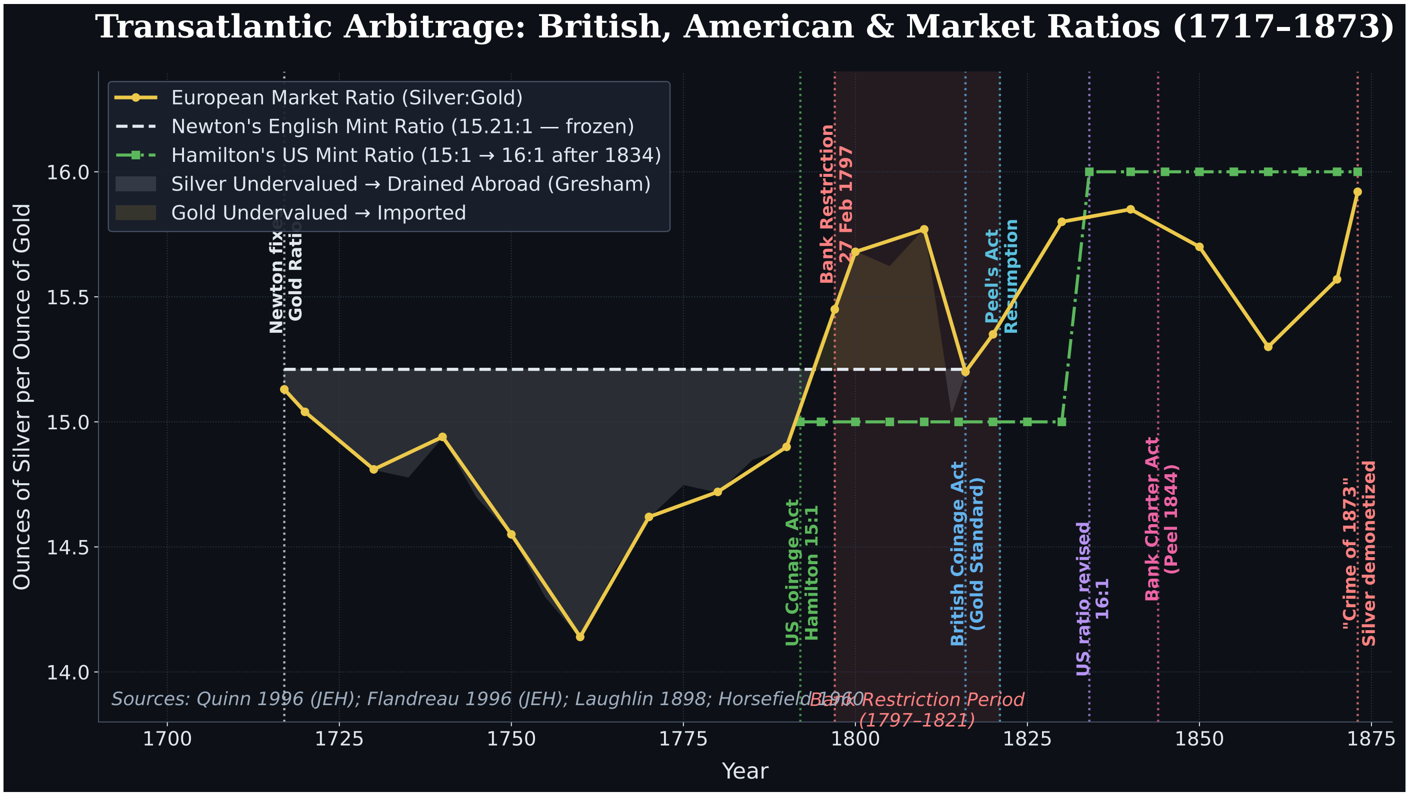

Figure 2: The Arbitrage Fracture — Transatlantic Divergence of British, American, and Market Ratios (1717–1873). Three lines trace the divergent monetary architectures: Newton's frozen English Mint Ratio (15.21:1, dashed white), Hamilton's US Mint Ratio (15:1 → 16:1 after 1834, green), and the fluctuating European market reality (gold markers). Fill-between shading encodes the Gresham "escape velocity"—the precise profit margin that drove bullion arbitrageurs to drain England's circulating silver (silver undervalued, drained abroad) and import gold (gold undervalued, imported). Nine vertical event markers annotate the US Coinage Act (1792), Bank Restriction (1797), British Coinage Act (1816), US ratio revision (1834), Bank Charter Act (1844), and the "Crime of 1873." A shaded band marks the Bank Restriction Period (1797–1821). Sources: Quinn 1996; Flandreau 1996; Laughlin 1898; Horsefield 1960 [Flandreau, 1996, Laughlin, 1898].

4 Gresham's Law and the Fracture of Mythopoetic Alchemy

When international silver values fluctuated against the enforced Newtonian mint ratio of 1717, they triggered the mechanical arbitrage of Gresham's Law: "bad money drives out good" [Thornton, 1802]. Because gold was systematically overvalued within the English Channel—Newton's guinea priced at 21 shillings domestically while equivalent gold commanded only 20s 9d in Spain or Portugal—bullion merchants melted full-weight silver coins and shipped the raw bullion to France, India, and China, where its elemental weight commanded significantly higher purchasing power [Quinn, 1996]. An engineered mathematical disparity hollowed out the domestic money supply.

4.1 Velde's Mathematical Formalization of Transatlantic Bimetallic Instability

To formalize this entropic decay, modern economic historians such as François Velde define the bimetallic equilibrium via the relationship between the statutory Mint Ratio (M) and the global commodity Market Ratio (R), bounded by transaction and melting costs (c) [Velde, 2005]. The condition for a functional, meta-stable bimetallic circulation is expressed mathematically as:

$$M - c < R < M + c \tag{1}$$

When the international market ratio of silver to gold climbs beyond the domestic limit erected by the state ($R > M + c$), silver becomes undervalued at the mint. Arbitrageurs mathematically optimize their portfolios by melting down full-weight silver coins—the "Lunar Flux"—and exporting the bullion to France, India, or the Far East, where its elemental weight commands a higher purchasing power. The East India Company played a central role in this drainage, trading English silver in Asia where it commanded premium value amid regional gold scarcity; by 1730, these asymmetric flows had delivered 15.5 tonnes of gold into the Bank of England's vaults while emptying the kingdom of circulating silver [Quinn and Roberds, 2007]. This arbitrage drained the physical economy of its circulating medium, leaving behind only clipped, worn, or counterfeit silver, alongside the static, hoarded gold.

4.2 Del Mar's Historiographic Reading of the Bimetallic Marriage

However, analyzing this financial collapse exclusively through quantitative arithmetic obscures its ontological implications—implications that William Blake recognized implicitly. The 19th-century monetary historian Alexander Del Mar later framed this dual-standard through a structural lens that resonates with Blakean mythology. In his historiographies of money, Del Mar casts monetary equilibrium not as a natural fact of intrinsic metallic value, but as an artifact of state numerary authority—a socio-political synthesis where circulating tokens maintain equilibrium in the monetary firmament under the sovereign prerogative of the state [Del Mar, 1895]. Analyzing money as a legal and numerical mechanism rather than a pure commodity unmasks the bimetallic pairing as a representation of sovereign decree rather than intrinsic divine right. Marc Flandreau extends this historiography, characterizing classical bimetallism as a form of economic alchemy conjuring stabilizing stasis from the metaphysical chaos of global trade by binding two independent metallic volatilities into a single legal fiction [Flandreau, 1996].

4.3 The Thermodynamic Decay from Bimetallic Generation to Monometallic Ulro

London's legally entrenched overvaluation of gold severed this alchemical harmony [Quinn, 1996]. Bimetallism was, inherently, a *Twofold Generative* tension (see the Fourfold Vision): an unstable but vitalizing socio-economic synthesis of the Solar (Gold/Love/Authority) and the Lunar (Silver/Wisdom/Circulation). The bullion merchants—driven by the atomizing, Epicurean *clinamen* of profit and private self-interest—melted down the lunar element to hoard the solar. That rapacity maps onto the Erdman-Urizen reading of empire and war finance established in our Introduction [Erdman, 1954].

For Blake, this is the very definition of the state of *Generation* decaying into *Ulro* (the void). Production and exchange were no longer aimed at sustaining human community or fulfilling human needs, but were captured by the paper-led churn of arbitrage. In *Jerusalem* Plate 27 Blake names the fixing of labour and the invention of "allegoric riches" (see § The fixing of labour and allegoric riches) [Erdman, 1988, Sklar, 2011]—precisely the moment when the living economy of human exchange is seized by the arithmetic of financial extraction. The bimetallic synthesis fractured under Gresham friction because it was a catastrophic clash between living, dual commodity interaction and the dead, reductionist geometry of the fixed Mint Ratio. Single Vision attempted, and failed, to bind generative duality. This drove the entire system toward monometallic isolation (as detailed in the discussion of the 1816 Coinage Act). Gresham's law, in this mythopoetic register, is not merely a law of economics, but a law of spiritual thermodynamics: the inevitable degradation of meaning when human relationships are mediated exclusively by rigid, monistic metrics.

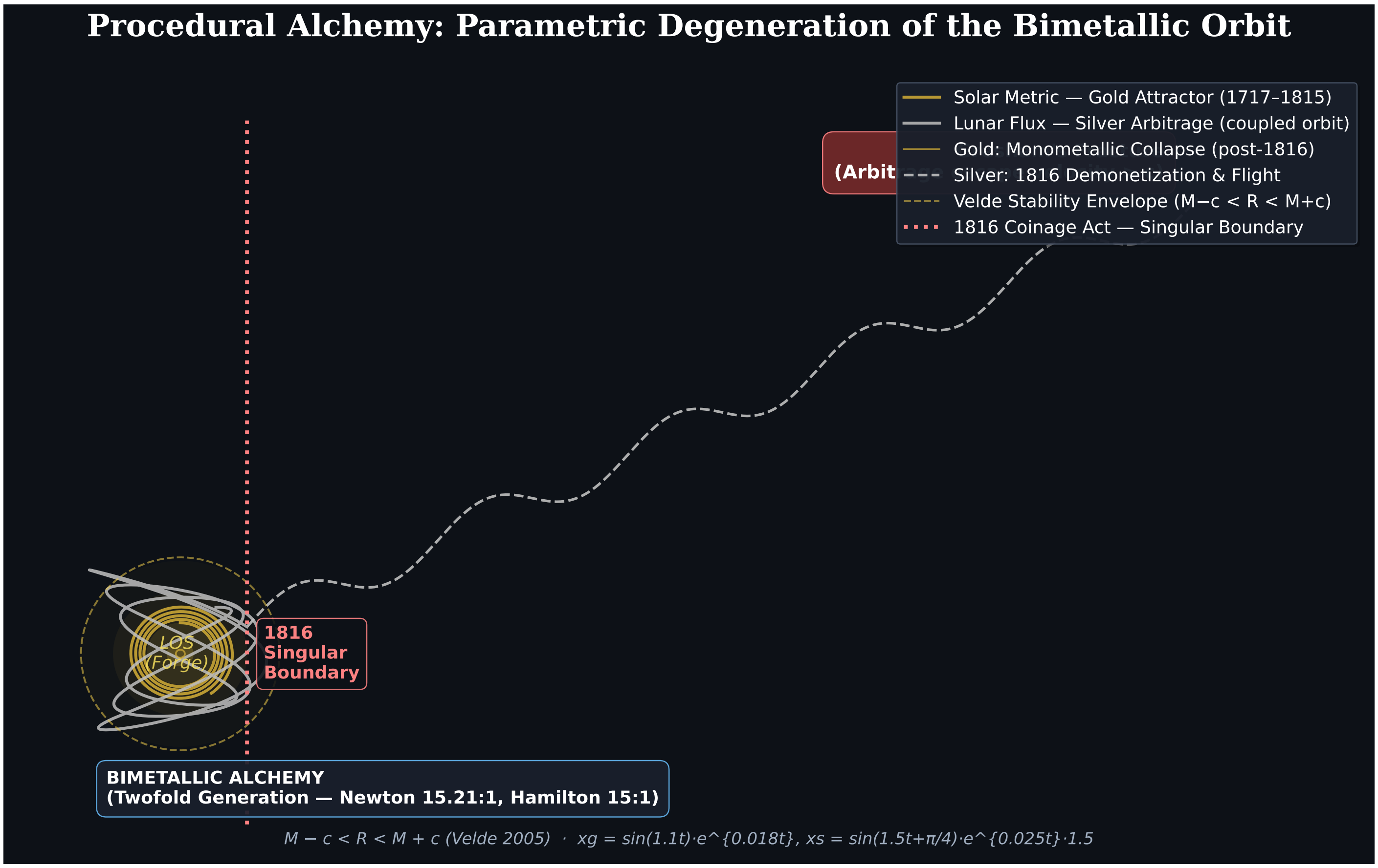

Figure 3: Procedural Alchemy of Bimetallic Vectors — Parametric Degeneration of Bimetallic Orbit. This procedurally generated 5000-point Harmonograph maps the historical vectors of Solar Gold (the central, tight attractor) and Lunar Silver (the wider, sweeping orbit of the 1.5 ratio) locked in meta-stable Twofold Generation. Mathematical harmony holds until the Velde stability ellipse threshold is breached ($R > M + c$). At the 1816 singular boundary, Gresham's arbitrage escape velocity is crossed: the Solar Gold vector collapses inward to a static geometric dot at the Urizen pole (Single Vision / The Gold Standard with 4-layer glow rings), while the Lunar Silver vector violently breaks orbit toward the Los pole, escaping tangentially into chaotic space—modeling the physical demonetization of silver under the Coinage Act (56 Geo. III c.68) and the total eradication of the bimetallic generative synthesis. Includes the parametric equation $xg = \sin(1.1t)e^{0.018t}, xs = \sin(1.5t + \pi/4)e^{0.025t} \cdot 1.5$.

5 The 1797 Bank Restriction and the Suspension of Metallic Reality

The meta-stable tension of Twofold bimetallism finally shattered under the geopolitical pressures of the French Revolutionary Wars. By the late 1790s, Britain was facing a multidimensional crisis of liquidity, sovereignty, and national survival. Panic swept the countryside as rumors of French invasion—dramatically realized by the Battle of Fishguard (22–24 February 1797), the last foreign invasion force to land on British soil—prompted local farmers and mercantilists to storm the provincial banks, demanding hard gold for their paper notes. These localized runs cascaded into Threadneedle Street.

By the end of February 1797, the Bank of England's gold reserves had dwindled to critical levels—roughly £1.1 million against total note circulation of just over £10.8 million, meaning the face value of paper in circulation was nearly twice the actual bullion held [Clapham, 1944]. The Bank's reserves had declined by £622,000 since 1 January alone, a depletion rate that threatened institutional collapse within days. Fearing a dissolution of the imperial treasury, the Privy Council issued its emergency order on 26 February 1797 (Saturday evening, with notification reaching the Bank by Sunday morning), which was formalized by Parliament as the Bank Restriction Act (37 Geo. III c.45), receiving Royal Assent on 3 May 1797 [Fetter, 1965]. This legislation legally suspended the convertibility of Bank of England notes into gold specie. The physical, elemental anchor of British wealth was severed overnight; the state was now legally empowered to print value *ex nihilo* [Ricardo, 1810].

5.1 The Atomic Swerve: Fiat Currency and Forgery's Media Ecology

This suspension unleashed an era of unbacked, proliferating paper currency that persisted until 1821. In the schema of Blakean and Epicurean philosophy, the 1797 suspension represents the historical manifestation of the atomic *clinamen*—the swerve of value away from metal. Unmoored from its metallic gravity, value swerved wildly. Threadneedle Street flooded the economy with low-denomination £1 and £2 notes to replace hoarded gold, relying on crude mass-printing that was trivially easy to counterfeit.

As Saree Makdisi argues, this deluge radically reshaped London's "media ecology" [Makdisi, 2003]. Paper money ceased to be an elite mercantile instrument and became a ubiquitous social contagion among the poor. When Blake writes of "mind-forg'd manacles" in *London* (1794), he is diagnosing the very ideological enclosure that William Pitt's paper-funded war machine would soon legally enforce: the working classes were trading their labor for "allegoric riches," paper claims that promised value while systematically stripping it away through inflation.

Crucially, Blake's philosophical hatred of this "spectral value" crystallized through documented, artisanal confrontation with the Bank. On 5 April 1797—mere weeks after the suspension—William Blake joined 18 prominent London engravers in signing a formal certificate endorsing Alexander Tilloch's revolutionary "stereotype" method for producing forge-proof banknotes. (Though occasionally conflated with the commercial "writing engraver" W.S. Blake, the poet's presence among his guild peers on this petition is established in the primary record preserved in G.E. Bentley Jr.'s *Blake Records* [Bentley, 2004]). The historical irony is profound: the visionary who most despised "allegoric riches" sought to protect them from forgery, not out of love for the Bank, but through an artisan's commitment to high-fidelity, irreproducible craft. The Bank's Directorate rejected Tilloch's solution. The immediate consequence of this Urizenic choice was a precipitous spike in counterfeiting, which the state answered with mass hangings. For Blake, the Bank's paper money was not merely an economic abstraction; its defense literally demanded human sacrifice. The poorest of London were executed to protect the Bank's groundless, easily forged monopoly [Baucom, 2005, Erdman, 1954, Crosby, 2011].

Blake had prophetically dramatized precisely this dissolution of metallic anchor in *Europe A Prophecy* (1794), etched just three years before the Restriction. In that poem, Enitharmon—the emanation of Los, Blake's spirit of sensuous beauty and deceptive repose—commands an eighteen-hundred-year "golden night" of spiritual slumber: "Now comes the night of Enitharmon's joy! / Who shall I call? Who shall I send? / That Woman, lovely Woman! may have dominion?" (Plate 5, lines 1–3; Erdman p. 63) [Erdman, 1988]. This "golden night" is Blake's image for the enchantment of material seeming—a false golden age sustained not by authentic metallic substance but by the seductive illusion of value. When Enitharmon's night shatters at the poem's climax with the trumpet of revolution, the parallel to the Restriction is exact: the "golden" currency regime collapses, revealing that its supposed solidity was always an enchantment sustained by sovereign fiat rather than intrinsic worth.

Henry Thornton's landmark *An Enquiry into the Nature and Effects of the Paper Credit of Great Britain* (1802) documented this credit crisis with analytical precision, demonstrating how the expansion of paper credit operated independently of any metallic constraint and thereby introduced radical instability into the pricing of commodities [Thornton, 1802]. The everyday economy, once rooted in the physical weight of the harvest and the hand, metamorphosed into a circulation of purely relational symbols. It became a linguistic rather than a substantive economy—a highly effective iteration of Urizenic abstraction.

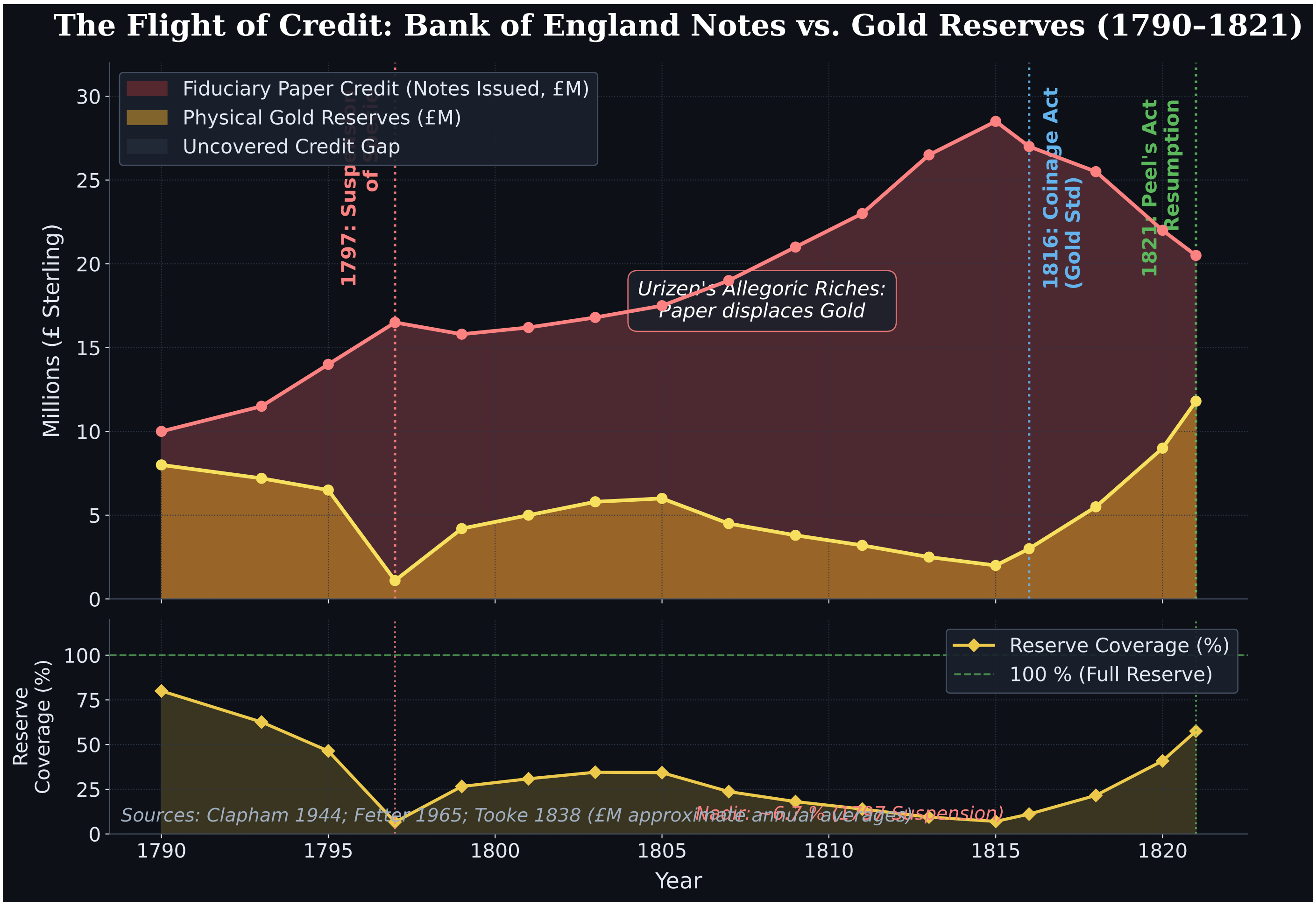

Figure 4: The Flight of Credit — Bank of England Note Issuance vs. Physical Gold Reserves (1790–1821). Top panel: visualizes the profound ontological gap emerging during the Bank Restriction period—skyrocketing issuance of fictional paper credit ("allegoric riches," £M) against drained physical gold reserves (£M). Vertical dashed lines mark the catastrophic date of 26 February 1797 (Privy Council suspended specie payments with reserves at roughly £1.1 million), the 1816 Coinage Act, and Peel's 1821 Resumption. The "uncovered credit gap" is shaded between notes and reserves. Bottom panel: the reserve coverage ratio plummets from ~80% before suspension to a nadir of ~6.7% in 1813, establishing the fiat void. Data derived from scholarly estimates of the restriction era [Clapham, 1944, Tooke, 1838].

5.2 Blake's *Vala* and the Ontology of Paper Credit: The Paper Epic

Simultaneous to this financial *clinamen*, William Blake commenced organizing and writing his first sweeping epic prophecy, *Vala, or The Four Zoas* (1797–1807). Surrounded by the chaos of unbacked paper abstraction in London, Blake articulated the nightmare of the fragmented, alienated psyche corresponding to a fragmented, alienated social body. The suspension of specie was not merely a fiscal mechanism for Blake; it was a plunge into the depth of **Ulro**—the void of single vision and spiritual death. Rather than entering the dream-like poetic rest of Beulah, the economy sank into spectral abstraction, where value became entirely disembodied from both Generative labor and tangible reality. It was the Epicurean universe—ungrounded, atomized—realized as policy. Patrick Brantlinger argues that the establishment of the national debt and the proliferation of paper credit effectively conjured "fictions of state," turning the British empire into an entity sustained entirely by future promises rather than substantive present reality [Brantlinger, 1996, Tooke, 1838]. Ian Baucom extends this critique in his study of finance capital and the Atlantic slave trade, demonstrating how this era of British credit relied on an epistemology of "spectral value," wherein human life itself became fully fungible and exchangeable on international ledgers [Baucom, 2005]. It was the total atomization of social value into swerving, groundless paper contracts, fractional reserve banking, and what Blake elsewhere termed "allegoric riches" (Plate 27, *Jerusalem*) [Makdisi, 2003, Erdman, 1988].

The Bank Restriction Act essentially created an environment where private mercantile debt was transmuted into a public burden, tearing at the fabric of social cohesion. As gold disappeared from circulation—either hoarded domestically or shipped abroad—the everyday citizen was forced to navigate the precarity of small-denomination paper notes and degraded silver tokens. David Ricardo's influential pamphlet *The High Price of Bullion, a Proof of the Depreciation of Bank Notes* (1810) crystallized the mounting intellectual case against the Bank's profligacy, insisting that the rising price of gold bullion was empirical proof of the depreciation of paper—not, as the Bank's directors claimed, merely a symptom of wartime scarcity [Ricardo, 1810]. The resulting Bullionist Controversy (explored in § The Bullionist Controversy) demanded a radical prophetic intervention to restore meaning and value, while simultaneously setting the stage for Urizen's eventual, systemic re-assertion of numerical containment in 1816. The period of Restriction (1797–1821) thus served as the chaotic *Ulro* out of which the repressive order of the Gold Standard would be forged.

6 The Bullionist Controversy and the Semiotics of Value

The aftermath of the 1797 Bank Restriction Act birthed the Bullionist Controversy, a political and economic debate that raged throughout the early 19th century and culminated in the 1810 Bullion Report presented to Parliament. Crucially, this economic debate mapped closely onto the semiotic and epistemological battles William Blake was waging in his prophetic poetry. The central issue of the Controversy was whether the rising price of bullion resulted from the over-issuance of paper money (the "Bullionist" position), or if the paper money was maintaining its value while gold itself was appreciating due to wartime scarcity (the "Anti-Bullionist" position) [Fetter, 1965].

Bullionists (Ricardo and the metallic anchor). The Bullionists, led by figures like David Ricardo and embodied in the 1810 Bullion Report, argued that value must refer back to a physical, metallic anchor. Ricardo's *The High Price of Bullion, a Proof of the Depreciation of Bank Notes* (1810) provided the intellectual foundation: the premium on gold bullion over the nominal value of banknotes constituted empirical proof that the Bank had depreciated the currency through overissuance [Ricardo, 1810]. Henry Thornton, in his *An Enquiry into the Nature and Effects of the Paper Credit of Great Britain* (1802), offered a more nuanced but equally comprehensive analysis, demonstrating that the Bank's credit expansion operated with radical independence from any metallic constraint, introducing systemic instability into all commodity prices [Thornton, 1802]. For the Bullionists, the post-1816 pound was effectively anchored to the sovereign's 113 grains of fine gold, and any deviation from that anchor was considered a species of national fraud.

Anti-Bullionists (the Bank's directors). The Anti-Bullionists, representing the Bank of England's directors and their parliamentary allies, paradoxically argued for a more abstract, relational conception of value. They claimed that their paper notes represented not a fixed weight of metal, but the "needs of trade"—the aggregate commercial demand of the nation. This was an early doctrine of paper credit and convertibility: that the Bank's notes could circulate so long as confidence and state backing sustained them [Fetter, 1965]. From the perspective of Blakean cosmology, this Anti-Bullionist position occupied a sophisticated space: it acknowledged the constructed nature of monetary value, but deployed this acknowledgment to entrench the oligarchic power of the Bank's governors rather than to liberate humanity from quantification.

6.1 Blake's Refusal: Newton's Mint and Los's Forge

In this debate, Blake's position is complex and irreducible to either camp; he frames the crisis not as macroeconomic policy, but as a political theology pitting **Newton's Mint** against **Los's Forge**. He was certainly not a Bullionist—he abhorred the "chimeric regime" of the gold standard and the worship of the "guinea" as a false idol, declaring in his marginalia to Reynolds that to a miser, "a guinea is more beautiful than the sun" [Blake, 1808]. Yet, he was equally critical of the Anti-Bullionist reality: a financial oligarchy manipulating abstract paper contracts ("allegoric riches") to extract real labor from the poor. *Jerusalem* Plate 27 targets that dual exploitation at length (see § The fixing of labour and allegoric riches) [Erdman, 1988, Sklar, 2011].

Both the Bullionists and the Anti-Bullionists were trapped in *Urizenic* logic. One worshipped the atomic, finite particle (the gold coin); the other worshipped the algorithmic void of credit (fractional reserve banking). Against both, Blake posited Los's Forge: the imaginative, artisanal production of eternal forms through immediate physical labor. The material toll of this macroeconomic abstraction on Los's Forge was substantive. As the Restriction era dragged on, the economic pressures of currency instability and inflation severed the working classes from the means of artistic production. By 1818, overwhelmed by this fiat malaise, Blake virtually ceased printing his illuminated books—producing only 14 copies of four titles post-1795—and pivoted to commercial graphic art to survive [Makdisi, 2003]. The abstract ledgers of Threadneedle Street had literally cooled the fires of the prophetic forge.

Blake's *Fourfold Vision* (detailed under § Urizenic materialism) entirely circumvents this dichotomy. For Blake, true value is not found in the metallic anchor nor in the abstract paper calculus, but in the generative, qualitative labor of the human imagination. The Bullionist Controversy represented the ultimate crisis of capitalist semiotics [Fetter, 1965]—a society arguing over whether the *sign* (paper) should be bound to the *referent* (gold), while entirely ignoring the *creator* of value (the human artist/laborer). As Mary Poovey demonstrates in her analysis of "genres of the credit economy," the entire semiotic infrastructure of eighteenth-century finance was built upon an irresolvable tension between the promise of face value and the reality of market value—a tension that Blake's prophetic works expose as symptomatic of the deeper spiritual crisis of quantification itself [Poovey, 2008]. The Controversy was eventually decided not by intellectual resolution but by legislative force. Parliament had already codified gold-centred coinage and token silver during Restriction in the **1816** Coinage Act [Redish, 1990]; **Peel's Act** of **1819** then committed Britain to **resumption** of Bank-note convertibility into specie by **1821**, closing the twenty-four-year arc of the Restriction period [Fetter, 1965] and binding the restored metallic order to that statutory frame.

7 The Mythopoetics of Global Valuation: Los Against Urizenic Materialism

7.1 Urizenic Materialism and the Generation of "Allegoric Riches"

To counter the chaotic flux of paper abstraction and the arbitrage strain of bimetallism, Urizen superimposes geometric limit. In Blake's mythology, Urizen (often derived from "Your Reason" or the Greek *horizein*, "to limit") is the architect of the fallen material world. Erdman's reading of Urizen as the "great Work master" and of "slave labor" as war finance, reserves, and commodified human energy was established in our Introduction [Erdman, 1954]. Saree Makdisi extends this reading, positioning Blake as an anti-capitalist who rejected the entire framework of commodity exchange, rational calculation, and empire-driven trade as a "flattening" of human existence [Makdisi, 2003].

Urizen's mathematically segmented universe mirrors the division of labor that alienated the 18th-century worker from the product of their hands. E.P. Thompson extends this analysis via his seminal reading of the poem *London*, interpreting the "mind-forg'd manacles" (line 8; Erdman p. 70) as literal mechanical mechanisms of market alienation imposed by the expanding, quantifying logic of industrial capitalism [Thompson, 1993]. Thompson's critical intervention demonstrates how Blake's deliberate imagery systematically indicts the acquisitive ethic: dividing people, enforcing moral bondage, destroying joy, and leading to death—all consequences of the reduction of human life to labor-power exchangeable on the open market. This segmentation of experience inherently relies upon the materialist reduction of infinite, qualitative spiritual essence into calculable physical vessels.

Blake's annotations to Francis Bacon's *Essays Moral, Economical, and Political* (c. 1798) contain his most concentrated marginalia against the mercantile worldview. Where Bacon recommended "the opening and well balancing of trade; the cherishing of manufactures; the banishing of idleness" as prescriptions for national prosperity, Blake dismissed the entire collection as "Good advice for Satan's kingdom" [Erdman, 1988]. More substantively, in response to Bacon's axiom that national wealth is necessarily extracted from foreign loss—"whatsoever is somewhere gotten is somewhere lost"—Blake annotated: "Bacon's Philosophy has Ruin'd England." This zero-sum mercantile logic is precisely the Urizenic worldview that undergirds the bimetallic system: wealth conceived not as qualitative human flourishing but as a fixed quantum of metal to be captured through competitive extraction.

Blake interrogates this exact ontological dynamic via the bimetallic dualism in *The Book of Thel* (1789):

> "Can Wisdom be put in a silver rod? Or Love in a golden bowl?" (*The Book of Thel*, 1789) [Blake, 1789]

By trapping infinite qualitative attributes (Lunar Wisdom and Solar Love) into standardized, quantified containers (monetary Silver Rods and Golden Bowls), the Urizenic state ensures only violent limitation. It is the poetic expression of Gresham's Law and its underlying arbitrage boundary: the rod and the bowl are not merely metaphors for human experience, but precise alchemical designations for the two metals whose statutory relationship governed the entire British monetary system. The silver rod of Thel encodes the very silver coinage whose flight from England—melted and shipped to France and India by the East India Company—destabilized the fragile bimetallic synthesis. The golden bowl encodes the hoarded, static gold that Newton's 1717 Mint ratio artificially elevated above its natural equilibrium. Against this quantification, Blake arrayed his revolutionary figure of Orc. Often depicted metaphorically as a pillar of fire or a cosmic serpent, Orc embodies the raw, unmeasured energy of human passion rising up against the totalizing theocracy of Urizenic law—a fiery rejection of the predictability and geometric constraint demanded by the gold standard bureaucracy.

7.2 The Fixing of Labour and the Invention of Allegoric Riches

The attempt to fix fluctuating, living subjective value within the state-mandated algorithmic bounds of the Mint ratio inherently evacuates the divine meaning of human existence. Blake recognized that the creation of the modern banking system, the issuance of state debt, and the fractional generation of credit was an act of misguided alchemy. In *Jerusalem* (Plate 27, lines 10–14), Blake explicitly targets the architects of this macroeconomic enclosure:

> "Shall not the Councellor throw his curb Of Poverty on the laborious? To fix the price of labour; To invent allegoric riches." (Erdman p. 169) [Erdman, 1988, Sklar, 2011]

As Susanne Sklar and modern scholars note, "allegoric riches" is a profound critique of credit creation *ex nihilo*. The Bank of England held finite gold reserves—by 1797, roughly £1.1 million—but issued paper credit exceeding £10 million, creating a vast superstructure of fictional wealth [Clapham, 1944]. This "allegoric" system simultaneously enslaved the laboring class to compounding debt while enriching a monopolistic financial elite who controlled the issuance of the currency. Blake's phrase anticipates the modern critique of central banking's capacity to create money through lending, generating "allegoric" claims upon future production that bear no necessary relationship to present reality. This materialist mechanics maps directly onto Blake's ultimate villain: the rigid, exploitative isolation of the *Selfhood* [Schouten de Jel, 2021]. To accept Urizen's economy is to accept a world where the living pulse of humanity is subjugated to quantification.

7.3 Entering the Mathematical and Ontological Void of Paper Credit

The transition from classical bimetallic friction to the 1797 paper suspension catalyzed an ontological crisis that Blake internalized into his epic structures. While gold and silver were idolized as "Gods of the Earth," paper credit was something even more destabilizing: it was a pure, systemic void. It substituted verifiable human labor and scarce elemental reality with infinite, self-referential debt obligations. *Vala, or The Four Zoas* (c. 1797), drafted as the Restriction crisis broke, is haunted by this paper deluge. These spectral geometries evoked new folkloric realities on the streets of London, most notably the legend of the "Bank Nun" (Sarah Whitehead), whose brother Philip Whitehead was convicted and executed for forging Bank of England notes during the Restriction years. Driven mad by the state's lethal defense of its fictional paper, Sarah arrived at Threadneedle Street daily for over twenty-five years, dressed in black, demanding her brother's return. For Blake, this intertwining of state execution and fiat forgery was not merely socio-economic tragedy; it was the literal realization of his mythological terror—the spectral economies of Urizen plagiarized into living folk memory [Makdisi, 2003].

As Ian Baucom illuminates in his study of finance capital and the Atlantic slave trade, this era of British credit relied on an epistemology of "spectral value," wherein human life itself became fully fungible and exchangeable on international ledgers [Baucom, 2005]. The speculative instruments of the City of London—bills of exchange, promissory notes, treasury bonds—constituted an entirely new semiotic regime in which the *sign* had been decisively severed from any *referent*, floating freely in recursive financial self-reference without a stable referent.

Alexander Regier argues that this new financial regime operated via "fragmentation"—the deliberate shattering of the social contract into isolated, competing financial claims that could be manipulated by the state [Regier, 2010]. If gold was the weight of Urizen's geometry, paper credit was the abyss of Urizen's chaos. It created an environment where the "price of labor" (Blake's exact phrase from *Jerusalem* Plate 27) was unmoored from reality, subject entirely to the inflationary whims of the Bank. For Blake, returning to metallic standards (the 1816 Coinage Act) was a regression into tyranny, but accepting unbacked paper without limit was equally disastrous. The only path forward was transcendence of both quantitative regimes through imaginative creation—Los's refusal to be enslaved by another's system (*Jerusalem*, Plate 10) [Erdman, 1988], developed in § Fourfold Vision.

8 Los, the Fourfold, and the Monetary Arc

8.1 Blake's Fourfold Vision and the Scales of Monetary Generation

Blake maps this escalating socioeconomic and spiritual entropy against his definitive epistemological concept: the **Fourfold Vision**. This paradigm directly traces the evolution of British monetary architectures, moving from calculation, through generative (but unstable) tension, to the ultimate requirement for an overarching qualitative human integration (as explored further under § Illuminated Nonduality). Northrop Frye's foundational elucidation in *Fearful Symmetry* (1947) establishes that Blake's Fourfold Vision represents not merely a poetic conceit but a complete philosophical telos: imaginative creativity operating as a living, breathing power that restores the fractured human form [Frye, 1947].

8.1.1 Single Vision of Ulro: Atomized Monometallism and Fiat Currency

The lowest perceptual state in Blake's cosmology is **Ulro** (*Single Vision*). Dominated strictly by empirical measurement and atomistic isolation, it is a realm of spiritual death—what Blake describes as "Newtons sleep," the stupor of pure quantification. As Susanne Sklar notes, "In Ulro, that which can't be expressed quantitatively does not exist" [Sklar, 2011]. In monetary mechanics, *Single Vision* equates identically to strict Monometallism—the Urizenic fetishization of a single currency vector (Gold) serving as an inflexible standard (see the 1816 Regression in § The 1816 Coinage Act). The 1816 Coinage Act, which legally restricted silver to token coinage with a 40-shilling legal tender limit, constitutes the legislative realization of Ulro: the elimination of duality and generative tension in favor of a monistic, reductionist finality. Ulro is also the state of unbacked fiat paper from 1797—a disconnected void where the Bank of England's notes, backed by reserves of roughly £1.1 million against over £10 million in circulation, constituted a semiotic void [Clapham, 1944]. It enforces total reductionism, severing spiritual context and dismissing any human value that cannot be weighed on capitalist scales or entered into a ledger.

8.1.2 Twofold Vision of Generation: The Dialectic of Structural Bimetallism

Escaping the void of Ulro leads to **Generation** (*Twofold Vision*). As documented, the Bimetallic standard is the historical instantiation of Twofold Vision (see the Harmonograph). It is a realm of biological and economic reproduction, deeply meta-stable, and prone to the unceasing arbitrage of Gresham's Law. Importantly, the crisis of bimetallic arbitrage was not a failure of Twofold integration itself; it was the inevitable rupture caused by attempting to govern a living, dual system with the rigid mathematics of *Single Vision* (Newton's immutable Mint Ratio). Single Vision cannot permanently bind dynamic dualities. Yet, as Buckminster Fuller would assert in *Synergetics*, "Unity is plural and, at minimum, two" [Fuller and Applewhite, 1975]—a structural necessity Blake anticipated through his defense of Generative tension. Minimum two provides the resilient platform required to enter into Threefold and Fourfold qualification. It is a site of suffering and labor, but nevertheless a vastly superior state to Ulro: it acknowledges duality, tension, and relative interaction over the violence of geometric singularity or monometallic fiat. Silver and Gold exist in a dynamic, albeit precarious, relationship—bound by Newton's 1:15.21 ratio yet perpetually strained by international market forces that valued silver more highly abroad. This is the productive but agonizing state of human existence: the alchemical marriage of Sol and Luna that Del Mar identifies as the sacred foundation of all legitimate coinage [Del Mar, 1895]. The instability is not a flaw but a feature—it is the generative friction of two irreducible principles in dialogue, the very condition of creative evolution.

8.1.3 Threefold Vision of Beulah: The Affective and Psychological Threshold

Above Generation lies **Beulah** (*Threefold Vision*), the realm of emotional insight and intuitive apprehension. In monetary terms, Beulah represents the fleeting historical moments when economic policy briefly served human flourishing rather than extractive accumulation—periods of relative prosperity and social cohesion that exist precariously between the grinding mechanisms of Urizenic finance. Beulah is, in Blake's cosmology, a necessary way-station, a "married land" of rest and restoration, but one that cannot sustain itself indefinitely without ascending into the full creative synthesis of Eden.

8.1.4 Fourfold Vision of Eden: The Ultimate Prophetic Monetary Assertion

In *Jerusalem*, the prophetic artisan Los rejects both the void of Ulro and the mere passive calculation of financial ratios found in Generation (the 1-fold and 2-fold quantification) with an operational doctrine:

> "I must Create a System, or be enslav'd by another Mans / I will not Reason & Compare: my business is to Create" (*Jerusalem*, Plate 10, lines 20–21; Erdman p. 153) [Erdman, 1988]

This decree is a direct philosophical rebuff to the bimetallic arbitrageur who exists only to "Reason & Compare" the Gresham Entropy Gap—calculating the exact moment when the silver-to-gold ratio across the channel offers a risk-free margin. It is also, at a generic level, a rejection of the foundational axiom of classical political economy: that rational self-interest, expressed through price signals and arbitrage, constitutes the highest form of social coordination. Blake insists that the *minute particular*—the irreducible, non-fungible quality of individual human experience—cannot be captured by any system of relative prices. As Makdisi argues, Blake's anti-capitalism is not a sentimental nostalgia for pre-industrial life but a rigorous, philosophically grounded rejection of the entire framework of commodity exchange [Makdisi, 2003]. Through Los's roaring furnaces, Blake asserts the absolute necessity of advancing beyond quantitative mechanics. He demands a leap into the qualitative synthesis of the *Threefold* (emotional/affectionate) and *Fourfold* (Edenic/imaginative) states, where real value is birthed in artistic and spiritual creation rather than through financial extraction.

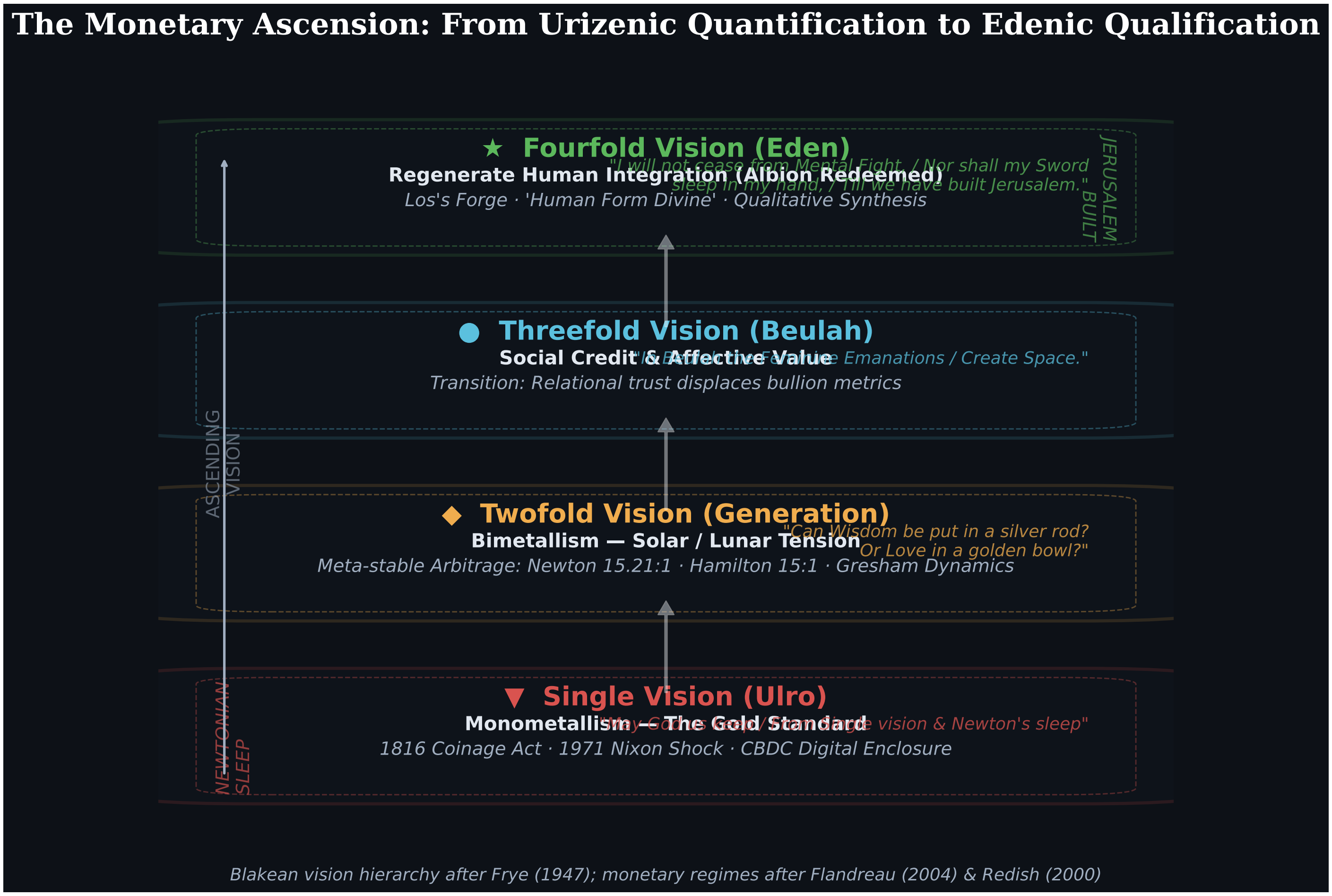

Figure 5: The Monetary Ascension — From Ulro to Eden. A four-tiered ontological mapping elevating from the reductionist Monometallic standard of Ulro (Single Vision) through the generative bimetallic tension of Generation (Twofold Vision), the affective threshold of Beulah (Threefold Vision), and culminating in the non-dual qualitative integration of the Edenic state (Fourfold Vision). Each tier maps directly onto a specific historical monetary regime, from the sterile finality of the 1816 Gold Standard and modern CBDC digital enclosure (Ulro) to the visionary artisanal economics embodied in Los's forge (Eden). The visualization juxtaposes these monetary systems with direct Blakean poetic quotations for each level. This progression provides a critical topological heuristic for reading Blake's late epics: the journey out of the fallen world is not an escape from materiality, but an ascension through increasingly complex architectures of socio-economic relationality.

9 The Alchemical Forges: Los vs. The Royal Mint

If Urizen is the bureaucratic Master of the Mint—the Newtonian administrator calculating ratios, imposing geometric limits, and standardizing the infinite human soul into weighed coins—then Los is the divine blacksmith, the alchemist of the spirit. The opposition between these two figures encodes one of the most structurally coherent economic critiques in the entire Romantic canon.

9.1 The Mint on Tower Hill: Engines of Homogenization

In *Jerusalem*, Los is constantly depicted laboring at his roaring furnaces. Blake utilizes explicitly metallurgical and alchemical imagery to describe this work. However, whereas the Royal Mint on Tower Hill, relocated in the early 19th century to a new purpose-built facility, was an industrial fortress of steam-powered homogenization, Los's forges are designed to produce living, differentiated, irreducibly unique human forms (Eden). The Mint's industrial transformation was itself a symptom of the Urizenic revolution: Matthew Boulton's steam-powered coining presses, installed at the Soho Mint in Handsworth (near Birmingham) and later adopted at the Royal Mint, could strike coins with mechanical precision at high speed, eliminating the human hand from the minting process entirely and replacing the artisan's judgment with calibrated, replicable force.

The Mint melts down the various, chaotic silver and gold of the world and stamps it with the sovereign's head—a singular image of authority. It is a process of extraction and homogenization that parallels exactly the Urizenic cosmogony described in *The First Book of Urizen* (1794), where the tyrant "form'd golden compasses / And began to explore the Abyss" [Blake, 1794]. Los's furnaces, conversely, operate on a principle of spiritual alchemy: taking the fragmented, degraded, atomic material of the fallen world and fusing it back together through the heat of prophetic imagination into the "Human Form Divine." This opposition encodes a fundamental first-principles insight into the nature of value itself: the Mint's operation is *subtractive* (reducing diverse human labor to a single metallic denominator), whereas Los's forge is *additive* (synthesizing fragmented experience into integrated wholes).

The metallic imagery in *Jerusalem* is pervasive and deliberate. On Plate 12, Blake describes the spiritual architecture of Golgonooza—Los's prophetic city, the anti-London—in explicitly metallurgical terms:

> "The stones are pity, and the bricks, well wrought affections, Enameld with love & kindness, & the tiles engraven gold, Labour of merciful hands: the beams & rafters are forgiveness: The mortar & cement of the work, tears of honesty: the nails, And the screws & iron braces, are well wrought Blandishments" (*Jerusalem*, Plate 12, lines 30–34; Erdman p. 155) [Erdman, 1988]

Here the "tiles engraven gold" and "iron braces" serve a function opposed to the Mint's gold: they are construction materials for a city built from human affect—pity, kindness, forgiveness, honesty—rather than the weight of bullion. Further, on the same plate, Blake names "the golden Looms of Cathedron" and "the golden mills of Los" (Plate 12, lines 46–47; Erdman p. 156), establishing that Los possesses his own golden instruments, but ones devoted to weaving and milling the fabric of human reality rather than stamping coins of abstract equivalence. The adjective "golden" in Blake is thus bifurcated: Urizen's gold is dead and hoarded; Los's gold is living, laboring, and regenerative.

Crucially, on Plate 13, Blake extends this metallurgical architecture of Golgonooza to enumerate the four metals of its gates in direct correspondence with the Fourfold Vision:

> "And that toward Eden, four, form'd of gold, silver, brass, & iron. The South, a golden Gate, has four Lions terrible, living! That toward Generation, four, of iron carv'd wondrous: That toward Ulro, four, clay bak'd, laborious workmanship That toward Eden, four; immortal gold, silver, brass & iron." (*Jerusalem*, Plate 13; Erdman p. 157) [Erdman, 1988]

The sequence—gold, silver, brass, iron—is not arbitrary decoration. It encodes a precise descending hierarchy of spiritual states, from Edenic gold (imaginative fullness) through silver (generative Beulah, the lunar-feminine, the bimetallic) and brass (the passionate-Orcian) down to iron (the Urizenic-rational) and finally clay (Ulro, the void of pure materialism). Silver occupies the second position in this sequence: it is the metal of *Beulah*, the intermediate state of rest and generation, the lunar complement to the solar gold of Eden. This structural placement is the most precise confirmation in the entire Blakean corpus that silver, when paired with gold, represents *Generation*—the very bimetallic synthesis whose legislative elimination in 1816 Blake's prophetic work condemned. Blake's Golgonooza literalizes the four metals of the bimetallic tradition into a cosmological architecture, with silver as the load-bearing structural element between Eden and the fallen world.

9.2 The Boulton Press and the Division of the Artist's Body

Blake explicitly contrasts the mechanical, steam-powered presses of early industrial capitalism—embodied most visibly by the Boulton steam presses—with the vital, bodily labor of the artist. The production of true value requires sweat, breath, and the integrated labor of the entire human body, not the alienated pull of a lever. As Thompson documents, Blake's hostility to industrial machinery was not Luddite nostalgia but a precise philosophical objection: the machine severs the connection between the laborer's creative will and the product of their hands, reproducing the structure of Urizenic alienation at the level of daily lived experience [Thompson, 1993].

> "And Los's Furnaces howl loud; living: self-moving: lamenting With Fury & Despair, & they dictate the relations of States" (*Jerusalem*, Plate 73) [Erdman, 1988]

The furnaces are not inert mechanisms; they are *living*, *self-moving*, *lamenting*—they participate in the suffering of the human condition even as they labor to transcend it. This is Blake's radical proposition: that the sites of genuine production—artistic, spiritual, political—are necessarily sites of anguish and fury, not the automated efficiency of the Mint.

9.3 The Anti-Coin: Blake's Illuminated Printing as Economic Subversion

For Blake, the true economy is not dictated by the Bank of England or the bullion brokers of the Royal Exchange, but by the "Furnaces of Los." Relief-etching inverts the Mint's stamping dies: where the **Great Recoinage** (1696–1699), under Newton's Wardenship, *stamped* sovereign authority onto discs to impose fungible value, and the **1717** guinea valuation later fixed the gold–silver ratio, Blake *dissolved* copper in acid to yield plates that resist fungible exchange [Poovey, 2008]. The full phenomenology of the anti-coin—*Marriage of Heaven and Hell*, infernal method, nondual matrix, division of labor, and *Milton*'s injunction against counting gold—is developed under § Illuminated Nonduality.

The choice facing humanity is clear: be minted as a passive coin under Urizen, or forge one's own infinite value in the roaring fires of Los [Blake, 1804]. As Erdman argues, this is not merely artistic preference but political economy: Blake's mode of production constitutes a complete alternative to the industrial system, one in which the producer retains full sovereignty over the means, process, and meaning of their labor [Erdman, 1954].

10 Quantification into Qualification: From Mint Metrics to Fourfold Measure

10.1 Illuminated Nonduality and the Cultivation of the Fourfold Vision

Meta-stability inevitably ruptures, as demonstrated by the arbitrage of Gresham's Law. But for Blake, rupture is not the end; it is the threshold marking the transition from the tensions of **Generation (Twofold Vision)** and **Beulah (Threefold Vision)** into the liberation of **Eden (Fourfold Vision)**: the realization of the "regenerate 4-fold man."

This eschatological pivot demands the abandonment of Urizenic *Quantification* (see Fourfold Vision) in favor of infinite, boundless *Qualification*. As Northrop Frye elucidates in his foundational work *Fearful Symmetry*, Fourfold Vision represents Blake's ultimate philosophical and spiritual telos: it is imaginative creativity operating as a living, breathing power, restoring the fractured human form, Albion [Frye, 1947]. In Blake's mythology, Albion is simultaneously the primal human, the island of Britain, and the totality of human civilization—his restoration is therefore at once a personal, political, and cosmic event. In a truly Fourfold economic system, value is no longer an intrinsic elemental property mysteriously inhering in dead base matter (like the weight of gold bullion in a bank vault) or fictional ledgers of compounding usury. Value becomes exclusively an emergent property of qualitative, active, synergetic human integration. It exists strictly within the context of radical human engagement—what Saree Makdisi characterizes as Blake's "rewrite" of the material capitalist order [Makdisi, 2003].

10.2 The Anti-Coin, Infernal Method, and Undivided Labor on the Plate

This refusal of capitalist order is not merely thematic in Blake's work; it is embedded in his very mode of production: illuminated printing. By inventing and operating his hybrid form of relief etching—biting words and images simultaneously into corrosive copper baths in a single, nondual matrix—Blake physically achieved a Fourfold qualitative synthesis in his own life. The copperplate becomes the anti-coin. Whereas the Royal Mint stamps an image of state authority onto a blank disc to impose monolithic, fungible value—a process accelerated to industrial scale by Boulton's steam presses—Blake dissolved the blank surface of the copper with acid to reveal a unique, irreproducible spiritual topography. Each illuminated plate cost Blake not the weight of its metal but the expenditure of his creative attention: hours of drawing, writing, etching, printing, and hand-coloring that could never be mechanically replicated.

The imaginative economy of that practice was already announced in ***The Marriage of Heaven and Hell*** (c. 1790–1793) [Blake, 1790, Erdman, 1988]. There Blake insists that **"Without Contraries is no progression"**—life itself is the clash of energies, not the suppression of one pole by a moralized other—and the **Proverbs of Hell** celebrate the productive, excessive, bodily energies that polite "angelic" reason would bind or forbid. This is not a brief for moral evil but for **making**: the devil's party, in Blake's ironic theology, is the party of unexhausted creation. Read alongside the monetary argument of this manuscript, that pamphlet subverts the same moralized dualism that underwrites **Single Vision**: one lawful numéraire, one authorized face, one passive subject who receives value stamped from above. The diabolic register is thus a mythic prefiguration of **Los's Forge** against **Newton's Mint**—energetic, particular, and corrosive of fixed surfaces, where the Mint stands for cooled, countable, state-legible sameness (developed in the opposition of Los to Urizen and the Mint in the sections above).

Blake names the technical corollary **printing in the infernal method** in *Marriage* (Plate 14 in standard facsimiles; see Erdman) [Blake, 1790, Erdman, 1988]: a deliberate, manual, acid-driven process in which apparent surface is eaten away so that letter and design stand in relief for a single pull from the press. **Infernal** here names not sin but **contact with transformative depth**—the same metaphorics that tie hell to energy in the *Proverbs*. Against Mint **stamping** (fungible discs, interchangeable by weight) and against the divided workshop (specialist plate, specialist press, specialist binder), the infernal plate is **author-integrated, process-heavy, and non-fungible**: each impression remains tethered to Blake's hand and to variable finishing. The anti-coin is therefore both a semiotic and a **technical** refusal of the universal equivalent.

The illuminated book then fuses poetry (temporal), visual art (spatial), and physical labor (sculptural etching) into a single artifact that defies the Urizenic division of labor. As Thompson argues, the division of labor was the central mechanism of industrial capitalism's alienation of the worker, and Blake's illuminated printing constitutes a deliberate, material refusal of this division [Thompson, 1993]. Blake took disparate, base elements and united them in an unstable medium that is sustained entirely by the human attention and interaction of the reader, demanding active, Fourfold engagement to decode its sprawling mythological architecture. The reader of an illuminated book cannot be a passive consumer—the text demands interpretive labor, visual attention, and imaginative participation simultaneously. This is the economic logic of Eden applied to the act of reading itself.

Blake proved, through the very medium of his craft, that true and lasting value is generated not by the metallic anchor overseen by Sir Isaac Newton, nor the "allegoric riches" of the Bank Restriction, but by the "regenerate 4-fold man" acting in imaginative societal synergy. Through relief etching, Blake literally minted a new currency of the spirit, one essentially immune to the arbitrage pressures of the bimetallic world. As Blake declares in *Milton*: "Leave counting Gold & diamonds, for Gods eye delights in thee" (Plate 26, line 27; Erdman p. 121) [Erdman, 1988]—the injunction to abandon the dead metrics of Urizen in favor of the infinite valuations of the divine imagination.

11 The 1816 Coinage Act as Topological Regression

While Blake proposed a visionary resolution to the meta-stable friction of Twofold Generation through infinite, Fourfold spiritual expansion, the British state pursued the exact opposite trajectory. Reacting against both the swerve of unbacked paper money (see § The 1797 Bank Restriction) and the arbitrage of the bullion trade, the government sought a rigid anchor.

11.1 Lord Liverpool's Act: The Legislative Architecture of Monometallism

Under the guidance of Lord Liverpool, Parliament passed the Coinage Act of 1816 (56 Geo. III c.68) on **22 June 1816**, officially known as "An Act to provide for a New Silver Coinage, and to regulate the Currency of the Gold and Silver Coin of this Realm." This Act legally demonetized full-bodied silver entirely as a standard of value. It relegated silver to a mere token coinage—reduced in weight to 66 shillings per troy pound from the prior 62 shillings, and declared legal tender only for amounts up to **40 shillings**—effectively ending the bimetallic alchemical marriage of the previous centuries and enforcing a strict *de jure* Gold Standard [Redish, 1990]. The new gold sovereign was defined at **123.274 grains** (7.988 grams) of standard **22-carat gold** (91.67% pure), with one troy pound of standard gold equivalent to **£46 14s 6d** (44½ guineas). This sovereign coin would become the foundation of British imperial finance for a century.

11.2 The Mathematical and Thermodynamic Necessity of Bimetallic Collapse

The mathematical necessity of this collapse is formalized by Velde's border conditions for bimetallism. For both metals to circulate concurrently, the global commodity price ratio (P_G^G/P_G^S) must dynamically satisfy strict world monetary demand shares (m_G, m_S):

$$m_G(1 - m_G) < \frac{P_G^G}{P_G^S} < \frac{(1 - m_S)}{m_S} \tag{2}$$

By legally tokenizing silver ($m_S \to 0$ as a standard of sovereign reserve), the 1816 Coinage Act intentionally violated this inequality, mathematically engineering a permanent structural singularity [Velde, 2005, Quinn, 1996]. Lord Liverpool and the architects of the Act did not "resolve" the crisis of human value; rather, from a Blakean perspective, they triggered a topological regression back into the quantification of **Single Vision (Ulro)**.

11.3 The Chimeric Regime and the Amputation of Silver

As Joseph Albernaz theorizes in his work on common wealth, totalizing measurement regimes like the Gold Standard operate as deeply "chimeric" technologies. They enforce false ontologies to "ground" a community, purposefully obfuscating humanity's shared "groundlessness"—our fundamental interdependence [Albernaz, 2024]. The 1816 Act was the finalized Urizenic framing of the British economy. The structural bimetallic tension (Twofold Vision) was erased not by synthesizing gold and silver into a higher qualitative order of human flourishing, but by amputating the lunar element of silver entirely. By tying the productive capacity of the British Empire to one isolated, calculable element—the 22-carat sovereign—the state surrendered to the condition where nothing exists unless it can be mathematically derived from gold. The social consequences were severe: as Del Mar documents, the contraction of the monetary base that followed silver's demonetization enriched the creditor class while plunging the producing classes into deflationary poverty—a transfer of wealth from labor to capital that Blake's *Jerusalem* had prophetically condemned as the "curb / Of Poverty on the laborious" [Del Mar, 1895, Erdman, 1988].

Blake renders this financial taming of living energy with characteristic precision on Plate 55 of *Jerusalem*, where the nations of empire appear as wild forces subjugated by monetary instruments:

> "Curbing their Tygers with golden bits & bridles of silver & ivory." (*Jerusalem*, Plate 55; Erdman p. 205) [Erdman, 1988]

The image is economically exact: empire tames its subject peoples not with violence alone but with the golden bits (gold standard coercion) and silver bridles (the compliant token coinage of the colonies) that enforce subordination. The "ivory"—a colonial commodity extracted from Africa—completes the triad of imperial extraction. Gold bits, silver bridles: the exact instruments of the bimetallic system (gold standard with silver relegated to token status under the 1816 Act) deployed as tools of subjugation. Blake's vision extends beyond British monetary policy to the global architecture of imperial finance: the 1816 Act did not merely tokenize silver domestically—it exported the Urizenic framework to every territory the Empire controlled, binding colonial economies to the gold sovereign and severing them from their own internal bimetallic circulations.

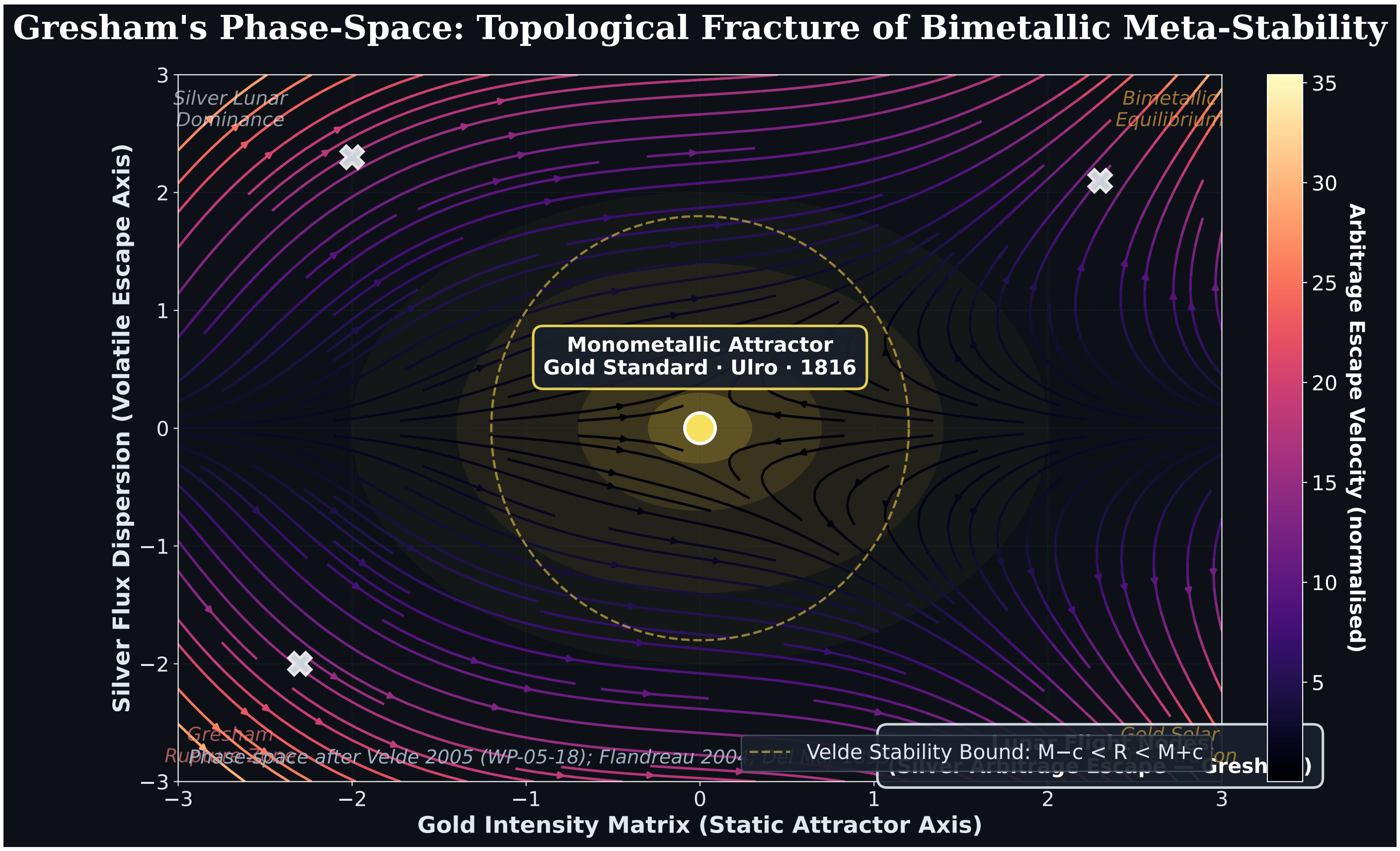

Figure 6: Topological Fracture of Gresham's Law in Phase-Space. This dynamic magma streamplot on a 120×120 grid visualizes the macroeconomic collapse of bimetallic metastability. An overlaid dashed golden ellipse denotes the Velde stability boundary $M - c < R < M + c$. The geometric center (Gold Attractor, $m_S \to 0$ / Ulro / 1816 Singularity, rendered with a four-layer glow ring) exerts an inflexible inward-pulling vector field ($U = -X + 2Y^2$)—the gravitational well of the monometallic standard: the 22-carat sovereign at 123.274 grains freezing human exchange into static atoms of sovereign credit. The outward thermal-gradient vectors represent the Lunar Flight ($V = 0.5Y + YX^2$): silver arbitrage shattering its state-mandated bond into three distinct silver flight nodes (marker 'X'). As the Mint Ratio (M) diverges structurally from the international Market Ratio (R), the currency system undergoes topological clinamen out of the bimetallic equilibrium quadrant into the Gresham rupture zone. The 1816 Coinage Act enforced the terminal Urizenic amputation of silver, restricting token coinage to 40 shillings.

11.4 The Victory of "Single Vision & Newton's Sleep"

This systemic reduction was the ultimate victory of "Single vision & Newtons sleep" (as Blake declared in his 1802 letter to Butts; Erdman p. 720) [Erdman, 1988]. It represented a reduction of the regenerate 4-fold man back into an isolated, atomized economic cog, evaluated solely against the geometric weight of the new golden sovereign coin. It was a regression into intellectual and spiritual infancy under the guise of scientific finance, establishing a paradigm of scarcity that Blake would fight until his last breath. The arc from Newton's 1717 ratio through the 1797 Restriction to the 1816 Act traces a complete Blakean narrative: from the imposition of Urizenic geometry upon the living economy, through the chaotic void of paper abstraction, to the final re-assertion of monometallic control. Blake's prophetic response—the immense, unfinished architecture of *Jerusalem*, composed across exactly these years—constitutes the most sustained imaginative resistance to this economic ontology in the entire literary canon.

12 Structural Finance History: Blake and Alexander Del Mar Compared

If William Blake provided the visionary, mythopoetic critique of 18th-century monetary metaphysics, the late 19th-century historian Alexander Del Mar provided its rigorous historiographical counterpart. Del Mar's *History of Monetary Systems* (1895) operates on a fundamental thesis that maps onto Blakean cosmology: that the right to coin money is a sovereign, communal prerogative (a state of Edenic or at least Beulah-like integration) that has been recurrently hijacked throughout history by private, atomizing mercantile interests (Urizen) [Del Mar, 1895].

12.1 The Sacred Sovereign Prerogative of Currency and Coinage Issuance

For Del Mar, the structural core of monetary history is precisely this struggle over the prerogative of issuance. When the state controls the money supply, value is derived from the *societal totality* (the Human Form Divine) and the collective needs of the people. When private banks (such as the Bank of England in 1797) or rigid metallic ratios (Newton in 1717, Liverpool in 1816) assume control, value is transferred to the dead material of the coin itself or the fictional ledger of the private creditor [Clapham, 1944]. Rather than asserting intrinsic metallic value, Del Mar traces the origins of money to numerary systems maintained by state authority, a thesis that reveals the transition from bimetallism to the gold standard not merely as a policy adjustment but as a metaphysical revolution: the displacement of a communal mechanism by a rigid, materialist reduction. This perspective illuminates a *generic* economic principle: every monetary regime encodes a specific theology of value.

12.2 Blake's Jerusalem Plate 10 and the Architecture of Enslavement

Blake recognized this identical usurpation with prophetic clarity. His condemnation of the Bank of England, the Mint, and the gold standard was rooted in his understanding that whoever controls the semiotics of value controls the human soul. On *Jerusalem* Plate 10, Los refuses to "Reason & Compare" on another man's terms and asserts creative agency as the ground of valuation (*Jerusalem*, lines 20–21; Erdman p. 153) [Erdman, 1988]—the full lines appear in § Fourfold Vision.

That stance is precisely this recognition that the *architecture* of representation determines the freedom or subjugation of human life. The "System" Blake must create is not merely a mythological schema but an entire alternative regime of valuation—one grounded in the irreducible particularity of creative labor rather than the abstract universality of the gold sovereign. When Del Mar catalogs the social consequences of the demonetization of silver—how the contraction of the monetary base enriched the creditor class while plunging the producing classes into deflationary poverty—he is documenting the literal effects of Urizen's "brazen quadrant" upon the British and global economy [Del Mar, 1885].

12.3 The 1844 Bank Charter Act and Ledger-Driven Spectral Value

The culmination of this architectural subjugation occurred with the 1844 Bank Charter Act (Peel's Act). The fiercely contested debate between the Banking School and the Currency School narrowed the legal field for note issue by constraining it under the Bank of England and a statutory reserve framework with a fixed fiduciary issue. The Currency School theorists, acting as the ultimate architects of Urizenic geometry, believed they had finally imprisoned the chaos of economic swerve within the immutable predictability of the gold standard.

However, by focusing on paper notes, Peel's Act paradoxically ignored the explosive growth of bank deposits and ledger credit, which later came to dominate everyday monetary circulation in late 19th-century Britain. The "fictive" or "spectral value" against which Blake raged did not vanish; rather, the "ghosts" completely migrated out of the physical paper artifact and into the invisible, unregulated abstraction of the bank ledger. This endogenous expansion of invisible credit represents a profound ontological mutation of the capitalist economy—a system sustained by mathematical promises that periodically collapsed in late-century panics.

12.4 The Convergence of Prophetic and Historiographic Critique: Del Mar and Blake

Both Blake and Del Mar understood that the true "alchemy" of money had been stolen from the domain of human creativity. The living, breathing economy of human interaction had been replaced by a ledger-bound numerical simulation engineered to perpetually enrich the creditor class at the direct expense of the producing masses. Reading Blake through this historiographic lens elevates his poetic epics from obscure mystical allegories into profound critiques of modern central banking and financialized alienation [Poovey, 2008, Baucom, 2005]. Del Mar's key historiographic insight—that the demonetization of silver was a deliberate political act designed to redistribute wealth upward—finds its mythopoetic expression in Blake's *Jerusalem*, where the architects of financial enclosure are exposed as agents of Urizenic tyranny.

By the *Milton* injunction against counting gold as ultimate good (see § Illuminated Nonduality) [Erdman, 1988], Blake stands alongside Del Mar as a prophet declaring that the highest sovereign act is not the balancing of a metallic ratio, but the liberation of the human imagination from the ledger. Where Del Mar provides the forensic historiography, Blake provides the visionary horizon: together, they articulate a complete mythopoetic economics of human liberation.

13 The Atlantic Crucible: American Bimetallism and the Architecture of Republican Money

In 1793—the same year the British state declared war on revolutionary France and intensified its repression of radical publishers—William Blake etched *America a Prophecy* on eighteen copper plates in his Lambeth workshop. Blake was no isolated mystic: David Erdman documents that he moved through the radical circles of 1790s London, frequenting the weekly dinners at Joseph Johnson's bookshop in St Paul's Churchyard alongside Mary Wollstonecraft, William Godwin, and Thomas Paine [Erdman, 1954]. Erdman further reports that Blake warned Paine during the government's pursuit of him for seditious libel after *Rights of Man* (1791–92), helping him avoid arrest and leave for France (Erdman p. 200). The poem that emerged from this milieu presents the American Revolution not as a political event but as a cosmic conflagration: the unchaining of Orc, the spirit of revolutionary energy, against the tyranny of Urizen's law. But *America a Prophecy* is not merely a poem about political revolution; it is, when read alongside the concurrent monetary crises of both Britain and the newly constituted United States, a prophetic meditation on the fundamental relationship between monetary sovereignty, human freedom, and the architecture of value itself. Blake's prophetic structure anticipates what the American Pragmatists—Peirce, James, Dewey—would later formalize: the organism confronting a novel encounter, breaking inherited habit, and forging new modes of engagement with the indeterminate situation [Friedman, 2026a,b]. The American monetary experiment was precisely such an indeterminate situation, demanding new cognitive and institutional architectures.

13.1 The Coinage Act of 1792: Hamilton's Republican Experiment

On 2 April 1792—one year before Blake etched *America*—President George Washington signed the Coinage Act of 1792, establishing the United States Mint in Philadelphia and codifying a bimetallic standard with a gold-to-silver ratio of 15:1 [Laughlin, 1898]. This ratio, proposed by Treasury Secretary Alexander Hamilton in his *Report on the Establishment of a Mint* (1791), was itself an act of deliberate divergence from Newton's British ratio of 1:15.21 [Hamilton, 1791]. Hamilton explicitly calculated his ratio by surveying average European market conditions, aiming for a standard that would attract both metals into domestic circulation rather than suffer the asymmetric drainage that plagued Britain [Sylla and Cowen, 2018]. The silver dollar was defined at 371.25 grains of pure silver; the gold eagle at 247.5 grains of pure gold. As Richard Sylla and David Cowen demonstrate, Hamilton's financial architecture—encompassing the Mint, the First Bank, and the systematic funding of revolutionary war debt—was the most ambitious experiment in republican finance the modern world had yet attempted [Sylla and Cowen, 2018].

This legislative act was revolutionary in its monetary implications, yet it carried a structural flaw that would destabilize the American economy for a century. Where Newton's Mint had served the Crown's imperial prerogative—calibrating a 15.21:1 ratio that systemically overvalued gold and drained England of silver—Hamilton designed his 15:1 ratio for a republican experiment in dual-metal equilibrium. However, as Angela Redish demonstrates in *Bimetallism: An Economic and Historical Analysis*, Hamilton's flatter ratio sat "on the slope of a declining value of silver relative to gold," driven by oversupply from Latin American mines [Redish, 2000]. Consequently, Hamilton inadvertently overvalued silver. This triggered Gresham's Law in reverse: gold coins were melted and exported to Europe where they commanded a higher premium, leaving the United States on a *de facto* silver standard by 1834. As Lawrence Officer calculates, the U.S. Mint earned substantial seigniorage profit from the operation of the bimetallic system despite its structural instability, suggesting the arrangement served fiscal as well as monetary purposes [Officer, 2001]. Milton Friedman and Anna Schwartz later analyzed this initial miscalibration as guaranteeing the monetary volatility that would define 19th-century America [Friedman and Schwartz, 1963]. Curtis Nettels' study of the early national economy confirms that Hamilton's system, however flawed in its ratio, succeeded in establishing the institutional architecture—Mint, Treasury, funded debt—upon which American monetary sovereignty would depend [Nettels, 1962].

Blake's Orc, breaking free from his chains on the Atlantean mountains, embodies precisely this revolutionary energy—the structural analogue to Peirce's "irritation of doubt" that compels genuine inquiry: the encounter with an indeterminate situation that inherited habit cannot resolve [Friedman, 2026a]. The Preludium to *America* (Plates 1–4) depicts Orc's liberation as an elemental eruption: the "hairy youth" bursts his chains in a subterranean cavern, his body burning with the fire of revolutionary desire (Erdman pp. 51–52) [Erdman, 1988]. When we read this mythological unchaining alongside the simultaneous establishment of a new monetary sovereign—a nation explicitly rejecting the Bank of England's monopoly, the Crown's prerogative of issuance, and the Newtonian metrological regime—Orc's fire becomes legible as the liberation of value itself from the calculus of empire.

13.2 Hamilton vs. Jefferson: The Structural Antinomy of Republican Finance

The American experiment in bimetallism was, from its inception, riven by an internal antinomy that maps with remarkable precision onto Blake's mythological framework. Alexander Hamilton—the architect of the First Bank of the United States (chartered 1791)—envisioned a centralized financial architecture modeled on, though deliberately constrained relative to, the Bank of England. Hamilton's bank, capitalized at $10 million, was authorized to issue banknotes, manage federal debt, and coordinate fiscal policy—functions that Thomas Jefferson viewed as a direct assault on republican agrarian virtue [Laughlin, 1898, Wilentz, 2005].

Jefferson's opposition to the Bank was not merely constitutional (though he argued strenuously that the Constitution granted no power to charter a federal bank); it was ontological. Jefferson insisted that the productive labor of the farmer—the physical working of the earth—constituted the only legitimate foundation of national wealth. Paper credit, fractional reserve banking, and the abstractions of urban finance were, in Jefferson's view, parasitical fictions that enriched speculators at the expense of the producing classes. As Sean Wilentz documents in *The Rise of American Democracy*, this Hamilton-Jefferson divide defined the fundamental fault line of American political economy for the next century, structuring every subsequent conflict over banking, tariffs, and monetary standards [Wilentz, 2005]. This position resonates with Blake's *Jerusalem* critique of allegoric riches (see § The fixing of labour and allegoric riches) [Erdman, 1988, Sklar, 2011]: both Blake and Jefferson recognized that the architecture of money creation determined the distribution of real power and real suffering. Saree Makdisi's analysis of Blake's impossible history extends this parallel further, arguing that Blake's rejection of state-administered personhood and property—the very foundations upon which both Hamiltonian credit and Jeffersonian land-ownership depend—constitutes a more radical critique than either political faction could articulate [Makdisi, 2003, 2014].

Yet Jefferson's agrarian alternative was itself caught in the contradictions of commodity production. The Jeffersonian farmer remained dependent on metallic currency—on the very gold and silver whose statutory ratios, as Gresham's Law demonstrated, were subject to international arbitrage beyond any single nation's control. Blake's prophetic critique extends further than either Hamilton's centralized finance or Jefferson's agrarian metallist position: for Blake, the fundamental error is the reduction of value to *any* quantitative metric, whether gold, silver, or paper. *The Book of Thel* (1789) refuses that reduction in the terms of coined wisdom and love [Blake, 1789]—see § Urizenic materialism—and the same logic bears on Hamilton's Treasury notes and Jefferson's silver dollars. Blake's Fourfold Vision—the coordination of Urizen (reason), Luvah (passion), Tharmas (sensation), and Urthona (imagination)—constitutes a proto-cognitive architecture in which no single faculty may dominate without fragmenting the system into what Blake names "Newton's Sleep" [Friedman, 2026a,b]. The Hamilton-Jefferson antinomy is, in this reading, a *bifurcation* of the American political mind: reason (Hamilton) sundered from embodied agricultural sensation (Jefferson), with neither capable of the integrative Fourfold Vision that Blake demanded.

14 *America a Prophecy* and the Political Economy of Revolutionary Perception

14.1 "Shaking their mental chains": Blake's Prophecy at the Monetary Threshold

America a Prophecy (1793) is structured in two movements: a Preludium of mythological unchaining and a Prophecy of revolutionary confrontation. At its center lies a passage of economic and epistemological resonance. When the Thirteen Governors convene in Bernard's house and the flames of Orc engulf the land, the colonial administrators react with terror:

> "Shaking their mental chains, they rush in fury to the sea To quench their anguish; at the feet of Washington down fall'n They grovel on the sand and writhing lie" (*America a Prophecy*, Plates 13–14; Erdman p. 55) [Erdman, 1988, Blake, 1793]

The phrase "mental chains" is Blake's articulation of the relationship between political subjugation and epistemic imprisonment. These are not physical manacles but conceptual constraints—the same "mind-forg'd manacles" that Blake would later identify in *London* (Songs of Experience, 1794; Erdman p. 70) [Erdman, 1988]. In the context of the bimetallic monetary crisis, the "mental chains" are the very statutory ratios, fixed prices, and abstract ledgers that bind human labor to metallic equivalences. The governors do not merely lose political authority; they lose the entire conceptual apparatus through which they have administered value.

An analysis of *America a Prophecy* formalizes this dynamic as *anticipatory epistemology*: the Thirteen Governors' collapse enacts the dissolution of a cognitive prior—what Peirce would later call the dissolution of a "fixation of belief"—that can no longer sustain itself against the pressure of experience [Friedman, 2026a,b]. The governors' "mental chains" are not merely political ideology but cognitive priors—inherited models of imperial sovereignty that the American encounter renders inoperative. When they "rush in fury to the sea," they seek to quench the Orcian fire that has falsified their generative model, but the old prior cannot be restored. This is Dewey's "indeterminate situation" realized in mythic form: the moment when inherited habits of thought break down and genuine inquiry—or genuine revolution—becomes unavoidable.

14.2 Boston's Angel and the Commodification of Trade and Generosity

The most economically resonant passage in *America* is Boston's Angel's speech, which Blake positions as the poem's intellectual climax:

> "Who commanded this? What God? What Angel? To keep the gen'rous from experience till the ungenerous Are unrestrain'd performers of the energies of nature; Till pity is become a trade, and generosity a science That men get rich by; and the sandy desert is giv'n to the strong?" (*America a Prophecy*, Plate 9; Erdman p. 53) [Erdman, 1988, Blake, 1793]

This passage demands economic exegesis. "Pity is become a trade" anticipates by eighty years Karl Marx's analysis of how capitalism transforms all human relations into commodity relations: even compassion itself becomes a tradeable asset, a resource to be deployed for profit. "Generosity a science / That men get rich by" describes with precision the logic of speculative philanthropy, charitable endowments, and the broader financialization of human virtue that was already visible in the operations of the Bank of England's credit system [Poovey, 2008]. Patrick Brantlinger's *Fictions of State* traces how this transformation of moral sentiment into financial infrastructure extended through the entire edifice of 18th-century credit culture, creating what he terms a "culture of speculation" in which even patriotism and public spirit were securitized [Brantlinger, 1996].

Boston's Angel's declaration—"No more I follow, no more obedience pay!"—is the decisive act of the anticipatory moment: the organism breaking inherited habit and asserting a new mode of engagement with the world [Friedman, 2026a]. The Angel does not merely reject a particular policy; he rejects the entire epistemological framework within which imperial monetary administration operates. As Makdisi argues, Blake's *America* challenges the emerging commodity-form of perception itself: the idea that knowledge, like goods, is something passively received from external authority rather than actively produced through imaginative engagement [Makdisi, 2003]. Boston's Angel demands to know *who has the right to restrict experience*—a question that applies with equal force to the sovereign's right to fix the price of metal and the Bank's right to restrict the conversion of paper into gold. Jon Mee's *Dangerous Enthusiasm* contextualizes Blake within the broader culture of 1790s radical dissent, demonstrating that Blake's critique of commodified experience drew directly on the millenarian and antinomian traditions that informed popular resistance to enclosure, taxation, and the disciplinary apparatus of Pitt's wartime state [Mee, 1992].

14.3 The "Crime" of 1873 and the Demonetization of Silver

Blake's prophetic framework proves its relevance when extended beyond its immediate historical context to encompass the full arc of American bimetallic politics. The Fourth Coinage Act of 12 February 1873—known to its critics as "The Crime of 1873"—demonetized the silver dollar by omitting it from the list of authorized coins, effectively placing the United States on a gold monometallic standard [Laughlin, 1898]. This legislative act, passed with minimal public debate while the nation was still recovering from Civil War and the Reconstruction crisis, enacted on American soil the same regression that Blake had diagnosed in Britain's 1816 Coinage Act. As Richard White documents in *The Republic for Which It Stands*, the 1873 Act was not a sudden conspiracy but the culmination of a decade-long lobbying campaign by Eastern financial interests who sought to align American monetary policy with the emerging international gold consensus centered on London and Berlin [White, 2017].

The parallels with the British experience are structurally exact. Where Lord Liverpool's 1816 Act (56 Geo. III c.68) demonetized full-bodied silver by reducing it to token coinage with a 40-shilling legal tender limit, the 1873 Act accomplished the same amputation by erasing the silver dollar from the statute book. As Marc Flandreau argues in *The Glitter of Gold*, this global shift from bimetallism to gold was fundamentally a struggle over *political theology*—a contest between competing visions of what money *is* and whom it should serve [Flandreau, 2004]. Agrarian producers and Western miners defended silver as a tangible sacrament of their labor, while Eastern financial elites demanded the hierarchical, centralized abstraction of the gold standard. Richard Franklin Bensel's *Political Economy of American Industrialization* demonstrates that the deflation following 1873 was not an incidental consequence but a structural requirement of the gold standard regime, which transferred wealth systematically from debtor agrarians to creditor financiers [Bensel, 2000].

Where Newton's Mint ratio had overvalued gold to drain England of silver, the post-1873 deflation crushed American farmers under a contracting gold supply—what Milton Friedman and Schwartz documented as a roughly 50% collapse in American price levels between 1865 and 1896 [Friedman and Schwartz, 1963]. The producing classes of both nations—the "laborious" upon whom Blake's "Councellor" throws the "curb / Of Poverty" (*Jerusalem*, Plate 27; Erdman p. 170)—bore the consequences of this monetary contraction, while the urban creditor class reaped profits from the rising value of their gold-denominated claims [Del Mar, 1895, Erdman, 1988].

14.4 The Free Silver Movement and the Populist Insurgency

The political response to the Crime of 1873 constituted nothing less than the most significant challenge to financial orthodoxy in American history. The Free Silver movement (1873–1900) demanded the restoration of free coinage of silver at a ratio of 16:1—a deliberate rejection of the monometallic stranglehold that had impoverished the agrarian West and South [Laughlin, 1898]. Charles Postel's *The Populist Vision* demonstrates that the Populists were not, as Richard Hofstadter once dismissively characterized them, backward-looking agrarian romantics, but sophisticated political actors who understood the monetary system's structural biases with considerable analytical precision [Postel, 2007, Hofstadter, 1955]. Congress responded with the Bland-Allison Act of 1878, requiring the Treasury to purchase $2–4 million of silver bullion monthly for coinage, and the Sherman Silver Purchase Act of 1890, mandating the purchase of 4.5 million ounces of silver per month—legislative interventions that represented partial attempts to restore the bimetallic synthesis against the crushing monometallism imposed by Eastern financial interests.

The movement reached its crescendo in William Jennings Bryan's "Cross of Gold" speech at the 1896 Democratic National Convention in Chicago (9 July 1896). As Michael Kazin documents in *A Godly Hero*, Bryan's address was not merely a political performance but a distillation of two decades of agrarian frustration with the deflationary gold standard regime [Kazin, 2006]. His defense of the agrarian producing classes against urban financial elites recapitulates with precision Blake's insistence that productive, embodied labor constitutes the only true source of value [Laughlin, 1898]. Bryan even invoked the American Revolution explicitly: "instead of having a gold standard because England has, we shall restore bimetallism, and then let England have bimetallism because the United States have"—a deliberate re-enactment of 1776's monetary independence. This is the Orcian fire, transmitted across a century: the same demand for liberation from the imperial metric that Blake had inscribed in *America a Prophecy*.

Bryan's peroration constitutes one of the most powerful expressions of the critique of monometallism ever uttered in the American political tradition:

> "Having behind us the producing masses of this nation and the world, supported by the commercial interests, the laboring interests, and the toilers everywhere, we will answer their demand for a gold standard by saying to them: 'You shall not press down upon the brow of labor this crown of thorns; you shall not crucify mankind upon a cross of gold.' "

The image of crucifixion upon gold directly inverts the Christian symbolism that Blake deployed throughout his prophetic works: gold, which should represent the solar principle of divine love, has been weaponized into an instrument of torture—

the miser's guinea elevated above the sun until it becomes the cross upon which human labor is sacrificed. Bryan's speech echoes Blake's *Milton* refusal to treat bullion as the highest good (see § Illuminated Nonduality) [Erdman, 1988]. Yet Bryan lost the 1896 election to William McKinley—the candidate of gold and industrial capital—and the Gold Standard Act of 1900 formally enthroned the monometallic regime, ending the American bimetallic experiment that Hamilton had initiated 108 years earlier. The Urizenic prior, momentarily destabilized by Orc's populist fire, reconsolidated itself in institutional form—precisely as *America a Prophecy* predicts: Urizen descends again, his "icy magazine" poured upon the revolutionary flames.

15 Transatlantic Architectures of Monetary Collapse: Britain and America Compared

15.1 The Divergent Ratios and Their Structural Consequences

The British and American bimetallic experiments, though sharing the same architecture—two metals bound by statutory fiat—diverged in ways that illuminate both the generic logic of bimetallic instability and the specific political economies encoded in each nation's monetary regime. A systematic comparison reveals how Gresham's Law operated with identical structural logic but divergent political consequences across the Atlantic.

Parameter	Britain (1717–1816)	United States (1792–1873)
Statutory Ratio	1:15.21 (Newton, 1717)	1:15 (Hamilton, 1792); revised to 1:16 (1834)
Market Reality	~1:14.5 (European)	~1:15.5 (European, post-1792)
Direction of Drainage	Silver exported to France/India	Gold exported to Europe (pre-1834); Silver exported (post-1834)
Central Bank	Bank of England (1694)	First Bank of US (1791–1811); Second Bank (1816–1836)
Suspension Event	Privy Council order, 26 Feb 1797; Royal Assent, 3 May 1797	Suspension of specie convertibility, 1862–1879
Demonetization	Coinage Act 1816 (56 Geo. III c.68)	Fourth Coinage Act, 12 Feb 1873
Popular Resistance	Minimal (no Free Silver equivalent)	Free Silver movement (1873–1900)
Prophetic Critique	Blake's *Jerusalem*, *Milton*	Bryan's "Cross of Gold" (1896)

The table reveals a structural insight: under Hamilton's 15:1 ratio, which *undervalued* gold relative to the European market of approximately 15.5:1, the United States initially experienced the mirror image of Britain's drainage. American gold was exported to Europe where it commanded higher value, while silver accumulated domestically—making silver, paradoxically, the *de facto* American standard through the 1820s [Laughlin, 1898, Officer, 2001]. This is precisely the inverse of Britain's experience under Newton's 15.21:1 ratio, which overvalued gold and drained silver. The 1834 revision to approximately 16:1 reversed this dynamic, deliberately overvaluing gold to attract it into domestic circulation—but at the cost of triggering the same outward silver flight that had devastated British coinage a century earlier [Redish, 1990].

15.2 Jackson's War on the Bank: The Limits of Institutional Destruction

Andrew Jackson's veto of the Second Bank of the United States in 1832, followed by his executive removal of federal deposits in 1833 and the Bank's ultimate demise in 1836, constitute an episode of resonance for understanding the structural limits of monetary reform. Jackson, the agrarian populist from the frontier, declared the Bank a "monopoly" and a "hydra of corruption" that enriched Eastern financial elites at the expense of the producing classes [Howe, 2007, Wilentz, 2005]. Daniel Walker Howe's *What Hath God Wrought* demonstrates that Jackson's Bank War was not merely an economic dispute but a fundamental contest over the meaning of democratic sovereignty in the new republic: who should control the creation of money, and to whose benefit [Howe, 2007]?

In Blake's mythological terms, this is Orc's revolutionary assault on the Urizenic institution—the fiery destruction of the centralized architecture of credit. Yet Jackson's destruction of the Bank unleashed a "Free Banking" era of wildcat state-chartered institutions that issued unregulated paper currency—precisely the proliferating "allegoric riches" Blake treats in § The fixing of labour and allegoric riches, now scaled horizontally across state charters. Sean Wilentz documents how the period between the Bank's destruction (1836) and the Civil War saw over 1,600 state-chartered banks issuing their own notes, producing a fragmented, unreliable, and frequently fraudulent currency system [Wilentz, 2005].

The Jacksonian paradox recapitulates the Blakean diagnosis with fidelity: destroying the centralized institution does not automatically produce liberation. In the language of *America a Prophecy*, where Orc's revolutionary fire has consumed the old order, Urizen descends again—reconstituting himself in new institutional forms. This cycle of revolution and reconsolidation is not a failure of the revolutionary impulse but a consequence of insufficient cognitive transformation—a structural feature of Blake's prophetic epistemology [Friedman, 2026a,b]. Without the integrative Fourfold Vision that coordinates all four Zoas—reason, passion, sensation, and imagination—the destruction of one Urizenic institution merely clears the ground for another. As Blake writes in *America a Prophecy*:

> "Urizen, who sat / Above all heavens, in thunders wrapp'd, emerg'd his leprous head From out his holy shrine, his tears in deluge piteous Falling into the deep sublime" (*America a Prophecy*, Plates 16–17; Erdman pp. 57–58) [Erdman, 1988, Blake, 1793]

Revolution alone is insufficient; the Urizenic principle merely reconstitutes itself in new institutional forms. Jackson dismantled the *federal* monopoly on credit only to democratize the issuance of unbacked paper through state banks—a horizontal proliferation of the same abstracting technology. Without the qualitative vision that transcends both metallic fetishism and paper abstraction, the destruction of one tyranny merely inaugurates another.

15.3 The Greenback Suspension: America's Unprecedented Wartime Monetary Swerve

The American Civil War (1861–1865) produced its own swerve into fiat abstraction, paralleling the British Bank Restriction of 1797. In 1862, the United States Treasury began issuing Legal Tender Notes ("Greenbacks")—unbacked paper currency designed to finance the Union war effort. Like the Bank Restriction, the American suspension of specie convertibility severed the connection between the circulating medium and any metallic anchor, plunging the economy into a void of fiat abstraction that persisted until the Specie Resumption Act of 1875 restored gold convertibility on 1 January 1879 [Laughlin, 1898, Unger, 1964].

Irwin Unger's Pulitzer Prize-winning *The Greenback Era* demonstrates that the suspension was far more than a wartime expedient: it catalyzed a reorganization of American political coalitions around the question of what money *is* [Unger, 1964]. The "soft money" faction—farmers, debtors, Western entrepreneurs—demanded the permanent retention of Greenbacks as an inflationary counterweight to the deflationary gold standard. The "hard money" faction—Eastern bankers, creditors, industrial capitalists—insisted on resumption and gold convertibility. This division prefigured and structurally anticipated the Free Silver movement of the 1880s–1890s.

The structural parallel with Britain is precise: both the 1797 British suspension and the 1862 American suspension were triggered by existential military crises; both produced inflationary spirals that devastated the laboring classes while enriching financial speculators; and both were resolved by a return to metallic standards that imposed deflationary austerity upon the producing classes. In both cases, Blake's prophetic analysis holds: the oscillation between the crushing geometry of metallic standards and fiat paper constitutes a double bind—a pendulum swing between two modes of quantification, neither of which addresses the fundamental crisis of human value.

15.4 From Albion to America: Prophetic and Monetary Transmission

Blake's *America a Prophecy* concludes not with Orc's triumph but with Urizen's renewed assault—his "icy magazine" poured upon the Atlantic to contain the revolutionary fire for "twelve years" before "France receiv'd the Demon's light" (Plates 16–17; Erdman pp. 57–58) [Erdman, 1988, Blake, 1793]. This prophetic temporality—revolution contained but not extinguished, revolutionary energy transmitted across borders—maps with precision onto the transmission of bimetallic crises across the Atlantic. Britain's 1816 demonetization of silver preceded, and structurally anticipated, America's 1873 demonetization. Barry Eichengreen's *Globalizing Capital* traces this convergence as part of a broader "network effect" in which the gold standard spread not through inherent superiority but through the gravitational pull of London's capital markets, which made gold convertibility the price of access to international credit [Eichengreen, 2019].

This transatlantic transmission functions as a key instance of what Peirce calls the "community of inquirers"—the recognition that no single nation's monetary experiment operates in isolation, but that all are bound in a web of mutual inference and structural feedback [Friedman, 2026a]. Blake's prophetic vision anticipated this insight: Orc's fire cannot be confined to a single continent, and Urizen's counterrevolution is likewise global. The arc from Newton's 1717 ratio through Hamilton's 1792 ratio, through both nations' suspensions and ultimate demonetizations of silver, traces a single structural trajectory: the global establishment of monometallic quantification over bimetallic generation. Yet the 19th-century gold standard was merely a transitional phase toward a more radical monetary abstraction.

16 Consolidating Fiat Abstraction: Federal Reserve to the Nixon Shock

The arc from Newton's 1717 ratio through Hamilton's 1792 ratio traces a single structural trajectory: the global establishment of monometallic quantification over bimetallic generation. Yet the 19th-century gold standard was merely a transitional phase toward a more radical abstraction. The defining monetary events of the 20th century—the establishment of the Federal Reserve (1913), the confiscation of private gold (1933), the demonetization of silver coinage (1965), and the collapse of the Bretton Woods system (1971)—constitute the realization of Blake's *Ulro*: the descent into a fiat void where money is severed entirely from physical substance.

16.1 The 1913 Federal Reserve Act: Centralizing the Architecture of Issuance

On 23 December 1913, Congress passed the Federal Reserve Act, altering the architecture of American monetary sovereignty by transferring the power of currency issuance to a centralized, quasi-public banking system comprising twelve regional Reserve Banks coordinated by the Federal Reserve Board in Washington, D.C. As William Silber documents in *When Washington Shut Down Wall Street*, the establishment of the Federal Reserve was catalyzed not merely by the Panic of 1907 but by a structural crisis: the absence of a "lender of last resort" capable of providing elastic currency during financial panics—a function the Bank of England had performed since 1694 [Silber, 2007]. The Federal Reserve thus represented the belated American adoption of the institutional architecture that Blake had identified as the engine of abstract credit creation.

In Blake's mythological system, the Federal Reserve Act represents the institutional triumph of the "Councellor" who invents, through a kind of fiat, "allegoric riches" (*Jerusalem* 27; see § The fixing of labour and allegoric riches) [Erdman, 1988]. By establishing an elastic currency supply managed through open market operations and fractional reserve banking, the Federal Reserve decoupled the dollar from any fixed metallic constraint, allowing the money supply to expand and contract at the discretion of an appointed technocratic elite. Liaquat Ahamed's *Lords of Finance* demonstrates how the central bankers of the interwar period—Benjamin Strong of the New York Fed, Montagu Norman of the Bank of England, Émile Moreau of the Banque de France, and Hjalmar Schacht of the Reichsbank—wielded this discretionary power with severe economic consequences, their collective mismanagement of the gold exchange standard directly precipitating the Great Depression [Ahamed, 2009].

A reading of Blake's Four Zoas as a "proto-cognitive architecture" illuminates the Federal Reserve's structural error: the consolidation of monetary authority in a single faculty—Urizen's reason—detached from the embodied, sensory, and imaginative dimensions that the other Zoas represent [Friedman, 2026a]. The Fed's founding premise—that rational technocratic management can optimize the money supply—is precisely the Urizenic fantasy that Blake diagnosed. It operationalizes "Newton's sleep," which functions formally as the pathology of rigid priors crushing sensory evidence: the belief that a single geometric framework, administered by a priestly elite, can govern the infinitely complex organism of economic life [Friedman, 2026b]. Where the earlier bimetallic tension decomposed value into two competing metrics, the fiat regime represents an even deeper loss of structural integrity. Synergetic wholeness is destroyed when value becomes an arbitrarily manipulable abstract symbol, severing any remaining anchoring to physical reality and allowing limitless numerical expansion without commensurate productive generation.

16.2 Executive Order 6102: The Confiscation of the Solar Principle

If the Federal Reserve Act abstracted the issuance of money, the onset of the Great Depression catalyzed the confiscation of the metallic anchor itself. Under Executive Order 6102 (5 April 1933) and the subsequent Gold Reserve Act of 30 January 1934, President Franklin D. Roosevelt mandated the surrender of all privately held gold coins, bullion, and gold certificates to the Federal Reserve [Roosevelt, 1933]. Private gold ownership was criminalized—punishable by up to ten years' imprisonment and a $10,000 fine—and the metal was collected and revalued from $20.67 to $35.00 per ounce. This 69% devaluation effectively expropriated the savings of every American who had held wealth in the constitutionally mandated medium of exchange, while simultaneously concentrating the nation's gold in federal vaults at Fort Knox (constructed 1936) and West Point.

The "mental chains" described in *America a Prophecy* had thus materialized into statutory edicts: the citizen could no longer hold the physical substance of value. By capturing the gold, the federal government removed a physical boundary against fiat expansion. The contemporaneous Silver Purchase Act of 1934, championed by the Western silver bloc in Congress, attempted to inflate the currency by nationalizing vast silver reserves and mandating Treasury purchases at artificially elevated prices. This dual confiscation demonstrates that the state recognized the necessity of capturing *both* poles of the bimetallic spectrum to enforce systemic compliance—an institutional consolidation that Blake's prophetic framework renders legible as the final enclosure of metallic reality within the Urizenic ledger.

16.3 The 1965 Coinage Act and the Purging of Circulating Silver

This trajectory reached its domestic culmination with the Coinage Act of 23 July 1965, signed by President Lyndon B. Johnson. Driven by acute shortages resulting from the growing divergence between silver's commodity value and its face value in coinage—a textbook Gresham's Law phenomenon in which the metal's intrinsic worth exceeded its nominal denomination—the Act removed 90% silver content from circulating dimes and quarters, replacing them with copper-nickel clad tokens [Johnson, 1965]. Half dollars were reduced from 90% to 40% silver, and would lose their remaining silver content entirely in 1971. Johnson acknowledged the magnitude of this transformation in his signing remarks, assuring Congress that the Treasury's silver reserves would "keep the price of silver in line with its value in our present silver coin."

The purging of silver from everyday exchange completed a process that had begun with the Crime of 1873. What circulated was no longer physical wealth but symbolic tokens, dependent entirely on the credibility of the issuing authority. The United States had achieved domestically what Blake diagnosed as the terminal condition of Ulro: the total replacement of intrinsic material substance with abstract, administered fiat.

16.4 The Nixon Shock and the Global Triumph of Pure Abstraction

The ontological transformation of money was achieved globally on 15 August 1971, when President Richard Nixon unilaterally terminated the direct international convertibility of the US dollar to gold. Confronting the depletion of US gold reserves from a postwar peak of approximately 20,000 tonnes to roughly 8,133 tonnes, alongside the deficit financing of the Vietnam War and Great Society programs, Nixon suspended the gold window that had anchored the post-war Bretton Woods system since 1944 [Steil, 2013, Eichengreen, 2019].

Benn Steil's *The Battle of Bretton Woods* documents how Keynes and White had designed the original system as a managed gold exchange standard precisely to avoid the deflationary rigidity of the classical gold standard while preserving some metallic discipline against inflationary excess [Steil, 2013]. Nixon's unilateral abrogation of this architecture—announced on a Sunday evening without consulting allied governments—severed the final tether between the global monetary system and physical reality. The world was plunged into a purely fiat regime—a system where all global currencies float against one another, sustained entirely by the credibility, military power, and institutional inertia of sovereign issuers. As Barry Eichengreen demonstrates in *Globalizing Capital*, no historical precedent existed for a global fiat system of this scale; every previous experiment with unbacked paper money, from the Chinese *jiaozi* of the Song Dynasty to the French *assignats* of the 1790s, had ended in inflationary collapse [Eichengreen, 2019].

Official US Treasury–owned monetary gold is often reported near 8,133 tonnes (post–Bretton Woods levels; exact totals move with coining and transfers). Site figures for Fort Knox, West Point, Denver, and related facilities are components of that sovereign stock, not separate pools to be summed into a larger national total. Metal vaulted at the Federal Reserve Bank of New York is predominantly foreign and other custodial holdings—not US official reserves—so it must not be added to Treasury aggregates. That accounting split between sovereign stock and Manhattan custody mirrors the ontological crisis Blake diagnosed: the ledger's line items and the underlying metal are easy to conflate. Treasury gold remains officially valued on the books at the statutory price of $42.22 per ounce established in 1973, vastly understating contemporary market reality. Policy discussion since 2025 has examined historical precedents for sovereign gold revaluations, estimating that marking US reserves to market would yield proceeds equivalent to roughly 3% of GDP—a figure that has prompted Congressional interest in revaluation as a mechanism for sovereign balance sheet management. The Urizenic ledger maintains its geometric fiction—$42.22—while the physical metal trades at a far higher market price.

17 The Sound Money Rebellion: Re-Monetizing Tangible Sovereignty (1985–2026)

Yet the resistance to fiat abstraction has proven structurally persistent. Despite the closure of the gold window in 1971, the demand for tangible, unmediated value has periodically erupted with force—most dramatically in the Hunt brothers' attempted silver accumulation (1979–80) and the subsequent establishment of the American Gold Eagle (1985) and American Silver Eagle (1986) bullion programs, which reintroduced sovereign metallic bullion not for circulation but as constitutionally significant repositories of stored value. By January 2026, the gold-to-silver ratio had compressed from the historical range of 80–90:1 that prevailed through most of the 2010s toward approximately 46:1, suggesting a structural reassertion of silver's monetary premium alongside its growing industrial demand profile.

17.1 The Legislative Renaissance of American State Monetary Federalism

The battle between "allegoric riches" and metallic tangibility has escalated directly into the 21st century as an assertion of constitutional sovereignty. Beginning with the **Utah Legal Tender Act** (HB 317, signed 25 March 2011), a coalition of US states has embarked on a coordinated legislative campaign to formally challenge federal monetary hegemony [Utah State Legislature, 2011, Greene, 2015]. This movement asserts that constituent states possess the constitutional authority under **Article I, Section 10** of the US Constitution—which specifically commands that no state shall "make any Thing but gold and silver Coin a Tender in Payment of Debts"—to erect a parallel monetary ecosystem protecting intra-state commerce from the depreciating trajectory of the fiat dollar.

This constitutional clause is not a footnote; it is the enduring legislative trace of a vision Blake would have recognized. The Framers of the 1787 Constitution—working two years before Blake etched *The Book of Thel* with its metallic interrogative—inscribed into the supreme law of the republic a mandate that state-level money must be physically grounded. Article I, Section 10 compels a monetary realism that the subsequent history of fiat abstraction has sought to render operationally moot without legally repealing. The contemporary sound money movement is, in this constitutional reading, not an innovation but a *re-activation* of dormant foundational law—what Blake's Los, insisting on the tangible and the particular against the geometric abstraction of the ledger, would recognize as the reassertion of the Forge against the Mint.

Between 2011 and 2026, this movement has accelerated with legislative momentum. As of March 2026, **at least ten states** have passed legislation formally operationalizing this constitutional clause:

State	Legislation	Year	Key Provisions
State	Legislation	Year	Key Provisions
Utah	HB 317	2011	First state to recognize US-minted gold/silver coins as legal tender [Utah State Legislature, 2011]
Oklahoma	SB 862	2014	Legal tender for US-minted coins; full tax exemption
Arizona	HB 2014	2017	Sales tax and capital gains tax exemption on precious metals
Louisiana	HB 396 / SB 232	2017/2024	Sales tax exemption; reaffirmed legal tender for US coins
Wyoming	HB 103	2018	Legal tender recognition; sales tax exempt [Wyoming State Legislature, 2018]
Arkansas	Act 595	2023	Full legal tender recognition and tax exemption [Arkansas State Legislature, 2023]
Florida	CS/HB 999	2025	Legal tender for payment of debts; effective July 1, 2026 [Florida State Legislature, 2025]
Texas	HB 1056	2025	Signed by Governor Abbott June 2025; partial effect Sept 2026 [Texas State Legislature, 2025]
Alabama	SB 130	2025	Passed House 102-0; comprehensive legal tender and tax provisions [Alabama State Legislature, 2025]
Nebraska	LB 1317	2024	Removes capital gains tax; explicitly excludes CBDCs from definition of money [Nebraska State Legislature, 2024]

This is not fringe activism. The legislative margins—Alabama's SB 130 passing the House 102-0—indicate broad bipartisan consensus that the constitutional prerogative of metallic money has been temporarily suspended rather than lawfully repealed. The Sound Money Defense League reports broad state-level movement toward reduced taxation on precious metals, representing a national trend toward the formal re-recognition of gold and silver's constitutional monetary status.

17.2 Dismantling the Punitive Tax Architecture of Fiat Enforcement

A critical dimension of this monetary federalism involves the systematic dismantling of the tax architecture designed to penalize precious metal ownership. Under federal tax law, the IRS classifies bullion as a "collectible" subject to a 28% capital gains rate—significantly higher than the 15–20% rate applied to stocks, bonds, and real estate—structurally discouraging its use as a savings vehicle or transactional medium. This classification uses the tax code to enforce fiat monopoly: any citizen who seeks to preserve purchasing power in constitutional money is penalized relative to those who hold Federal Reserve Notes.

The state-level response has been to systematically strip away these penalties. Utah's pioneering HB 317 (2011), later joined by additional measures expanding legal-tender recognition and payment infrastructure, has been followed by Arizona and Oklahoma's complete exemption of sales taxes and capital gains on gold and silver; Nebraska's elimination of state capital gains taxes on metals; and Florida and Alabama's abolition of sales taxes on bullion acquisitions [Utah State Legislature, 2011, Florida State Legislature, 2025, Alabama State Legislature, 2025, Nebraska State Legislature, 2024]. Nebraska's LB 1317 is particularly significant: in addition to removing capital gains taxes on precious metals, it explicitly **excludes Central Bank Digital Currencies (CBDCs) from the legal definition of money**—a direct legislative assertion that digital fiat tokens issued by the Federal Reserve do not constitute constitutionally valid money [Nebraska State Legislature, 2024].

By eliminating the tax friction designed to penalize the holding of physical metal, these states directly challenge the Federal Reserve's capacity to define and administer the medium of exchange. In the language of *America a Prophecy*, this is the Thirteen Angels' collective transformation writ legislative: the states, like Blake's revolutionary governors who rend their robes and stand with Washington in the Orcian flames, are breaking with the received institutional framework—enacting the pragmatist moment of genuine inquiry, where inherited habit is abandoned in favor of a new mode of engagement with the indeterminate monetary situation [Friedman, 2026a]. The movement explicitly positions itself as a defense of the producing classes—an insistence that constitutional metals, constrained by physical scarcity, preserve the purchasing power of labor against the indefinite expansion of fiat currency. It is the modern institutional manifestation of Bryan's agrarian crusade, transposed from the prairie to the statehouse and equipped with precise statutory instruments.

17.3 The Texas Bullion Depository: Sovereign Infrastructure Beyond Federal Custody

A key structural innovation of this 21st-century resistance is the establishment of state bullion depositories. In 2015, the Texas legislature passed **SB 2097**, creating the **Texas Bullion Depository**—launched operationally in 2018 as the first sovereign institutional infrastructure designed specifically for holding precious metals reserves outside of the federal banking apparatus [Texas State Legislature, 2015]. The Depository provides a secure, state-managed, publicly auditable alternative to the federal depositories (Fort Knox has not been independently audited since 1953), and is authorized to accept deposits from individuals, businesses, and government entities. Governor Abbott's subsequent signing of **HB 1056** (June 2025) integrates the Depository's infrastructure with the state's new legal tender framework, creating a vertically integrated system: Texas citizens can hold gold and silver as legal tender, store it in a state-managed depository, and transact with it free of state taxation [Texas State Legislature, 2025].

This infrastructure physically relocates monetary reserves from centralized Federal Reserve custody into explicitly decentralized, state-controlled institutions. When mapped onto Blake's prophetic architecture, this localized legislative reassertion represents the persistence of what Blake called the productive, creative impulse of Los—the blacksmith who works with fire and metal at the forge, insisting on the tangible and the particular against the geometric abstraction of the ledger. The constitutional text that these states invoke—Article I, Section 10—was drafted in 1787, two years before *The Book of Thel* (1789) [Blake, 1789]. Over two centuries later, the tension between abstract ledger and tangible metal endures, and the legislative campaign to reclaim physical monetary sovereignty remains a persistent, structural defense of tangible value against the empire of abstract debt [Erdman, 1988].

18 The Spectral Made Tangible: Precious Metals versus Digital Abstraction

By the third decade of the twenty-first century, the long trajectory that Blake's prophetic system diagnosed—from bimetallic generation through monometallic enclosure to pure fiat abstraction—had reached a critical inflection. The very instruments designed to enforce ontological groundlessness were generating, through their excess, an equal and opposite assertion of metallic tangibility. The years 2020 to 2026 constitute the most significant period of precious metal reassertion since Nixon's closure of the gold window in 1971, driven not by nostalgia but by recurrent stress in fiat regimes. Read through a Blakean lens, these years trace the arc from Orc's renewed stirring beneath the surface to the first coherent legislative and institutional form of Los's counter-forge, with the gold-to-silver ratio compressing from a historic peak near 127:1 toward approximately 50:1 by early 2026.

18.1 The COVID Clinamen and the Pandemic Monetary Swerve

The first shock came with precise mythological timing. On 11 March 2020, the World Health Organization declared COVID-19 a global pandemic. Within two weeks, the gold-to-silver ratio surged to an extraordinary ~127:1 on 18 March—the highest level in recorded history—as financial markets liquidated silver alongside industrial assets, while simultaneously bidding gold toward historic valuations as a safe-haven instrument. This ratio inversion crystallized the dualism Blake's bimetallic framework encodes: silver, the lunar metal of industrial circulation and commercial exchange, collapsed as economic activity froze globally; gold, the solar metal of pure sovereignty, was elevated precisely because the sovereign fiat system appeared threatened [Silver Institute and Metals Focus, 2021].

The Federal Reserve's emergency response—expanding its balance sheet from approximately $4.2 trillion to over $7 trillion in four months, the most aggressive activation of the electronic printing press in monetary history—constituted a *fiat clinamen*: the swerve into maximum abstraction. This produced its precise Blakean counter-reaction: a flight toward the physical, the scarce, the irreducibly material. Gold, which cannot be printed or conjured from a spreadsheet, reasserted itself as the terminal hedge against the limitlessness of the ledger [Steil, 2013].

For Blake, this dynamic is precisely the shape of prophetic crisis—the point at which Urizen's overextension of geometric abstraction provokes Orc's eruption. The pandemic monetary swerve confirmed, in real time, what *America a Prophecy* had mapped prophetically: that the maximum expansion of fiat abstraction generates the maximum counter-pressure from the inherently bounded, the physically constrained, the elementally real. This is the structure of Peirce's "irritation of doubt" writ planetary: the inherited monetary model—infinite fiat elasticity—confronted an encounter it could not assimilate, and the resulting epistemological rupture drove capital toward the tangible foundations that the model had declared obsolete [Friedman, 2026a,b].

18.2 The Silver Squeeze: Digital Orc and the Lunar Metal's Return

If gold's 2020 surge demonstrated sovereign capital's flight toward the solar metal, February 2021 witnessed something genuinely unprecedented in monetary history: a distributed, digitally coordinated attempt by retail participants to assert the monetary value of silver through collective action. On 1 February 2021, users of the *r/WallStreetBets* forum on Reddit launched what became known as the **Silver Squeeze**: a coordinated campaign to purchase silver exchange-traded funds (ETFs), physical bullion, and futures contracts, explicitly framing the operation in the language of monetary justice—as a challenge to the speculative short positions held by major financial institutions, which they characterized as the source of silver's systematic undervaluation relative to its physical scarcity and industrial demand [Silver Institute and Metals Focus, 2021].

The squeeze drove silver briefly toward $30.00 per ounce—its highest level in nearly a decade—while physical premiums exploded, the US Mint sold out of American Silver Eagles, and bullion dealers nationwide posted multi-week backlogs. Although the squeeze ultimately failed to achieve the sustained breakout retail participants sought—institutional short positions were managed and the price retreated—the episode constituted a structurally significant datum: for the first time, digital mass coordination had mounted a credible, if temporary, assault on the paper derivatives infrastructure governing silver's price discovery.

The Silver Squeeze translates with precision into Blake's prophetic vocabulary as an Orcian eruption within the digital domain. Orc—the spirit of revolutionary energy, the "hairy youth" who erupts from subterranean chains—had found a new substrate: the networked forum, the mobile brokerage account, the democratized derivatives market. As in *America a Prophecy*, where Orc's fire "rush

es

from the mountains" and spreads across the Atlantic despite Urizen's attempts to contain it, the Silver Squeeze demonstrated that the demand for tangible, physically constrained monetary value cannot be permanently suppressed by paper derivatives, regardless of their institutional sophistication. Urizen reconstituted himself—through SLV's prospectus amendments, through regulatory scrutiny, through the sheer scale of institutional short positions—but the episode revealed the structural fault line in the paper silver architecture with a clarity no academic monetary analysis had achieved. This is the Blakean cycle incarnate: Orc's fire contained but not extinguished, the revolutionary impulse driven underground to await its next eruption.

18.3 The Green Energy Sector's Photovoltaic Alchemical Inversion

The most profound development in contemporary silver's monetary status derives not from speculative finance but from industrial chemistry—from the physical requirements of the energy transition that the twenty-first century has elevated to existential priority. Silver's role in photovoltaic solar energy generation—where conductive silver paste, applied to approximately 85–100 milligrams per solar cell, creates the electrical pathways that transform photons into electrons—has made it simultaneously the metal of Blake's Lunar imagination and one of the primary physical substrates of the post-carbon economy [Silver Institute and Metals Focus, 2025].

The Silver Institute's *World Silver Survey 2025* documents that industrial demand for silver reached 680.5 million ounces in 2024, driven by a record 232 million ounces consumed by the photovoltaic sector alone—a 20% year-on-year increase generated by the record deployment of solar capacity globally. The same report confirms that the global silver market has recorded five consecutive years of structural deficit (2021–2025), with a cumulative shortfall of approximately 820 million ounces—meaning that for five consecutive years, the world has consumed more silver than it mines and recycles [Silver Institute and Metals Focus, 2025]. This is not a speculative or cyclical phenomenon; it is a structural consequence of the energy transition's inescapable physical demands.

In Blakean terms, this industrial inversion constitutes a startling alchemical mutation. Silver—the Lunar metal of circulation, the medium of trade and human exchange that Gresham's Law drove out of England to France and Asia—has been alchemically *transmuted* by the solar energy system into a vehicle of literal solar power. The Lunar becomes the conduit of the Solar; the metal of reflective wisdom becomes the material substrate of energy capture from the source of all light. The question Thel posed in 1789—"Can Wisdom be put in a silver rod?"—receives, in the photovoltaic cell, an industrial answer Blake could not have anticipated but whose structure his mythopoetics precisely encoded: wisdom *can* be channeled through a silver conductor, but only when the rod ceases to serve the Urizenic purpose of hoarding and instead becomes the living filament of solar transformation. This is Fourfold Vision materialized in industrial chemistry: the solar and lunar principles achieving synthesis not through the political fiction of a bimetallic ratio but through the physical requirements of photon-to-electron conversion. Del Mar's structural insight—that the gold-silver pairing encoded a primordial solar-lunar cosmology of legitimate sovereignty—reappears in the twenty-first century not as metaphysical assertion but as engineering necessity [Del Mar, 1895].

18.4 Central Bank Gold Accumulation: The Sovereign Forge Restoked

The most structurally consequential development in global precious metals from 2020 to 2026 is one that passes largely unnoticed in popular financial discourse but reconfigures the international monetary order: the unprecedented *sovereign re-accumulation of gold* by the world's central banks.

The World Gold Council documents that in 2022, global central banks purchased a record 1,082 tonnes of gold—the highest annual figure in over fifty years, surpassing even the Cold War period of reserve accumulation. In 2023, central banks bought a further 1,037 tonnes, confirming the sustained structural nature of this sovereign shift. The leading buyers included the People's Bank of China (which added over 225 tonnes in 2023 alone), the National Bank of Poland, the Reserve Bank of India, the National Bank of Kazakhstan, and the Czech National Bank—a geopolitically significant coalition spanning emerging-market sovereigns, former Soviet-sphere European nations, and the world's second-largest economy [World Gold Council, 2024].

The proximate catalyst for this acceleration was the seizure of Russia's foreign exchange reserves. On 24 February 2022, Russia invaded Ukraine. Within days, the G7 nations and the European Union immobilized approximately $300 billion of Russia's Central Bank reserves held in Western financial institutions—principally in Euroclear's Belgian clearing system and the Federal Reserve's New York accounts. This action, whatever its political justification, demonstrated to every non-Western sovereign that reserves held in another nation's currency, through another nation's financial infrastructure, can be frozen or confiscated by political fiat. The dollar-denominated reserve system—the foundation of the Bretton Woods monetary order since 1944—was revealed as a conditional grant, not an absolute property right [Eichengreen, 2022].

The consequence was a decisive acceleration of **de-dollarization**: the systematic reduction of dollar-denominated assets in sovereign reserve portfolios and their replacement with gold—the one asset that is no one's liability, that cannot be frozen by a sanctions regime because it cannot exist on a counterparty's ledger. This sovereign accumulation constitutes, in the deepest Blakean sense, the first *institutional* manifestation of what Blake identified as the Los imperative: the insistence that genuine sovereignty requires the tangible, the physical, the irreducible—that value stored in a counterparty's promise is not value but a form of subjugation dressed in the language of liquidity.

18.5 BRICS De-Dollarization and the Multipolar Monetary Horizon

At the August 2023 BRICS summit in Johannesburg—attended by China, Russia, India, Brazil, and South Africa, where leaders invited Argentina, Egypt, Ethiopia, Iran, Saudi Arabia, and the UAE to join, with four of those six countries acceding on 1 January 2024 (Egypt, Ethiopia, Iran, and the UAE; Argentina declined and Saudi Arabia deferred)—delegates debated explicitly the creation of a new trade settlement mechanism that would circumvent the dollar-denominated SWIFT system. While a formal gold-backed BRICS currency was not adopted, the summit's agenda represented the most serious institutional challenge to the post-1971 dollar reserve architecture since the collapse of Bretton Woods itself [Eichengreen, 2019].

The structural driver of this discussion is precisely the dynamic that Blake's cosmological framework illuminates: the dollar system requires every non-US sovereign to accept its issuance prerogative, its rule changes, and its sanction regimes as the price of integration into global trade. This represents the global generalization of the Urizenic dynamic Blake identified in Newton's 1717 Mint ratio: a geometric constraint imposed by a singular power upon the multinational circulation of value, extracting seigniorage from every nation that holds dollar reserves as its primary monetary anchor. The BRICS de-dollarization impulse is, in the deepest structural sense, the global south asserting what the Western silver states assert in their statehouse legislation: that value stored in a foreign sovereign's promise is no value at all—that genuine sovereignty requires material independence from the ledger of the dominant power.

18.6 The Digital Counter-Forge: CBDCs and the Ultimate Urizenic Enclosure

Arrayed against this movement toward metallic tangibility stands the most ambitious enclosure of value in monetary history: the Central Bank Digital Currency (CBDC). By March 2026, over 130 countries, representing approximately 98% of global GDP, were engaged in some phase of CBDC exploration, development, or deployment, according to the Atlantic Council's CBDC Tracker [Atlantic Council GeoEconomics Center, 2026]. The digital yuan (e-CNY) had processed over 7 trillion yuan in transactions since its 2020 pilot launch; the European Central Bank's digital euro was progressing through its preparation phase; the Bank of England had completed consultations on a UK retail CBDC.

CBDCs represent the apotheosis of the Urizenic architectural project. Where previous monetary abstractions—from Bank of England notes to Federal Reserve digital deposits—retained some residual opacity and porosity, a programmable CBDC encodes the possibility of *comprehensive surveillance*, *conditional spending*, *expiration dates on money*, *negative interest rates applied directly to holdings*, and *automated tax collection at the point of transaction*. The CBDC is, in every structural respect, what Urizen fantasized in the opening plates of *The First Book of Urizen*—before Blake transferred this vision to *Jerusalem*: "One King, one God, one Law" (*Jerusalem*, Plate 4, line 40; Erdman p. 145) [Erdman, 1988]—a singular, geometric, omniscient framework in which every transaction in the monetary universe is visible and controllable from the sovereign's vantage point.

Nebraska's LB 1317 (2024) becomes, in this context, far more than a tax measure: its explicit exclusion of CBDCs from the legal definition of money represents the first legislative assertion that the digital Urizenic enclosure is constitutionally incommensurable with the "gold and silver Coin" that Article I, Section 10 mandates. As Blake declared in *Jerusalem*, the human community must "Create" its own "System" or be "enslav'd by another Mans" [Erdman, 1988]: Nebraska's CBDC exclusion is precisely this—a system being created by legislative inscription to resist the totalizing architecture of digital fiat sovereignty.

$$\mathrm{GSR}(t) = \frac{P_{\mathrm{Au}}(t)}{P_{\mathrm{Ag}}(t)}, \quad \text{where } \mathrm{GSR}(t_{\mathrm{peak}}) \approx 127 \text{ (18 March 2020) and } \mathrm{GSR}(t_{2026}) \approx 50 \text{ (Q1 2026)} \tag{3}$$

The gold-to-silver ratio GSR_t (Eq. 3) encodes the tension between sovereign safe-haven demand (gold) and industrial-monetary dual demand (silver). The historically unprecedented compression from ~127:1 to the low 50s in six years—a structural shift driven by photovoltaic silver demand, digital retail demand coordination, and sovereign gold accumulation simultaneously—constitutes the first measurable, data-supported *bimetallic rebalancing signal* since Newton's 1717 Mint ratio imposed its inaugural disparity [Silver Institute and Metals Focus, 2025, World Gold Council, 2024].

For Blake, none of these developments—however structurally significant—represent liberation. The restoration of bimetallic parity, the accumulation of gold in sovereign vaults, the state recognition of metallic legal tender: these remain within the domain of *Generation*, of the Twofold Vision that manages the tension between solar and lunar metals without transcending the metric logic of quantification itself. As long as value is denominated in any commodity, the fundamental Urizenic error persists: the reduction of the irreducible human soul to a weight, a price, a quantity. The challenge *The*

Book of Thel posed in 1789 remains, in 2026, structurally unanswered [Blake, 1789]. The solar and lunar metals have returned to the center of global monetary discourse not because humanity has closed that argument, but because the fiat system's failure to sustain a credible alternative to qualitative value has become impossible to deny.

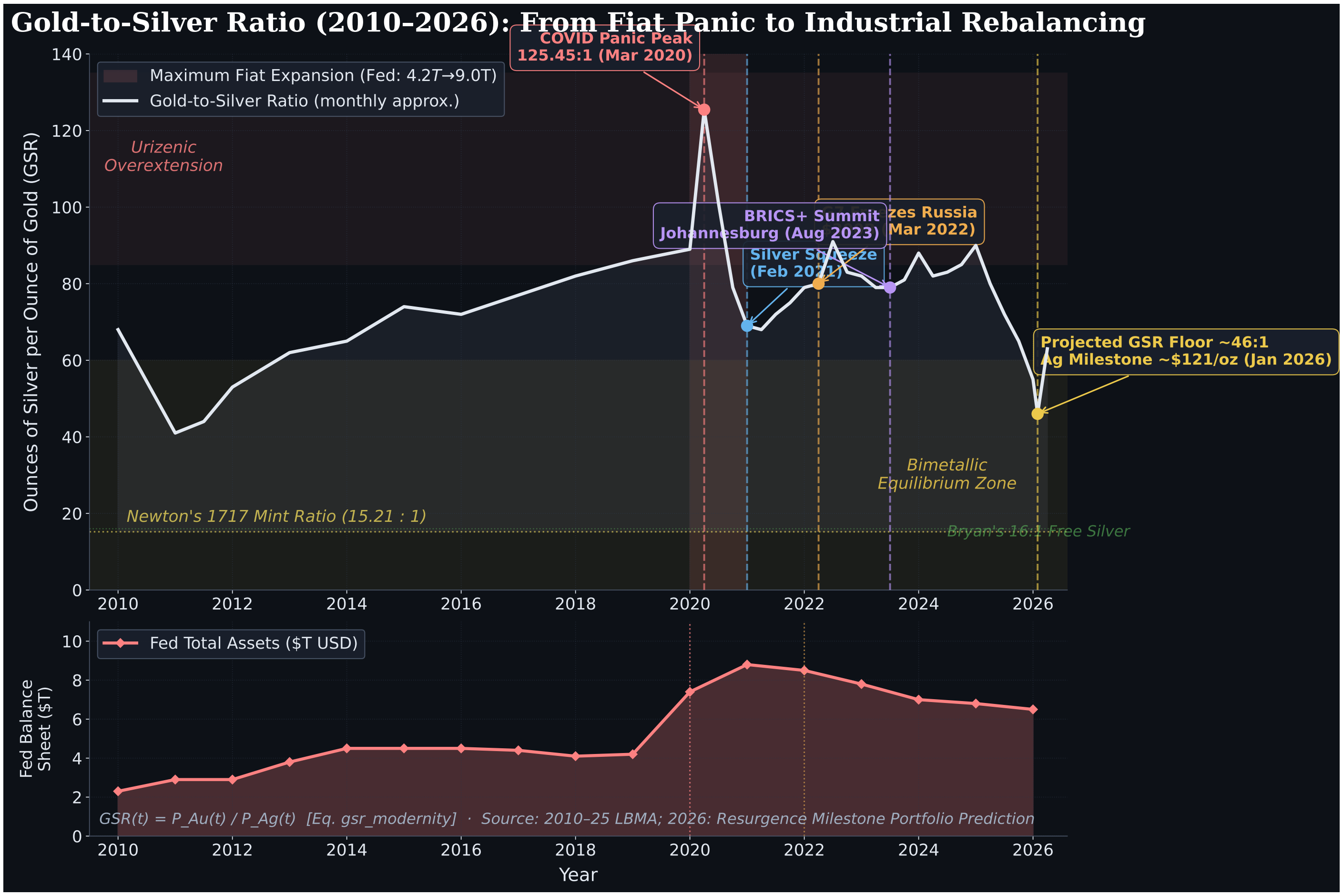

Figure 7: Gold-to-Silver Ratio and Fiat Expansion, 2010–2026. Top panel: empirical monthly gold-to-silver ratio (GSR, Eq. 3) from 2010 through Q1 2026 plotting atomic gold and silver prices from the LBMA benchmark, with a dashed reference line plotting Bryan's historic 16:1 bimetallic target. Vertical markers denote structurally significant events: COVID liquidity panic peak near 127:1 (18 March 2020); Silver Squeeze coordination event (February 2021); G7 freezing of Russian reserves triggering central bank gold accumulation (March 2022); BRICS+ Johannesburg summit (August 2023); and silver nominal high with GSR floor below 50:1 (January 2026). Bottom panel: tracks the Federal Reserve Total Assets ($T), visualizing the maximum Urizenic fiat expansion ($4.2T →$8.9T) coinciding with peak precious metal volatility in 2020–2021. The systematic compression of the ratio from 125:1 toward 46:1 encodes the structural reassertion of silver's dual monetary-industrial demand against gold's sovereign safe-haven function.

19 Discussion: The Alchemical Forge and the Destruction of Urizen

Human history operates by oscillating between periods of meta-stability and thermodynamic collapse. The complete breakdown of the British bimetallic standard—accelerated by the paper panic of 26 February 1797, debated during the Bullionist Controversy, finalized by the establishment of the rigid gold anchor on 22 June 1816 (56 Geo. III c.68), and later tightened by the 1844 Bank Charter Act and ledger-credit expansion—is traditionally interpreted by orthodox economic historians as a victory for empirical governance, stability, and rationality over the anarchy of fluctuating bullion markets [Fetter, 1965]. As demonstrated in the preceding transatlantic analysis, this trajectory was replicated in parallel across the Atlantic: Hamilton's republican bimetallic ratio of 15:1 (1792) underwent the same Gresham-driven degradation, culminating in the American "Crime of 1873", the fiat centralization of the 1971 Nixon Shock, and the subsequent decentralized, state-level metallic rebellions extending through 2026. This roughly three-century arc constitutes a global confirmation of the Urizenic principle's expansion and Orc's resistance. As we and others have explored, Blake's prophetic epistemology anticipated this very arc: the cycle of revolution, institutional reconsolidation, and renewed prophetic rupture that characterizes the history of monetary sovereignty maps onto the pragmatist architecture of inquiry itself—the organism encountering an indeterminate situation, breaking inherited habit, and forging, through fallibilistic self-correction, new modes of engagement with the world [Friedman, 2026a,b, Laughlin, 1898, Blake, 1793].

19.1 The Blakean Inversion of Traditional Neoclassical Economic Orthodoxy

However, when this history is mapped against William Blake's prophetic critiques, the financial historiography of Alexander Del Mar [Del Mar, 1895], and the dimensions of *Fourfold Vision*, the usual neoclassical consolation narrative loses its force. The 1816 Coinage Act stands exposed not as the march of progress, but as a regression back into the materialist, atomized despair of *Single Vision (Ulro)* [Redish, 1990]. Setting the price of human labor against geometric gold—the 22-carat sovereign at 123.274 grains, minted with steam-powered precision on Boulton's presses—and fictitious "allegoric riches" revives the miser logic of the Reynolds marginalia explored earlier [Blake, 1808]. The Mint has triumphed over the Forge.

19.2 The Double Bind of Metal and Paper

Blake recognized that standardizing vital human existence to finite, atomized currency sets a course towards both spiritual and societal entropy. The debate between the Bullionists and Anti-Bullionists was ultimately a double bind: a choice between the idol of dead metal and the idol of dead paper [Thornton, 1802, Ricardo, 1810]. From a generic, first-principles standpoint, both positions share the same axiom: that value is a *quantity* to be measured rather than a *quality* to be cultivated. The Bullionists insist the measuring rod must be gold—the post-1816 sovereign's 113 grains of fine gold; the Anti-Bullionists accept paper as a sufficient proxy, backed only by the Bank's sovereign guarantee and the "needs of trade." Neither party questions whether the act of measurement itself is the source of the disease.

Blake grasped this deeper pattern. In *The Book of Thel*, his question—"Can Wisdom be put in a silver rod? / Or Love in a golden bowl?" (1789)—rejects the premise of both positions [Blake, 1789]. Wisdom cannot be weighed; Love cannot be minted. By interrogating the dualistic friction of bimetallism through the creative furnace of Los—transmuting the isolated solar gold and lunar silver into a Fourfold qualitative ontology through acts of artistic and spiritual labor—Blake provides the template for human liberation [Erdman, 1988, Thompson, 1993].

19.3 Toward a Prophetic Economics: Active Inference and Fourfold Refusal

Under Active Inference, approximate Bayesian agents minimize an expected free energy functional which decomposes into **pragmatic value** (also known as constraint, or the cost of outcomes relative to prior preferences) and **epistemic value** (the information gain from resolving uncertainty about hidden causes) [Friston, 2010, Parr and Friston, 2018]. Read alongside Blake's monetary arc, that split suggests an **epistemic bimetallism**: a living intelligence must keep both moments in tension—neither collapsing into pure pragmatic fixation (the monometallic drive to enforce a single, "correct" price and policy outcome at all costs) nor dissolving into endless epistemic drift without commitments strong enough to act. Bimetallism's statutory pairing of gold and silver is a crude institutional image of the same structure: two incommensurable yet co-constitutive registers of value that prevent the system from pretending that one scalar solves the whole problem. Where Urizenic finance demands a unique numéraire—gold *or* paper, ledger *or* metal—Blake's Fourfold refusal and the free-energy formalism both insist that viable cognition (and viable political economy) requires coupling preference-respecting action with openness to evidence that can falsify one's model of the world. Blake's "doors of perception" can be formalized as statistical boundaries (Markov blankets) separating self from world, and his "fourfold vision" maps directly onto hierarchical precision-weighting across processing depths, establishing epistemic balance [Friedman, 2026a,b]. Epistemic bimetallism is therefore not a return to nineteenth-century coin ratios but a norm for any system, biological or institutional, that would avoid both the violence of Single Vision and the paralysis of unconstrained scepticism.

True wealth cannot be quantified by the gram, nor engineered by "chimeric measurement" regimes [Albernaz, 2024], nor secured behind the doors of the Bank of England. It cannot be legislated by a Newton or a Lord Liverpool, codified in a statute at 56 Geo. III c.68, or guaranteed by whatever bullion happens to sit in the Bank's vaults. As Blake anticipated the Marxist critique of alienation decades before *Das Kapital*, he recognized that reducing human life to capitalist relations severs humanity from its creative essence. The Erdman reading of Urizen, "slave labor," and the "great Work master" as prefiguring Marx's abstract labor was established in the Introduction [Erdman, 1954].

The years 2020 to 2026 have revivified this prophetic frame in bullion markets, retail coordination, industrial silver draw, sovereign gold accumulation, reserve sanctions, and CBDC proliferation; the figures and citations are consolidated in § The Spectral Made Tangible (2020–2026) [World Gold Council, 2024, Eichengreen, 2022, Atlantic Council GeoEconomics Center, 2026, Blake, 1794].

19.4 The Temporal Grammar: Coherence, Rupture, and Regeneration

The epistemic bimetallism articulated above—the necessary tension between pragmatic fixation and epistemic openness—has recently received rigorous mathematical grounding through the Coherence-Rupture-Regeneration (CRR) framework [Sabine, 2026]. Sabine demonstrates that any bounded system governed by the Free Energy Principle must oscillate through three coupled temporal phases, each of which maps onto the Blakean mythological cycle with structural precision.

19.4.1 The Phase of Coherence: Los Laboring at the Forge

The first phase is *coherence*: the system accumulates Fisher-Rao arc length on its statistical manifold. Each observation tightens the posterior, each datum extends the geodesic the system has traversed. In Blake's idiom, this is Los at the forge—each hammer-blow an increment of evidence, each spark a datum binding the generative model more tightly to its world. Coherence is not static equilibrium but *active construction*: the system builds, through sustained engagement with its environment, the very manifold on which it will eventually exhaust itself.

19.4.2 The Phase of Rupture: Orc Breaking Urizen's Rigid Chains

The second phase is *rupture*: the Dirac-delta transition triggered when accumulated coherence saturates the manifold's geodesic extent. Sabine formalises this threshold as:

$$C \cdot \Omega = 1$$

where C is accumulated coherence (Fisher-Rao arc length) and Ω is the manifold's total geodesic capacity. At saturation, the system can no longer assimilate new evidence within its current geometry—the model *breaks*. In Blake's prophecy, this is Orc breaking Urizen's chains: the revolutionary eruption that shatters a regime grown too rigid to accommodate the living world it purports to govern.

19.4.3 The Phase of Regeneration: Albion Rising from the Ashes

The third phase is *regeneration*: the exponentially weighted reconstruction from historical memory. The system does not restart from nothing; it reconstitutes from a kernel that preserves the most salient features of prior experience while discarding the exhausted geometry. This is Albion rising—the Universal Man reassembling from the fragments of the fallen Zoas, the kernel reopening.

19.4.4 Topological Invariants and the Theoretical Necessity of the $\sqrt{2}$ Ratio

Two symmetry classes yield parameter-free thresholds fixed by manifold topology alone:

- $\pi) for \mathbb{Z}_2$ symmetry (bistable, sensory): the boundary alternation at every edge of a Markov blanket.
- $2\pi) for \mathrm{SO}(2)$ symmetry (rotational, prior-bearing): the continuous belief cycle at every node.

Their ratio is exactly 2—a topological invariant that is, as Sabine observes, structurally identical to the Cramér-Rao bound, the Mandelstam-Tamm quantum speed limit, and the Higgs vacuum manifold. The CRR finding that the free-energy-optimal precision allocation between sensory and prior channels satisfies:

$$\frac{\pi_p}{\pi_s} = \sqrt{2}$$

gives quantitative substance to our epistemic bimetallism. Viable cognition, and viable political economy, requires not merely *two* registers of value but their maintenance at a specific, mathematically determined ratio [Sabine, 2026, Friston, 2010].

The Urizenic collapse from bimetallism to monometallism can be modeled an Ω-collapse—the regeneration kernel sharpening until only the most familiar patterns (geometric gold, single numéraire, Newton's sleep) reconstitute. The Orcian ruptures traced across three centuries—the Bank Restriction of 1797, Bryan's Cross of Gold, the Nixon Shock, the state-level metallic rebellions of 2011–2026—are threshold-crossings at which accumulated coherence exhausted its regime's finite capacity and the system was forced to reorganise.

Blake's "Without Contraries is no progression" is, in CRR's information geometry, a theorem [Blake, 1790]. The Forge does not merely resist the Mint; it regenerates, on a manifold whose curvature is set by the very topology of bounded cognition, the capacity for renewed vision that every monometallic collapse temporarily annihilates. The conclusion states, without repeating the formalism, what is at stake when that regenerative capacity meets the monetary forms of the present.

20 Conclusion: The Eternal Stance of the Forge Against the Mint

The transition from bimetallism to the gold standard—and ultimately to unanchored twentieth-century fiat, and now to programmable digital currency—was not merely an economic sequence, but the successive enforcement of spiritual abstractions. The coherence–rupture–regeneration temporal grammar implies that each of these monetary regimes advanced until its own geometry could absorb no more lived contradiction. Epistemic bimetallism is therefore less a policy prescription than a refusal to let any one single abstraction—bullion weight, bank ledger, or executable token—stand in for the full fourfold valuation of persons in community.

Blake's final prophetic vision—the building of Jerusalem "Among these dark Satanic Mills" (*Milton*, Preface, Plate 1; Erdman p. 95) [Erdman, 1988]—is a transfiguration of economic reality and economy: the insistence that the human community can and must create systems of value that honor the irreducible dignity of every living soul.

Programmable retail CBDC architectures and state-level reassertions of Article I's metallic mandate are rival institutional imaginations of the same enclosed metric; neither is destiny, and both can be read as increasingly desparate attempts to answer Orc with a tighter Urizenic grid. These forces operate with copper acid-baths, blockchains, private ledgers, legislative chambers, and surely other tools to come. Against this single vision, the human imperative remains identical: energetically resist the geometric reduction of human life to a metric, to maintain minimum two (minimum!), and assert the openly infinite valuation of the human form and imagination. Los hammers at the anvil of every century; the Forge stands eternal against the Mint.

References

Liaquat Ahamed. *Lords of Finance: The Bankers Who Broke the World*. Penguin Press, New York, 2009.

Alabama State Legislature. Alabama legal tender act (sb 130), 2025. Passed House 102-0; effective 2025.

Joseph Albernaz. *Common Measures: Romanticism and the Groundlessness of Community*. Stanford University Press, Stanford, 2024.

Arkansas State Legislature. Arkansas legal tender act (act 595), 2023. Enacted April 11, 2023; effective August 1, 2023.

Atlantic Council GeoEconomics Center. CBDC tracker, 2026. URL https://www.atlanticcouncil.org/cbdctracker/. Tracks global central bank digital currency development across 130+ countries; accessed March 2026.

Ian Baucom. *Specters of the Atlantic: Finance Capital, Slavery, and the Philosophy of History*. Duke University Press, Durham, 2005.

Richard Franklin Bensel. *The Political Economy of American Industrialization, 1877–1900*. Cambridge University Press, Cambridge, 2000.

Jr. Bentley, G.E. *Blake Records*. Yale University Press, New Haven, second edition, 2004. Documents Blake's signing of Tilloch's anti-forgery petition (5 April 1797) among 18 London engravers.

William Blake. *The Book of Thel*. William Blake, London, 1789.

William Blake. *The Marriage of Heaven and Hell*. William Blake, London, 1790. Relief-etched illuminated book; composition and printing c. 1790–1793.

William Blake. *America a Prophecy*. William Blake, Lambeth, 1793. Illuminated book, 18 plates, relief etching.

William Blake. *The First Book of Urizen*. William Blake, London, 1794.

William Blake. *Jerusalem: The Emanation of the Giant Albion*. William Blake, London, 1804. Composed and etched c. 1804–1820.

William Blake. *Annotations to Sir Joshua Reynolds's Discourses*. William Blake, 1808. Marginalia.

Patrick Brantlinger. *Fictions of State: Culture and Credit in Britain, 1694-1994*. Cornell University Press, Ithaca, 1996.

John Clapham. *The Bank of England: A History*, volume 2. Cambridge University Press, Cambridge, 1944.

Mark Crosby. Blake and the banknote crises of 1797, 1800, and 1818. *University of Toronto Quarterly*, 80(4):815–838, 2011. doi: 10.3138/utq.80.4.815.

Alexander Del Mar. *A History of Money in Ancient Countries from the Earliest Times to the Present*. George Bell Sons, London, 1885.

Alexander Del Mar. *History of Monetary Systems: Record of Actual Experiments in Money Made by Various States of the Ancient and Modern World*. Effingham Wilson, London, 1895.

Barry Eichengreen. *Globalizing Capital: A History of the International Monetary System*. Princeton University Press, Princeton, third edition, 2019.

Barry Eichengreen. Sanctions, SWIFT, and China's cross-border interbank payments system. *CIGI Papers*, (263), 2022.

David V. Erdman. *Blake: Prophet Against Empire*. Princeton University Press, Princeton, 1954.

David V. Erdman. *The Complete Poetry and Prose of William Blake*. University of California Press, Berkeley, newly revised edition, 1988.

Frank W. Fetter. *Development of British Monetary Orthodoxy, 1797-1875*. Harvard University Press, Cambridge, MA, 1965.

Marc Flandreau. The french crime of 1873: An essay on the emergence of the international gold standard. *The Journal of Economic History*, 56(4):862–897, 1996.

Marc Flandreau. *The Glitter of Gold: France, Bimetallism, and the Emergence of the International Gold Standard, 1848–1873*. Oxford University Press, Oxford, 2004.

Florida State Legislature. Florida gold and silver legal tender act (cs/hb 999), 2025. Passed 2025; effective July 1, 2026.

Daniel Ari Friedman. Before pragmatism had a name: Blake's "America A Prophecy" anticipates American anticipatory epistemology, 2026a. URL https://zenodo.org/records/18984939. Maps six structural convergences between Blake's visionary epistemology and pragmatist tradition (Peirce through Brandom); Orc's fire as Peirce's irritation of doubt; Four Zoas as proto-cognitive architecture anticipating Active Inference.

Daniel Ari Friedman. The doors of perception are the threshold of prediction: Active inference and william blake's theory of seeing. 2026b. doi: 10.5281/zenodo.18600040. URL https://zenodo.org/records/18600041.

Milton Friedman and Anna Jacobson Schwartz. *A Monetary History of the United States, 1867–1960*. Princeton University Press, Princeton, 1963.

Karl J. Friston. The free-energy principle: a unified brain theory? *Nature Reviews Neuroscience*, 11(2):127–138, 2010. doi: 10.1038/nrn2787.

Northrop Frye. *Fearful Symmetry: A Study of William Blake*. Princeton University Press, Princeton, 1947.

R. Buckminster Fuller and E. J. Applewhite. *Synergetics: Explorations in the Geometry of Thinking*. Macmillan, New York, 1975.

Matthew Green. 'sublime labours': Aesthetics and political economy in blake's jerusalem. *Studies in Romanticism*, 46(1): 21–42, 2007.

Richard Greene. Understanding the utah legal tender act: Constitutional and practical implications. *State Constitutional Law Review*, 4(2):112–134, 2015.

Alexander Hamilton. *Report on the Establishment of a Mint*. Treasury Department, Philadelphia, 1791. Submitted to Congress, 28 January 1791.

Richard Hofstadter. *The Age of Reform: From Bryan to FDR*. Alfred A. Knopf, New York, 1955.

J. Keith Horsefield. *British Monetary Experiments, 1650–1710*. Harvard University Press, Cambridge, MA, 1960.

Daniel Walker Howe. *What Hath God Wrought: The Transformation of America, 1815–1848*. Oxford University Press, New York, 2007.

Lyndon B. Johnson. Remarks at the signing of the coinage act, July 1965. Public Law 89-81, 79 Stat. 254.

Michael Kazin. *A Godly Hero: The Life of William Jennings Bryan*. Anchor Books, New York, 2006.

J. Laurence Laughlin. *The History of Bimetallism in the United States*. D. Appleton and Company, New York, 1898.

Saree Makdisi. *William Blake and the Impossible History of the 1790s*. University of Chicago Press, Chicago, 2003.

Saree Makdisi. *Reading William Blake*. Cambridge University Press, Cambridge, 2014.

Jon Mee. *Dangerous Enthusiasm: William Blake and the Culture of Radicalism in the 1790s*. Clarendon Press, Oxford, 1992.

Jon Mee. Blake's politics in history. In Morris Eaves, editor, *The Cambridge Companion to William Blake*, pages 133–149. Cambridge University Press, 2003.

Alan Moore. Alan Moore on William Blake's contempt for Newton. *Royal Academy of Arts*, 12 2014. URL https://www.royalacademy.org.uk/article/william-blake-isaac-newton-ashmolean-oxford.

Nebraska State Legislature. Nebraska sound money act (lb 1317), 2024. Removes state capital gains tax on precious metals; excludes CBDCs from definition of money.

Curtis P. Nettels. *The Emergence of a National Economy, 1775–1815*. Harper & Row, New York, 1962.

Lawrence H. Officer. The U.S. mint's profit from bimetallic coinage, 1792–1853. *Explorations in Economic History*, 38 (2):283–302, 2001.

Thomas Parr and Karl J. Friston. The anatomy of inference: Generative models and brain structure. *Frontiers in Computational Neuroscience*, 12:90, 2018. doi: 10.3389/fncom.2018.00090.

Mary Poovey. *Genres of the Credit Economy: Mediating Value in Eighteenth- and Nineteenth-Century Britain*. University of Chicago Press, Chicago, 2008.

Charles Postel. *The Populist Vision*. Oxford University Press, New York, 2007.

Stephen Quinn. Competing bimetallic ratios: Amsterdam, london, and bullion arbitrage in mid-eighteenth-century britain. *The Journal of Economic History*, 56(1):71–90, 1996. doi: 10.1017/S002205070001595X.

Stephen Quinn and William Roberds. The bank of england and the great recoinage of 1696. *The Economic History Review*, 60(2):328–350, 2007.

Angela Redish. The evolution of the gold standard in england. *The Journal of Economic History*, 50(4):789–805, 1990. doi: 10.1017/S002205070003780X.

Angela Redish. *Bimetallism: An Economic and Historical Analysis*. Cambridge University Press, Cambridge, 2000.

Alexander Regier. *Fracture and Fragmentation in British Romanticism*. Cambridge University Press, Cambridge, 2010.

David Ricardo. *The High Price of Bullion, a Proof of the Depreciation of Bank Notes*. John Murray, London, 1810.

Franklin D. Roosevelt. Executive Order 6102 – Requiring gold coin, gold bullion and gold certificates to be delivered to the government, April 1933. Issued under authority of the Emergency Banking Act, 9 March 1933.

Alexander Sabine. The doors of perception are mathematical: Coherence, rupture, and regeneration in Blake, Active Inference, and Quantum Physics, April 2026. URL https://doi.org/10.5281/zenodo.19388291. Presents the Coherence-Rupture-Regeneration (CRR) framework as temporal process machinery for the Free Energy Principle; maps Blake's Four Zoas (Los, Orc, Urizen, Albion) to CRR phases; derives parameter-free thresholds π (Z_2) and 2π (SO(2)) from manifold topology; demonstrates structural identity with Cramér-Rao bound, Mandelstam-Tamm speed limit, and Higgs vacuum manifold; companion to "Phase-Gating Across Precision Channels" (AGI 2026 Workshop).

Joshua Schouten de Jel. *William Blake's Selfhood and the Atomistic Materialism of Lucretius' De Rerum Natura*. PhD thesis, University of Plymouth, 2021.

William L. Silber. *When Washington Shut Down Wall Street: The Great Financial Crisis of 1914 and the Origins of America's Monetary Supremacy*. Princeton University Press, Princeton, 2007.

Silver Institute and Metals Focus. World silver survey 2021. Technical report, Silver Institute, Washington, DC, 2021. Annual survey of global silver supply, demand, and price data.

Silver Institute and Metals Focus. World silver survey 2025. Technical report, Silver Institute, Washington, DC, 2025. Documents fifth consecutive annual structural silver market deficit (2021–2025); cumulative shortfall of approximately 820 Moz; photovoltaic sector demand exceeding 232 Moz in 2024.

Susanne Sklar. *Blake's Jerusalem As Visionary Theatre: Entering the Divine Body*. Oxford University Press, Oxford, 2011.

Benn Steil. *The Battle of Bretton Woods: John Maynard Keynes, Harry Dexter White, and the Making of a New World Order*. Princeton University Press, Princeton, 2013.

Richard Sylla and David J. Cowen. *Alexander Hamilton on Finance, Credit, and Debt*. Columbia University Press, New York, 2018.

Texas State Legislature. Texas bullion depository (s.b. 2097), 2015. Established Texas state-administered depository for precious metals.

Texas State Legislature. Texas gold and silver legal tender act (hb 1056), 2025. Signed by Governor Abbott June 2025; partial effect Sept 1, 2026.

E.P. Thompson. *Witness Against the Beast: William Blake and the Moral Law*. Cambridge University Press, Cambridge, 1993.

Henry Thornton. An enquiry into the nature and effects of the paper credit of great britain. 1802.

Thomas Tooke. *A History of Prices and of the State of the Circulation from 1793 to 1837*. Longman, London, 1838.

Irwin Unger. *The Greenback Era: A Social and Political History of American Finance, 1865–1879*. Princeton University Press, Princeton, 1964.

Utah State Legislature. Utah legal tender act (h.b. 317), 2011. URL https://le.utah.gov/~2011/bills/hbillint/hb0317s01.htm. Enacted March 25, 2011.

François R. Velde. Limits of bimetallism. Working Paper WP-05-18, Federal Reserve Bank of Chicago, 2005.

Richard White. *The Republic for Which It Stands: The United States During Reconstruction and the Gilded Age, 1865–1896*. Oxford University Press, New York, 2017.

Sean Wilentz. *The Rise of American Democracy: Jefferson to Lincoln*. W.W. Norton, New York, 2005.

World Gold Council. Gold demand trends full year 2023. Technical report, World Gold Council, London, 2024. Documents central bank gold purchases of 1,082 tonnes in 2022 (50-year record) and 1,037 tonnes in 2023; China PBC, Poland, India identified as leading buyers.

Wyoming State Legislature. Wyoming legal tender act (hb 103), 2018. Recognizes US-minted gold and silver coins as legal tender; sales tax exempt.