

Discrete Proper Time and a Tempo Field: Another Retranslation Essay

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Preface

The reflections that follow stand as the counterpart to a mathematical article (doi: [10.5281/zenodo.17012407](https://doi.org/10.5281/zenodo.17012407)). That paper presents a formal framework in mathematical language; this essay retranslates the same structure into philosophical prose. It does not advance a new theory; rather, it receives the mathematics in another key, letting its resonances be heard in words.

Prologue

In my previous essay (*A Retranslation Essay*) I wrote: “Being is time.” When time arises, space and matter take form, and the world stands up as background. What, then, is the “nothing” where time has not yet been spoken? If existence is supported by the beat of time, perhaps we cannot touch the nothing itself.

Even so, by the practice I call *retranslation*—a shift of language that carries the same structure into different words—one can slightly alter the visible landscape. If we redraw the round-trip of observation and recognition as a motion that shuttles between the latent and the manifest, we may hold in words the feel of standing at the edge of the nothing. Philosophy picks up the shadow that mathematics trims away and casts another light. That attempt both scoops and spills the shadow. I explore that possibility here.

Matter and Energy

Even under discrete ticks, the identity of mass and energy does not waver. Matter and gravity are forms born from the creases of the fabric of time; energy is their unfolding. Matter is rhythm condensed along a *tempo field*, and energy is the aspect of that rhythm as it unspools. The melody by which being is woven into time is here retranslated as a matter-theory.

Without equations, we may still say: when the beat of time folds upon itself to make an image, we call that mass; when the beat loosens and becomes motion, we call that

energy. At our scale the discrete tick is heard as flow. Continuity and discreteness are not a rupture but rhythms that resonate with one another.

When a pattern appears on a woven cloth, that pattern is matter, and the tension and to-and-fro are energy. When origami is folded into a solid, the paper itself is time, the folding is mass, and the unfolding is energy. What supports both is the beat itself—namely, time.

Can the Nothing Be Known?

When tempo manifests, space, matter, and causal order arise. Outside that order lies the “nothing,” a venue in which order does not obtain and which, in principle, cannot be experienced. This does not mean that being is missing; only that recognition cannot reach it. The latent behind the manifest—the not-yet-manifest time—bears what our handling cannot encompass.

As we read a singularity as the shadow of a blind spot in theory, so the nothing appears only as shadow. To render that shadow intelligible without violence, we need a reason to say: “it is there, yet unrecognized.”

Let us think of the nothing not as a perfect vacuum but as a source sustaining the manifest. We who live in time cannot face timelessness head-on. By tracing the rim where the latent passes into the manifest, we can estimate its presence. The light that time weaves is visible; the un-woven shadow is not.

Just as the blind spot of vision arises from the eye’s structure, the nothing may be invisible by structural necessity. When a flower opens, we later say that the seed’s latency has unfolded. We cannot create a flower from a seed by fiat. The seed stands close to nothing, yet it houses the densest possibility.

Observation and Apparent Probability

“Observation fixes the result”—this may be a description that excerpts only the final scene of manifestation. From the side of tempo, the very arrangement appears to have prepared, in advance, the rhythm by which the latent turns manifest. In the double-slit experiment, one says that, once observed, the result is settled. Yet might it not be that, when the slits are set, an interference pattern has already been provisioned? Observation then receives the appearing.

Why, then, is it said that the fixation occurs at the instant of observation? The observer is not an outsider but a strand in the weave of time. When time recognizes itself, the manifest stands up. Observation does not create something from the nothing; it images the modulation by which the latent turns manifest. Prior to that, within the latent, a change has already occurred that hands off to the scene that will be manifest.

The image in a photograph is not born at the shutter alone; the lensing configuration has already determined it. Even if it is never recorded on film, the object exists. The

waves on a shore are not made at the beach; winds offshore and the shape of the seabed prepare them, and the sea's structure precedes the wave by long spans. Observation is the subsequent receipt of an appearing.

Yet if we must treat the unseen as nonexistent, then while receiving the surface we are compelled to inquire what lies behind it. How are we to recognize results that are “probabilistic and indeterminate”? If we are to accept nature as nature, we may need to restore a determinacy beneath appearance—a *unitary* and inertial evolution that contains judgment without contradiction. Time does not plead with time to accept what is unnatural. (If one insists on a notation:

$(\forall x \in E (x = \text{Time}) \wedge 0 < \text{Pr}(\text{Time}) < 1) \Rightarrow \text{Time} \neq \text{Time} \equiv \neg(\forall x \in E (x = \text{Time}) \wedge 0 < \text{Pr}(\text{Time}) < 1)$
but I will not pursue this here.)

The Contour of the Cosmos

To read redshift as expansion is the standard construal of observation. Yet it is not inconsistent to interpret it instead as a *difference of tempo*. If so, cosmic expansion need not be a premise; one may say that time itself ignited, manifested, and began to run. The universe need not be born at a single point; it may keep scale while tempo modulates and extends. On such a view, the universe's age may overlap vastly; even a trillion years would not be a contradiction. The cosmic microwave background becomes the trace of a time-manifestation that spread in all directions, and the dark components appear not as external unknown matter but as a *surplus of temporal fluctuation* in a tempo field. These are words of retranslation. That is, dark matter is not thereby established; rather, its appearances may be accounted for in the language of tempo.

Nor does retranslation categorically dispense with dark matter. If one posits it in another sense, then as a “present yet unseen” it is apt to be placed as a *seed of unmanifest time*. And what is set as dark energy can be placed as “the very manner in which time manifests.” Both sit comfortably within the present frame. The universe is the name of the domain in which tempo can be sustained. Even if there is space beyond, without time it is not a universe. The boundary is not a place but the limit of manifestation.

When a lamp is lit in a garden, its circle of light is the world, and what lies beyond is identical with darkness. Darkness is only the region beyond the lamp's reach. A play proceeds on stage, yet no spectator knows the presence of the actors waiting in the wings. As radio coverage looks like the world, and electromagnetic waves outside the visible are unseen, so even if there is space outside, where time does not stand up it is identical to the outside of experience.

Conclusion: At the Edge of the Nothing

We cannot experience a “complete nothing.” We cannot even imagine it. But if we take the nothing not as lack but as source, present yet unseen, then thinking may begin. We

cannot know it directly, yet through the round-trip between latent and manifest we may receive its force. Time is both tick and flow. The tick gives rise to the flow, and the flow envelops the tick; then existence is woven.

Even if one reads the logic or learns the new words, the “complete nothing” remains unknown. At best we loosen the belief that what is called nothing is, in fact, nothing. Yet even that is a lens refitted—one that shifts the world’s appearance slightly.

My work is not to announce new facts. It is to move existing theory into other words and to verify nature as nature. This is not a claim but a labor of seeking what is obvious. Retranslation is not a new theory; it is a practice for receiving nature as it is.