foreword

"It is success for all or for none." — R. Buckminster Fuller, Operating Manual for Spaceship Earth, final chapter "The Regenerative Landscape", 1969

Ronja & Coco,they were good friends: on the job market, they find themselves again, side by side in competition.

Yes, what is the value of the secular character of a society if its worship of the material object amounts to total

The main thing is that it goes on: submission?
Historical profits from historically cold radiators.

but

the age of commodity production can
no longer sustain itself.
It produces its own destruction on a continuous
conveyor belt.

"die and become!"

And die,
until you understand what that means.
I
dissolve your body in dimethylmercury
and you die again, I mean,
as if it had ever been any different.
Bodies mean endings,
and tell me, What's so terrible about it if
you no longer have a ***heart***,
if nothing pulses, through your veins to prove
that you're alive?
Tell me,
what are you afraid of?

What's really so great about feeling and the body and everything else, when dimethylmercury eats away at your skin?
tell me, what

=Money

I bet: nothing

For love is not a thing, but stronger than any thing.

FIRST FINDING · THE 1969 WAGER

In 1969, Fuller closes his book with a sober wager: scarcity is not a law of nature, but a problem of maintenance, one that can be solved by seeing better.
That same year, with the *World Game*, he puts forward the technical answer: a computer-assisted inventory of the world's resources, designed to show what actually exists, where it exists, and in what quantity (Fuller, 1969). For Fuller, the computer was not an administrative instrument. It was the organ that could finally see enough for the machine to run properly.
More than fifty years later, that hope has itself become a question of power. Computing capacity is now concentrated around a handful of extremely narrow bottlenecks: energy, cooling, and above all EUV lithography. Whoever controls these bottlenecks indirectly controls how much of Fuller's promise can still be realized today. The organ that was supposed to see enough has itself become a resource, contested much like oil or rare earths.
Once such a system becomes powerful enough to participate in its own further development, progress also shifts from linear to recursive: it optimizes its own next version, thereby accelerating the rate at which control over those bottlenecks becomes further concentrated. Even mere access to finished systems becomes scarce, not just their manufacture.
⇒ Fuller's organ of perception thus becomes itself an object of geopolitical competition.

SECOND FINDING · THE LUBRICANT

From the outside, without any vested interest in the system, what catches the eye first is the grinding, not the cause. What actually mediates the movement of this machine is not computing power, but money.
Money: the lubricant of every economy based on the division of labor. Lubricant only works as long as it circulates. When it comes to rest in particular places, it coagulates, while other parts of the machinery run dry. That, taken plainly, is precisely what happens to money on a large scale.
Part of the reason lies in the very construction of the medium. A payment amount knows neither distance nor duration nor the state of the system. It knows only a number. Proposals that seek to encode this missing information directly into the currency - to create money that carries the spatial and temporal properties of a payment with it (as proposed by Gustav Kollmeier) - are aimed precisely at this coagulation. Not at the amount itself, but at what the amount has so far been unable to see.
⇒ The information density of the medium has to change.

THIRD FINDING · THE COUNTER-WAGER

Any attempt to extend the medium begins with an older question:
What is value before it becomes a number?
Böhm-Bawerk describes capital as time projected into the future: as roundabout production, in which short-term sacrifice is transformed into higher long-term productivity (*Capital and Interest*, 1889). Mises takes the question one step back in *The Theory of Money and Credit* (1912): money cannot simply be decreed into existence. It must emerge from a good possessing its own use value and gain acceptance through voluntary exchange until it becomes self-sustaining (→ his regression theorem).
Hayek provides the objection to any construction imposed from above. In *The Use of Knowledge in Society* (1945), he argues that relevant knowledge "never exists in concentrated or integrated form", but remains dispersed among countless individual minds, none of which can be fully brought together by anyone else. Applied to any attempt to expand currency by adding further dimensions, this yields an objection that cannot simply be calculated away. Someone must decide what those dimensions are supposed to measure, and how strongly they are supposed to affect the system. That power of definition is precisely the position that, in Hayek's view, no one can legitimately occupy, no matter how many dimensions are ultimately added.
Rothbard's critique of fractional-reserve banking extends the same idea institutionally. Banks that issue more claims than their reserves can cover create a credit expansion (→ more liquidity) that inevitably culminates in a crisis of confidence and contraction (Rothbard, *America's Great Depression*, 1963). Any correction imposed from above, so the common lesson of all three suggests, produces a new distortion that in turn calls for another correction.
⇒ Growth thus appears as the consequence of an information distortion within the price system itself.

FOURTH FINDING · THE THIRD WAGER

A third wager now enters the picture, categorically different from the first. Classical computers run into a hard limit when attempting to model an economy, because the number of relevant variables grows faster than any available computing power. That is why real-world models almost always work with averages: the "representative household" instead of millions of individual decisions.
Quantum computers promise to shift this boundary, because certain classes of optimization and simulation problems can, in principle, scale fundamentally differently on them. Whether this can produce more precise forecasts of interest-rate decisions or supply-chain shocks remains an open question. Fault-tolerant quantum computers on the scale required for such applications do not yet exist.
A more concrete consequence lies elsewhere. Peter Shor's 1994 algorithm demonstrates that a sufficiently large quantum computer could efficiently solve precisely those mathematical problems on which much of today's encryption depends: RSA, elliptic curves, and therefore a substantial part of what makes digital money secure in the first place. The response to this post-quantum cryptography, which the U.S. NIST has been standardizing since 2024, shifts the problem but does not fundamentally resolve it: security remains a question of computational problems that have not been solved, only different ones.
More interesting is an older, lesser-known idea. As early as the late 1960s, the physicist Stephen Wiesner conceived of a form of money whose resistance to counterfeiting would not depend on a difficult computational problem, but on a physical law (→ *No-Cloning-Theorem*), according to which an unknown quantum state cannot, in principle, be copied exactly (Wootters and Zurek, 1982). Wiesner's manuscript was rejected for almost fifteen years before being published in 1983 (Wiesner, *Conjugate Coding*, SIGACT News, 1983).
The idea remains! A banknote that physically attests to its own authenticity (→ attestation without witnesses).
This has little to do with Fuller's wager, and not directly with Hayek's objection either. For the first time, a property appears here that neither market nor state has to guarantee.

FINAL FINDING · THREE WAGERS

Three wagers now stand side by side.

Fuller's hope that better information can reduce scarcity.

Hayek's objection that some of the relevant knowledge will fundamentally remain decentralized and emergent.

And the possibility that certain properties capable of sustaining a monetary system need not be defined centrally by anyone at all, because they follow from physical or structural law rather than from administration.

Kollmeier's extension of money into space and time was a first step in this direction: two additional axes for a medium that had previously known only one.

The question that follows is this:

If two additional dimensions can already make the coagulation of money noticably less severe, what would a third or fourth accomplish, one that does not encode location or time, but something that has never existed in money at all?
This is not a rhetorical question. It is the point at which the actual instrument for changing the lubricant must begin, and at which this foundation (Findings 1-4) comes to an end.

Note:

According to the holographic principle, only two dimensions at a distant boundary are necessary to encode, with physical exactness, the entirety of the information contained in our three-dimensional space for an observer of that space; BUT it is only the higher dimensions that allow this information to unfold as a localized, dynamic universe, because complex physical interactions and the causal flow of information would collapse within macroscopic structures without the interplay of space and time.
What matters here is not the human Noosphere,
but the Infosphere
(= the collective totality of all information, which contains the Noosphere and surpasses it in scale to an incalculable extent).

"Human beings are not merely organisms of flesh and blood, but also mechanisms of measure and number."
A space-hearted being, then

PRESCRIPTION

Defrosting

Active ingredient against coagulation

Diagnosis: A number without memory. Two corrections have already been proposed: one spatial, one temporal (Kollmeier). Both require an authority to determine what distance and stagnation are supposed to mean, and that authority is precisely the underlying problem. A third administered rule would merely reproduce it. The active ingredient must therefore follow from something that no one needs to define anymore, because it already holds (without money without man).

Active ingredient: two additional axes. Neither is administered.

FOURTH DIMENSION · ENTROPY

Frederick Soddy, Nobel laureate for his work on radioactivity and co-discoverer of the concept of isotopes, turned to economics in the 1920s and posed an uncomfortable question: Why should money be allowed to grow exponentially through interest, while every real form of wealth remains subject to the laws of thermodynamics and inevitably wears out, rusts, decays? Wealth ages. Debt does not (Soddy, *Wealth, Virtual Wealth and Debt*, 1926). He regarded this discrepancy not as a cosmetic flaw, but as the design flaw of the entire system.

The active ingredient takes this discrepancy literally. Every unit of money is assigned a half-life, T. Its remaining value, N, after a period of inactivity t follows the same equation with which Soddy's own field of research describes the decay of isotopes:

$N(t) = N_0 \times e^{(-\lambda t)}$, with $\lambda = \ln(2) / T$

Money in motion remains almost intact, because movement itself is evidence that the underlying value is still circulating through the world. Money at rest decays measurably, not suddenly, but exponentially, like an isotope.

What decays does not disappear. It becomes the release valve: a continuous, automatic distribution to all active accounts, financed exclusively by what the stagnation itself has released. No one decides how much is distributed. Physics decides.

The refill valve works in reverse. New money does not arise through lending against a promise, but through verified new energy entering the system: additional generation capacity, measured efficiency gains, newly accessed resources that had previously gone unused. Money is created where something real has been added.

FIFTH DIMENSION · BOND

Marcel Mauss showed in his *Essai sur le don* (1925) that archaic systems of exchange were never value-neutral. A gift creates an obligation. It demands reciprocation. It weaves a network of debt and attachment between people, precisely the network that anonymous market money systematically dissolves. What circulates multiplies something that cannot be quantified; once that something is sold, it is precisely that something which is lost.

The fifth dimension writes this property directly into money, not the amount, not the location, but the length of the chain through which a payment has passed without ever being broken. Technically, this is already solvable. So-called zero-knowledge proofs can establish that a chain has remained unbroken without revealing a single one of its participants. Attestation without witnesses, as noted earlier, now not merely for authenticity, but for relationship.

The longer the chain, the lower the friction of the next transaction. Money that has remained in relationship for a long time moves more easily than money that has only just emerged from anonymity.
It is not "decided" what counts as a relationship. The chain itself is the proof. (See Deleuze and Guattari's concept of the rhizome.)

INTERACTIONS

Even a rule grounded in physical law does not eliminate all power to define. Someone still has to calibrate the half-life; someone still has to measure the length of the chains. The knowledge problem does not disappear completely. It merely shifts to where it can do the least damage: into the calibration of a small number of publicly verifiable constants, rather than into the ongoing administration of individual cases.
No triumph over Hayek. A compromise with him.

A second side effect concerns the active ingredient itself:
Soddy's 1926 book contains, alongside its thermodynamic argument, a chapter containing antisemitic conspiracy narratives. This part of his work is explicitly not followed here. A physical idea can be separated from its originator, and that is precisely what this prescription demands of itself.

Fuller asked in 1969 whether seeing enough could solve scarcity. Perhaps the right answer was never seeing. But flowing.

PACKAGE INSERT:

Anyone who holds this money for long enough without moving it notices nothing at first.
Then something.
Then that it is becoming lighter, that it wants.
Side effect: It begins to flow on its own.
That was always the job of lubricant.

biography

^me as Andy Warhol
ca 07:00am

(Mohammad) Reza Bahadori Khalili
*28.08.2007 Shiraz, Iran

→wannabe artist

What I can do with the prize money:
Establish a lobby against fighting poverty,
leg amputation using silk,
invest in musk flower scented neon signs.