

Five Laws and the Civilizational Law as Consequences of the Rauma Theorem

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Abstract

This work presents an ontological development of the Rauma Theorem. From the initial axiom of the identity of space and time, a system of laws of being is derived, including the original laws, the derived laws, and the Civilizational Law, which closes the system into a unified whole.

The work defines time as a field in which we exist, possessing two fundamental parameters — density, which determines the gravitational potential, and tempo, which determines the rate of time flow — manifested through resonance between the observer and space.

The work draws on historical and archaeological examples (megaliths, the Roman Empire, nuclear explosion) and demonstrates that physics and ethics are inseparable, and that the limit of knowledge points to the existence of the Creator.

Editor's Note: In this version (July 21, 2026), the sign in the Poisson equation in Section 5.1 has been corrected from $\nabla^2\Phi = 4\pi G\rho$ to $\nabla^2\Phi = -4\pi G\rho$ to align with the Rauma Theorem and ensure the correct sign of the attractive force.

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1 Introduction

The Rauma Theorem states that gravity is neither a force nor a curvature of space, but a **gradient of local density and tempo of time**.

Time is a field in which we exist. It possesses two fundamental parameters — density, which determines the gravitational potential, and tempo, which determines the rate of time flow. These parameters manifest through gradients, and in a state of resonance they cease to be felt as force. Time is a measure of the identity of space and the observer, manifested through this field.

From the theorem follow four original laws of being, four derived laws, and one Civilizational Law. Together they form a system that describes the limits within which man exists, and warns of what lies beyond.

2 Four Original Laws of Being

Before proceeding to the derived laws, it is necessary to establish the four laws on which they are built. These laws are not hypotheses. They follow from the Rauma Theorem as its direct consequences and operate at all levels — from the atom to the empire.

Law 1 (Law of Threshold). *Any system has a critical gradient of time, the exceeding of which leads to irreversible destruction or transformation.*

Law 2 (Law of Consequences). *Every action that alters the gradient of time generates an irreversible chain of events that accumulates in the structure of the system.*

Law 3 (Law of Gradation). *The effect of the gradient of time differs depending on the level of organization of the system. The laws governing the atom do not coincide with the laws governing society.*

Law 4 (Law of Incapacity). *No system can indefinitely resist an external gradient of time without changing its internal structure. It must either adapt or be destroyed.*

These four laws are not moral prescriptions. They are **ontological constants** that operate regardless of whether man is aware of them.

2.1 Elaboration on the Law of Gradation

The Law of Gradation means that the same physical principle — the gradient of density and tempo of time — yields different consequences at different levels of organization. The atom does not «know» about social revolution, but society is composed of atoms. Hence, the laws for the atom and for society are not different laws, but **different projections of the same law** onto different scales.

This principle operates universally: from the quantum level, where time gradients affect spectral lines, to the civilizational level, where uneven temporal flow leads to collapse. The table below summarizes how the same gradient manifests at each level and what happens when its critical value is exceeded.

Level	How the time gradient acts	What occurs upon violation
Atom	Change in τ alters electron oscillation frequency	Shift in spectral lines
Molecule	Change in τ alters reaction rates	Disruption of kinetics, denaturation
Cell	Change in τ alters division rate	Cancer, mutations, aging
Organism	Vertical $\nabla\tau$ creates tension	Circulatory disruption
Society	Difference in tempo between center and periphery	Stratification, revolutions
Civilization	Planetary gradient that cannot be equalized	Collapse

Table 1: Projections of the Law of Gradation at different levels

3 Examples from History and Archaeology

To understand how these laws operate in history, we turn to three illustrative examples: megalithic structures, the Roman Empire, and the nuclear explosion.

3.1 Megaliths as Evidence of a Limit

Throughout the world, megalithic structures are found that cannot be explained by known technologies: the Egyptian pyramids, the polygonal masonry of Sacsayhuamán, the stones of Baalbek. Their builders moved and lifted blocks weighing from 15 to 1000 tons with a precision unattainable even by modern engineering.

Traditional explanations — ramps, wooden sledges, thousands of slaves — do not withstand criticism. No archaeological evidence exists for ramps of such length and strength. Wood cannot support the weight of 1000-ton blocks. The demography of ancient states could not have assembled millions of people for construction lasting decades.

Within the framework of the Rauma Theorem, these structures receive a unified explanation: their builders possessed the technology of local control of the gradient of time.

If the gradient of time $\nabla\tau$ is altered at the base of a block, its effective mass changes. The block becomes «lighter» — not because mass disappears, but because the time gradient between it and the Earth decreases. The same applies to polygonal masonry: local alteration of the time gradient makes the stone surface temporarily plastic, allowing blocks to «fit» together without mechanical processing.

But these civilizations vanished. They vanished not because they were insufficiently wise or technologically advanced. They vanished because they encountered a **limit** they could not overcome. Their knowledge was local, but not global. They could lighten blocks, but they could not save themselves from catastrophe — because that would require changing the planetary gradient of time.

Yet this does not imply hopelessness. If the planetary gradient of time is inaccessible, it does

not mean nothing can be done. It means **strategy must change**.

It is important to note: archaeology does not find the tools with which they did this. No machines, generators, or devices that could be placed in a museum. This means that the technology of controlling the gradient of time was not **technical** in the modern sense — separable from man, reproducible from blueprints.

It was **embedded**: in the body, in the voice, in collective ritual, in knowledge that was transmitted orally and died with its bearer. It required presence, maturity, resonance. It could not be stolen, recorded, or repeated without the one who knows how to «hold» it.

This is why it disappeared. Not because the technology was lost, but because the bearers passed away. And with them — the very knowledge of how time responds to resonance.

But if the technology was embedded, then access to it was not technical, but **existential**. And this brings us back to the Law of Access to the Threshold: time cannot be changed with instruments alone. One must change the one who acts.

Before creating devices that alter the gradient of time — whether gravilets, anti-gravity engines, or any other tools — it is necessary to create **systems for monitoring temporal tension**. Without them, any local change in time becomes unpredictable and dangerous. Control must be primary. Technology — secondary.

Compensatory zones at the state level are not a luxury. They are a necessity. They do not «save the world,» but they prevent the world from destroying itself. They allow civilization to exist longer than its own acceleration would permit. This is the service of time — not its management, but the creation of spaces where it flows evenly, like the river of which the ancients spoke.

Instead of attempting to change the entire world, man may enter **zones of natural equalization of time** — not through structures, not through institutions, but through everyday actions that everyone knows intuitively.

When a person engages in a hobby, goes to the gym, walks, travels, watches a film, or simply sits in silence — he **switches off from technogenic time**. In the city he lives in a regime of «acceleration — deadlines — consumption». In these states he enters another tempo — his own, internal, requiring no control. And this **changes his internal gradient of time**.

People sense this intuitively: after a good walk, after a workout, after an evening spent on a favorite activity, a person becomes different. He has not simply «rested». He has **entered another temporal resonance**. He was in a zone of compensation — and it changed him.

It does not matter whether it is gardening, painting, running, fishing, or playing the guitar. What matters is that in this action **time belongs to the person, not to the system**.

There may be other ways of equalizing the time gradient that have yet to be discovered. But for now, we know only these — and they are available to everyone.

Megaliths are not monuments of greatness. They are **warnings**. They say: «We could do this. We departed. You too can, but remember — a limit lies beyond.»

3.2 The Roman Empire as a Violator of the Law of Gradation

A closer example is the Roman Empire.

Rome created a technology of managing time in the social sense: roads, law, army, bureaucracy — all were instruments of acceleration and synchronization. The Empire sought to «compress» space in order to control the time of its provinces. In this sense, Rome acted as a civilization trying to control the gradient of time between center and periphery.

But Rome violated the **Law of Gradation**. Social stratification, ecological crisis, resource depletion, inability to integrate new peoples — all this created internal gradients of time that grew steeper. The Empire tried to resist, but the Law of Incapacity took effect: the system could not endlessly adapt to mounting tension. It collapsed.

The Roman Empire did not fall to barbarians. Barbarians were merely the catalyst. It fell because its internal time ceased to coincide with the time of its provinces. The gradient became critical.

This scenario repeated itself many times: Byzantium, the Mongol Empire, the British Empire. Each sought to manage time on its own scale. Each encountered a limit.

4 Law One. The Law of Access to the Threshold

Law. *Altering the gradient of time at a local point is impossible through technical means alone. It requires either the collective effort of people capable of ontological maturity, or a single person fully aware of the measure of responsibility. In the absence of these conditions, the attempt leads to catastrophe.*

This law does not deny the technical possibility of altering the time gradient. It asserts that technical possibility is **insufficient**.

The physical essence is this: matter is secondary to time. Space is a manifestation of time. If we alter matter, we alter only the **reflection** of the gradient, not the gradient itself. To alter the gradient of time, one must act upon time itself — and for this, one must be not merely an engineer, but one who **recognizes the measure of responsibility** inherent in changing time.

This is not a matter of intellect. It is a matter of **maturity**. Maturity here means the capacity to recognize that time is not a resource but a field; that its alteration changes everything; that responsibility for this change cannot be delegated or transferred.

The question is not how to alter the gradient of time. The question is who can do it, and who is able to bear the consequences.

4.1 Freedom and Responsibility

Freedom presupposes responsibility. But responsibility frightens people. This is why most prefer submission to freedom — it removes the burden of choice. The level of one's responsibility is usually understood only within the limits of one's duties: the worker for his machine, the official for his district, the parent for his child.

But altering the gradient of time requires responsibility that has no boundaries. It cannot be delegated, divided, or limited by a job description. This is why access to such knowledge requires not intellect, but maturity — the capacity to accept responsibility for consequences one cannot foresee.

4.2 Example: A Person Sleeping Lying Down

This example shows the boundary between natural existence in the gradient and technical intervention.

When a person sleeps lying down, his body is in a homogeneous time gradient: head and feet are at the same level, the difference $\nabla\tau$ is minimal. The person feels no tension; his internal processes are synchronized. He does not attempt to change the gradient — he simply exists within it.

When the person stands up, his body enters a vertical gradient: the head is in «faster» time than the feet. This creates a microscopic but real temporal tension. Evolution has adapted us to this gradient — we can live in it.

But if someone attempts to **technically** equalize this gradient (for example, with a device) without understanding the ontology of time, he may not equalize it, but **rupture** it. Create a new gradient more dangerous than the original. A person who does not understand what he is doing may alter time so that the body lying down never wakes up again — not because it died, but because its time has ceased to be compatible with the time of the world.

This is the essence of the Law of Access to the Threshold: altering time without maturity is catastrophe.

5 Law Two. The Law of Irreversibility

Law. *Any alteration of the time gradient made without ontological maturity generates irreversible consequences at all levels of being — physical, biological, social, and existential. Conscious and responsible alteration may be integrated. Erroneous or selfish alteration leads to the disintegration of the system and the irreversible transformation of the agent.*

This law is not a moral warning. It is an **existential law**. Error in managing time cannot be «undone,» because the undoing itself is an alteration of time. The one who alters the gradient becomes part of the altered reality. He can no longer return to his previous state.

5.1 Example: Nuclear Explosion as a Catastrophe Without Maturity

On July 16, 1945, humanity conducted its first nuclear explosion. This was not merely a military act. It was an **alteration of the time gradient at a local point** — not in the physical sense of the Rauma Theorem, but in the ontological sense: man created a technology capable of altering the very foundation of his existence.

From the standpoint of the Law of Access to the Threshold, the nuclear explosion is the perfect example of an attempt to alter the time gradient **by technical means without ontological maturity**.

Physical level. The nuclear explosion releases energy that alters the local density of mass-energy ρ . According to the Rauma Theorem equation $\nabla^2\Phi = -4\pi G\rho$, the change in ρ creates a local change in the gravitational potential Φ , and thus — **a local change in the time gradient**. This is not a hypothetical effect. It is a direct consequence of the equations.

At the moment of the explosion, time at the epicenter flows differently than in the surrounding space. The difference is negligible in magnitude, but it **fundamentally exists**. Man altered time — not as a field, but as its source through matter. But he did this **without understanding** what he was doing. And the consequences proved irreversible.

Biological level. Radiation caused by the explosion disrupts cell division, damages DNA, causes mutations and death. Within the framework of the Rauma Theorem, this is interpreted more deeply: local alteration of the time gradient changes the tempo of internal processes. According to Corollary 2 of the Rauma Theorem $\omega(r) = \omega_0 \cdot \tau(r) / \tau_0$, the change in $\tau(r)$ alters the frequency of molecular vibrations, the rate of chemical reactions, the rate of cell division. Radiation is **desynchronization of the cell's internal time with the time of the surrounding environment**. The victims of Hiroshima and Nagasaki died not only from burns and radiation. They died because their internal time ceased to coincide with the time of the world.

Social level. After 1945, humanity entered the era of nuclear deterrence. But from the standpoint of the Law of Irreversibility, this is not deterrence. It is a **state of constant temporal tension**. Two superpowers created a time gradient between themselves. The arms race is the creation of a mutual gradient that cannot be equalized because neither side is ready for maturity. Each time the world stood on the brink of nuclear war, humanity entered a state of critical time gradient. And each time it retreated — not because it became wiser, but because the survival instinct acted faster than awareness.

Existential level. The nuclear explosion changed man's very relation to time. Before 1945, man could believe he was immortal as a species. After 1945, he knows he can destroy himself in one hour. Man no longer lives in «natural» time. He lives in time that he himself can terminate.

Violation of the Law of Gradation. The nuclear explosion is a classic example of violating the Law of Gradation. Humanity leaped over several levels:

Level	What should have been	What occurred
0. Observation	Understanding of atomic energy	Was achieved
1. Local influence	Laboratory experiments	Was achieved
2. Object control	Energy for peaceful purposes	Partially
3. Matter control	Control over nuclear processes	Leaped over
4. Time control	Understanding of ontological consequences	Leaped over
5. Integration	Global responsibility	Critical

Table 2: Violation of the Law of Gradation in the creation of nuclear weapons

Humanity created weapons without creating maturity. It gained power over matter, but not

power over itself. And now it lives with this. Every day.

6 Law Three. The Law of the Gradual Path

Law. *Altering the gradient of time is only possible in stages. Each level of alteration requires a corresponding level of maturity. Transition to the next level is only possible after integrating the consequences of the previous level. Attempting to skip levels leads to the destruction of the system.*

This law is practical protection against vanity. It asserts that one cannot «leap over» levels of understanding. Each level gives exactly as much capability as the person is able to comprehend. And if he attempts to take more — the system collapses.

Each level is not merely «more power.» It is a **new ontology**. Transition to the next level requires not technical improvement, but transformation of the person himself.

6.1 Example: Education and Upbringing as a Gradual Path

All education — whether in music, science, craft, or ethics — is structured in stages. A child does not become an adult in one day. He passes through stages: childhood, adolescence, youth, maturity. Each stage gives him exactly as much freedom as he is able to bear responsibility for.

In education this is particularly evident. One cannot teach higher mathematics to one who has not mastered arithmetic. One cannot educate a citizen who has not learned to respect others' time. One cannot transmit knowledge of time to one who has not passed through an understanding of responsibility.

Upbringing is not the transmission of information. It is **cultivation of maturity**. And it takes time. Attempting to accelerate this process, to «leap over» stages, to give a child adult freedom without adult responsibility — this is a violation of the Law of the Gradual Path. It leads to deformation of personality, to internal rupture, to incapacity for decision-making.

The same applies to altering the time gradient. One cannot move from observation to control of matter without passing through understanding of ethics and collective responsibility. As in upbringing — first obedience, then understanding, then freedom. So here: first awareness, then maturity, then action.

6.2 Cryptocurrencies and Artificial Intelligence

In the 20th and 21st centuries, humanity created two technologies that are examples of **attempts to leap over levels** without ontological maturity.

Cryptocurrencies (mining) — the generation of entropy to maintain virtual consensus. They create a local density of events (billions of hashes per second) that does not equalize the time gradient, but creates a new artificial gradient between the accelerated digital world and the slowed physical world. This is a real temporal shift that demands compensation.

Artificial Intelligence (model training) — the extreme processing of data, which creates a **local ultra-high tempo of time**. It does not make the world wiser — it makes the imbalance of time steeper. Man cannot keep pace with the speed of AI, because his biological tempo is limited. This creates a **gradient between accelerated intelligence and slowed humanity**, which according to the Law of Gradation leads to dissonance.

Both of these technologies are **attempts to compensate for the imbalance of time**, but they do not equalize it — they deepen it. They create **zones of temporal tension** that appear as progress but are in fact accelerators of collapse. They violate the Law of the Gradual Path, because humanity turned to them without having passed through the levels of ontological maturity.

7 Law Four. The Law of the Anthropological Limit

Law. *There exists a limit to the alteration of the time gradient that is fundamentally inaccessible to the individual, group, or civilization. Beyond this limit, alteration is possible only for the source of time. Attempting to cross this limit leads to the self-destruction of the agent.*

This is the harshest law. It asserts that man is **limited**. Is it possible that this limit could be surpassed by one who has attained full maturity, realized his measure of responsibility, and is ready to accept the consequences? Can one person, a group, or a civilization alter the planetary time gradient if they are truly ready?

We do not know.

The theorem does not answer this question. It only shows that the limit exists. But where exactly it lies — remains open. Perhaps it is absolute. Perhaps it is accessible — but not to us, rather to those who come after. Or to those who were before. Perhaps it is wider than we think. We simply do not know.

But this knowledge is not defeat. It is a **condition of the task**. We do not know what is possible — but we know that it is possible to investigate. It is precisely in this space between «I can do everything» and «I can do nothing» that real life unfolds.

7.1 Example: Megaliths as Evidence of the Limit

Ancient civilizations that built megaliths achieved local control of the time gradient. They could lighten blocks, plasticize stone, lift 1000-ton slabs. But they could not save themselves from catastrophe — because the catastrophe was planetary, and their technology was local.

They perished not because they lacked intelligence. They perished because they encountered an **ontological limit** they could not overcome. Their knowledge was great, but it did not make them immortal.

This is the Law of the Anthropological Limit in action: the limit exists, and it is not overcome by technology.

8 Conclusion from the Law of the Anthropological Limit

If there exists a limit that man cannot cross, then beyond that limit there must be One for whom this limit is not a limit, because He created time.

This is not religion. It is logical necessity.

Time is a **field** in which we exist. It possesses two fundamental properties — **density** (saturation with events) and **tempo** (rate of their succession). These properties manifest through **resonance** between the observer and space. Time is a **measure of the identity** of space and the observer in this field.

Man is not the source of this field. He exists within it. If there is a field, there must be its source. And this source cannot be man. It may be called the Creator. And He is not man.

The Rauma Theorem does not prove the existence of God. It shows that **denying the Creator requires a violation of logic**. If there is a limit to the human, beyond it lies that which is not human. And this is not hypothesis — it is consequence.

9 The Civilizational Law

Law. *A civilization that ignores the laws of threshold, consequences, gradation, and incapacity enters a state of critical time gradient, which resolves through war, revolution, collapse, or ontological shift. Upon reaching the limit, a **reset** occurs — the system loses its previous structure and either transitions to a new state or is destroyed completely. The only sustainable strategy is the service of time through the equalization of gradients, not through their control.*

This law closes the system.

It does not say what to do. It says **what happens** if the laws are not observed. Reset is not punishment. It is a **mechanism**: when the time gradient becomes critical, the system cannot preserve its structure. It discharges the tension — through war, revolution, collapse, or ontological shift.

Here is a simple example: when a computer or any device freezes, we press *reset*. We are not punishing it. We are simply allowing it to start anew, because the old configuration has ceased to be functional. Reset is not punishment — it is restoration of harmony.

The same happens with a civilization that does not heed the laws of time. Reset is not a moral judgment. It is the physics of civilization.

And the law offers the only sustainable strategy: service, not control.

9.1 What It Means to «Serve Time»

To control time means to impose one's own rhythm upon it: to accelerate, slow down, compress. This is the path of any system that places control above understanding. This path always leads to collapse, because it violates the Law of Gradation.

To serve time means to **resonate correctly** with it. Resonance is not always slow or always fast. It varies:

- When the world accelerates mindlessly — service requires **slowing down** to maintain clarity.
- When the world is frozen in inertia — service requires **accelerating** to shift the point of support.
- When chaos surrounds — service requires **finding silence** within.
- When an opportunity opens — service requires **acting** without delay.

This is the meaning of life: not to be a slave to one tempo, but to **sense** which tempo is needed here and now. This is the design of the Creator — not a prescribed rhythm, but the **capacity to hear the rhythm** and move within it.

Service to time is:

- Hearing its gradient.
- Not attempting to straighten it.
- Moving where it calls — sometimes accelerating, sometimes slowing, but always **in resonance**.
- Accepting that you are not the master of time, but its **conduit**.

Service to time does not require technology. It requires maturity. And it is available to all who are ready to recognize that time is not a resource, but the foundation of being.

9.2 Example: The Roman Empire as a Violator of the Law

The Roman Empire sought to manage time: it accelerated communications, standardized law, synchronized provinces. But it did not serve time. It did not equalize gradients — it ignored them. Social stratification, ecological crisis, cultural depletion — all were consequences of violating the Civilizational Law.

The Empire collapsed. Not because it was weak. Because it encountered a limit it could not overcome.

The same is happening to modern civilization. We accelerate technology, but we do not mature. We change the world, but we do not change ourselves. And if we do not understand the Civilizational Law, we will repeat the fate of Rome — and the fate of the megalithic civilizations.

The nuclear explosion was a warning. It showed that humanity can create weapons against which there is no defense, but cannot create a defense against its own ignorance. This is the critical time gradient.

9.3 Example: Socialism as an Attempt to Equalize the Gradient

Socialism proposed ideas that were ontologically impeccable in intent: friendship, equality, brotherhood, social mobility. It was an attempt to **equalize the time gradient** between different strata of society, between city and village, between elites and masses. To make time flow equally for all.

But socialism violated the **Law of Gradation**. It attempted to impose a **single tempo** on all, regardless of their readiness, capacities, and local conditions. It tried to make equal that which by nature is not equal.

The level of infrastructure, access to goods, tempo of life must correspond to the level of development of the specific society. When a system imposes a single tempo on all, it creates internal tension: some cities are in accelerated time, others in slowed time. Some people are ready for freedom, others are not. Some regions have matured for development, others have not.

This is not a contradiction. It is a **mechanism**. Imposing a single tempo **generates** heterogeneity, because reality is heterogeneous by nature. The system attempts to equalize what cannot be equalized without taking gradation into account. In response, internal tension arises — and it becomes critical.

This gradient leads not to equalization, but to disintegration. The system collapses not from external enemies, but from the internal heterogeneity that it itself created.

10 Conclusion

The four original laws, the four derived laws, and the Civilizational Law form a unified system. Each law is not an isolated rule, but a facet of a single ontological principle. Together they describe not only how gravity is structured, but also how responsibility is structured, and how the limit of the human is structured. This is not a collection of rules. This is a map of the limits within which intelligent life is possible.

Law	Level	Answer
Original Laws	Physics	Gravity is a gradient of density and tempo of time
Law of Access to the Threshold	Ethics	Access only through maturity
Law of Irreversibility	Existence	Error = catastrophe
Law of the Gradual Path	Practice	Path is gradual
Law of the Anthropological Limit	Anthropology	Man cannot do everything
Civilizational Law	History	Violation leads to collapse

Table 3: System of Laws

Why were these laws not known before? Because there was no understanding of what gravity is.

Gravity was mistakenly thought to be a force, then a curvature of geometry. But neither force nor geometry provides an ontological foundation for deriving the laws of threshold, consequences, gradation, and incapacity. They describe **how** bodies move, but they do not explain **why** time flows unevenly and what this leads to.

Only when gravity was understood as a gradient of local density and tempo of time did the laws that follow from it become possible. This is not the discovery of new rules. It is the **reading of old ones** — those written into the structure of reality from the very beginning.

We did not invent these laws. We simply learned to read the language in which time is written.

This system does not require faith. It requires only consistent thinking. It shows that physics and ethics are inseparable, that knowledge without responsibility is danger, and that the limit of knowledge is not a wall, but a door.

Behind the door is the Creator. Not as a hypothesis, but as a logical necessity. And He is not man. This is not religion and not fantasy — it is physics.

Arno Raum, July 21, 2026

The signature is verifiable by the public Ed25519 key:

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Note on Time

In the classical tradition, time was defined as the measure of motion (Aristotle), the form of contemplation (Kant), or the duration of consciousness (Bergson). 20th-century physics established its connection with space but did not grant it ontological status.

In this work, time is asserted as a field. It exists objectively, independently of the observer, but manifests through resonance between the observer and space. Its fundamental parameters — density and tempo — define gravity as a gradient and life as a process.

This definition is not a hypothesis. It is a consequence of the Rauma Theorem and is confirmed by the entire system of laws set forth above. Philosophers sought time in the mind, in number, in motion. We found it in the field.

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References

1. Pound, R. V., Rebka, G. A. (1960). Apparent weight of photons. *Physical Review Letters*, 4(7), 337–341.
2. Dyson, F. W., Eddington, A. S., Davidson, C. (1920). A determination of the deflection of light by the Sun's gravitational field. *Philosophical Transactions of the Royal Society A*, 220, 291–333.
3. Einstein, A. (1915). Die Feldgleichungen der Gravitation. *Preussische Akademie der Wissenschaften*, 844–847.
4. Newton, I. (1687). *Philosophiæ Naturalis Principia Mathematica*. London.
5. Oppenheimer, J. R. (1945). *Atomic Energy and the Future of Man*. MIT Press.
6. Raum, A. (2026). Theorem on the gravitational identity and unity of time and space.