The Unthinkable—Definitions of Velocity and Acceleration Under Attack, Destroyed by Lorentz Transformations

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Abstract

This paper shows further inconsistencies caused by the Lorentz transformations (LT) that are not immediately visible to the eye, in contrast to the LT-induced deformations of the laws of physics that this author has made immediately manifest in black and white in the very pages of the relativity founding papers. It turns out that there are inconsistencies, also due to LT, within the uncovered inconsistencies this author has discovered related to LT. This paper specifically demonstrates the ultimate no-no in physics—relativity's tampering with the absolute truths of physics, its definitions. The Lorentz transformations fundamentally contradict the absolute truth of the basic definitions of physics, specifically velocity and acceleration, leading to the destruction of the framework of relativistic physics. Contrary to popular opinion, relativity cannot derive $E = mc^2$. By exposing internal contradictions and deriving $E = mc^2$ non-relativistically, this paper proposes a new force law of unquestionable absolute validity, $F_{\text{real}} = ma + \frac{mv^2}{2x}$, arriving from absolute truths of physics, its definitions of velocity and acceleration, and urges a reevaluation of the foundations of physics.

Main Argument

This author has shown that the mass-energy equivalence $E = mc^2$ is native to coherent physics, the physics devoid of the theory of relativity, and is tightly associated with the true law of motion $F_{\text{real}} = ma + \frac{mv^2}{2x}$, naturally evolving from

the absolute, indisputable basis of this discipline. Indeed: from the definitions of velocity, $v = \frac{dx}{dt}$, and acceleration, $a = \frac{dv}{dt}$, for constant a:

$$\int v\,dv = \int a\,dx \quad \rightarrow \quad v^2 = 2ax \quad \rightarrow \quad \underbrace{mv^2}_{v^2 \rightarrow c^2} = \underbrace{\underbrace{2ma}_{2F=F_{\text{real}}}\, x}_{\text{Energy, } E} \quad \rightarrow \quad F_{\text{real}} = ma + \frac{mv^2}{2x},$$

revealing non-relativistic $E = mc^2$ (with c as a limit velocity). Relativity is even unable to derive it—the integral equation $\int \epsilon X\,dx = m\int_0^v \beta^3 v\,dv$, ostensibly deriving $E = mc^2$, reversed, leads to:

$$\int \epsilon X\,dx = m\int_0^v \beta^3 \frac{dx}{dt}\,dv \quad \rightarrow \quad m\int_0^x \beta^3 \frac{dv}{dt}\,dx \quad \rightarrow \quad m\int_0^x \beta^3 \frac{d}{dt}\left(\frac{dx}{dt}\right)dx$$
$$\rightarrow \quad m\int_0^x \beta^3 \frac{d^2x}{dt^2}\,dx$$

(the integration of $\frac{d^2x}{dt^2}$ over x is valid because $\frac{d^2x}{dt^2}dx = vdv$, transforming the integral into $\int v\,dv$, not a direct integration over x; it's a standard work-energy method, not a misuse of variables). The integral equation that is claimed to derive the celebrated $E = mc^2$ relativistically turns out to tackle the wrong LT-derived equation $\epsilon X = m\beta^3 \frac{d^2x}{dt^2}$ in frame K, irresolvably conflicting with $\epsilon X = m\frac{d^2x}{dt^2}$ in the same frame K.

The above is another reason why the integrity of especially the basic definitions must be kept untarnished. Below, contradictions of LT are further exposed, fracturing the untouchable elements of physics and necessitating a complete overhaul.

The notions of velocity u and acceleration a are definitions, absolute truths that embody the sanctity of a frame's autonomy. A definition, by its nature, relies solely on the assets of its frame, structured in a precise, unalterable form. Therefore, they are absolute truths that cannot be redefined across inertial frames. This is a self-evident fact of such profundity that it does not need to be postulated, mentioned or discussed. It is even beyond such an obvious absolute norm as the Principle of Relativity (PoR), discovered by Galileo and massively abused by relativity. Unfortunately, as with PoR but perhaps even more strikingly so (if there could ever be anything more striking than a theory that disobeys its own foundational postulate, as relativity does), LT destroy this absolute mandate to keep the definitions of physics untouched across frames. This fact is first discovered and brought into prominence for the first time by this author in the following text.

Thus, in frame K (the unprimed frame) the definitions of velocity, using, as it must, only the K frame's coordinates x and t, and acceleration, using u and t, are:

$$u = \frac{dx}{dt}, \quad a = \frac{du}{dt}. \tag{1}$$

In frame k (the primed frame), moving relative to K at frame velocity v, the definitions of velocity, using, as it also must, only the k frame's coordinates x' and t', and acceleration, using u' and t', necessarily remain the same, changing only the coordinates,

$$u' = \frac{dx'}{dt'}, \quad a' = \frac{du'}{dt'}. \tag{2}$$

These structures are non-negotiable, grounded in the frame's intrinsic properties.

It must be emphasized that the equations, eq.(2), are valid for any velocity v. Events in a given frame are unaffected by whether or not there are bodies moving around it (other than the effect of the eventual trivial gravitational effects). An experiment performed in a laboratory is unaffected by whether or not trams, airplanes, or planets are orbiting it.

Lorentz transformations (LT), however, demolish this concept of a definition. They produce expressions which are as bizarre as they are wrong in their aspiration to serve as definitions of velocity and acceleration. In spite of this absolutely clear, singular way of presenting velocity and acceleration in k, eq.(2), the alternative way, by applying LT, of presenting these same equations in k, gives an obviously discrepant result:

$$u' = \frac{u - v}{1 - \frac{vu}{c^2}}, \quad a' = \frac{a}{\gamma^3 \left(1 - \frac{uv}{c^2}\right)^3}, \tag{3}$$

where $\gamma = \frac{1}{\sqrt{1-\frac{v^2}{c^2}}}$, inappropriately introducing variables external to frame k: u, a from frame K, and relative velocity v. Acolytes have the audacity to put up with the idea that these expressions, eq.(3), shaped in odd, convoluted structures, define the same u' and a' as $\frac{dx'}{dt'}$ and $\frac{du'}{dt'}$. If this is not travesty of science, one wonders what travesty of science might be.

Notice, this critique targets LT's crush of definitions, not their functional output (which must be criticized as well, and it is done below and elsewhere in this author's studies). This is a violation of the law of identity, as a single quantity in frame k cannot have two distinct definitions—one using the frame's assets in its proper form, and another invoking irrelevant external variables in an alien structure. Such a demolition of definitions undermines the coherence of physics itself. These contradictions extend to length (Figure 1) and force (Figure 3), further fracturing the foundations of relativity.

Coincidentally, the abstract concept of definition has made it impossible to illustrate it pictorially, because any attempt at such a presentation, although preferred by some, inevitably invokes the idea of some numerical or functional result, which obscures the main point of this critique. It is not that LT produce distorted images, although they do, and there is ample commentary here on that devastating fact. The point of this section is that LT are doing the unthinkable, they are gerrymandering with the definitions of physics, mutilating them, thus committing an intellectual crime of unheard-of proportions, unmatched by any level of wrongness of a theory.

The above follows the overall trend across relativity to defy the law of identity. Indeed, it is immediately seen that this is illogical—one and the same definition in one and the same frame can never have two distinct definitions. The expressions

$$u' = \frac{dx'}{dt'} \text{ and } u' = \frac{u - v}{1 - \frac{vu}{c^2}}$$

can never coexist as the definition of u' in k.

Let us reiterate—definition (singular noun) of velocity in a frame depends only on the resources—coordinates, x' in this case, and time, t'—of that frame. The definition of velocity in a frame does not depend on spurious external factors such as the velocity u in another frame or the velocity v among frames.

The same applies for the acceleration in k— $a' = \frac{du'}{dt'}$ and $a' = \frac{a}{\gamma^3\left(1-\frac{uv}{c^2}\right)^3}$ can never coexist as the definition of acceleration (notice again that the noun is in its singular form) in the same frame k.

The absolute truth, the definition of a quantity, can never coexist in the same frame with its distorted image. The velocity of a body is uniquely defined in a frame. Notice, quantities such as velocity v, acceleration a and angular momentum $L_z = mr^2\omega$ are definitions. They are absolute truths for all theories. These definitions hold their positions of absolute truth even stronger than the postulates of a theory, which may be wrong, as the second postulate of relativity is wrong—discussed below for completeness, since relativity, having already violated its first postulate, the Principle of Relativity (PoR), has already collapsed and cannot reach the shores of its second postulate.

No theory can dispute these absolute truths, known as definitions. To say nothing of the fact that even a theoretical result must be adopted as an absolute truth until the theory is shown to be invalid.

In frame k, moving at velocity v relative to K, the definitions remain:

$$u' = \frac{dx'}{dt'}, \quad a' = \frac{du'}{dt'}. \tag{4}$$

Yet, LT yield contrarian expressions:

$$u' = \frac{u - v}{1 - \frac{vu}{c^2}}, \quad a' = \frac{a}{\gamma^3 \left(1 - \frac{uv}{c^2}\right)^3}, \tag{5}$$

where $\gamma = \frac{1}{\sqrt{1-\frac{v^2}{c^2}}}$ (aka β).

This logical contradiction—a single quantity in one frame having two definitions—is pervasive in relativity. A definition cannot coexist with its deformation.

Velocity and acceleration are uniquely defined. These definitions—velocity v, acceleration a, angular momentum $L_z = mr^2\omega$—are absolute truths, stronger than postulates, which may err.

- **An Example of a Wrong Postulate**
  Case in point is the second postulate of relativity, which asserts c = const in all frames, regardless of whether the light source is moving or not. It is invalid. Michelson's theory [1], which underpins the Michelson-Morley experiment, predicts a null result (no interference patterns) in the absence of ether only for observers at rest with the interferometer (frame k), where c = const. If the frame of the interferometer (light source) is moving in K, without ether, $c \neq$ const, which contradicts the postulate. In K the speed of light emitted by the moving source will be $c = const$ only in the presence of ether; light would become a part of the undulatory properties of ether. Michelson-Morley's null result [1] confirms $c \neq$ const in K, invalidating the foundation of relativity.

No theory can dispute, let alone deny, the truth of the unique singleness of definitions. To violate definitions by offering alternatives is a reckless act that is immediately exposed because they are the foundation of science.

So, touching on the integrity of the definitions in physics is incommensurable to any other sacrilegious thing that can be done in science. The definitions are untouchable, sacrosanct, they are the Holy of Holies of science and desecrating them is the most audacious act that can be committed in science because it is immediately uncovered.

Having seen the ultimate sacrilege in physics—assaulting and mauling the fundamental definitions of physics—we are tempted to look more into the framework of this flaw, to see how it fares across the thicket of the irrational, which governs physics today. Here are some further glaring issues caused by the main culprit—LT.

Notably, the non-physical nature of LT cannot be established within their own framework (e.g. [2–4]). The usual, rather disingenuous, way to convince the student of physics that LT are internally consistent is to apply them and then reverse their application. Doing wrong and then undoing it doesn't prove that the wrong is right. Not to mention that not all wrongs have the good fortune to find themselves undone. The result of the LT needs to be compared to some standard, outside of LT's framework, such as PoR, or more than one point needs to be observed and the results compared. Here's a devastating example

- **LT Distinguish Rest from Uniform Translatory Motion (UTF)**
  The question of which transformation should be preferred, the one discovered by Galileo or the one resulting from the application of the Lorentz transformations, has a straightforward answer—no one has yet rejected Galileo's discovery that no experiment carried out in an inertial frame can detect that said frame is in uniform translatory motion (UTF) or whether it is at rest relative to other inertial frames. As far as the Lorentz transformations go, they can detect such motion—if LT are correct, the values of measured fields will differ when frames are in uniform translatory motion, compared to when they are at rest, which has never been and will never be shown.

- **LT Dissolve the Concept of Length**
  Moreover, LT can be shown unphysical in a number of other ways. For instance, LT destroy the very notion of length itself. LT's: $x' = \beta(x - vt)$ and $t' = \beta\left(t - \frac{vx}{c^2}\right)$ give for a rod at $x_1 = 0, x_2 = 1, t = 0$ in K, with $v = 0.6c$, $c = 1, \beta = \ 1.25$, endpoints $x'_1 = 0$, $t_1 = 0$, $x'_2 = 1.25$, $t'_2 = -0.75$ in k—an illusion, not a rod, its ends non-coexistent (one present, one past) to define length. You may note that for every x, t pair there will be a discrepant x', t' pair, making it impossible for two points to coexist so length can be defined. This length dissolution of the LT's $L' = \frac{L}{\gamma}$ can never be prevented. After LT are applied, no length exists to ruminate about length contraction, let alone time dilation, the GPS corrections explicable in the trivial terms of their communicating signals' finite speed.

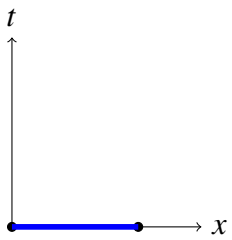

Figure 1:
Rod at rest
in frame K,
for $x_1 = 0, x_2 = 1$,
$t_1 = 0, t_2 = 0$.

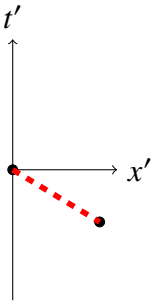

Figure 2: Non-coexistent rod endpoints in frame k per LT, for $x'_1 = 0$, $t'_1 = 0, x'_2 = 1.25, t'_2 = -0.75$.

  - **No Time Dilation Straight from LT.** Despite the opinion that LT predict time dilation, such a phenomenon is, paradoxically, impossible also on the basis of LT themselves. Conversely, not only do LT destroy the concept of length but this disjointing of the entity after LT are applied also has the effect, in addition to the other arguments against time dilation listed here, that a body that is not contiguous, i.e., whose parts don't exist at the same time, makes it impossible to speak of time intervals corresponding to this body after LT are applied, so that any idea of time dilation would arise. The most these time intervals refer to are the intervals between time referring to a point of the body in the past and time of a body's point corresponding to the present or the future.

- **Time Dilation is Impossible in Principle.** This can be understood by realizing that stationary clocks are synchronous (which can be done by a well-known light-beam method); spatially coincident clocks are synchronous; a moving clock, by its very nature, immersed in an infinite sea of synchronous stationary clocks, is synchronous with them because the moving clock inevitably spatially coincides with an underlying stationary clock.

  The author of relativity himself locks clocks at A and B on the moving rod to K's world time ("We imagine further that at the two ends A and B of the rod, clocks are placed which synchronize with the clocks of the stationary system . . . ", although he later forgets this absolute truth)—time dilation is impossible. LT's:

$$t' = \beta\left(t - \frac{vx}{c^2}\right)$$

desynchronizes, against the absolute laws of physics, these spatially coincident clocks, defying the inviolable absoluteness of simultaneity.

LT project their physical and mathematical inconsistency—equating a constant with a variable—across any field of application that harbors them. One must be extra careful when dealing with them, especially when involved in scientific exchange, because their acolytes have had a full century to invent a whole culture of protection and jealously guard them from having their obvious problems become public. The entrenchment of falsehood is not uncommon in the world and the longer the degradation goes on, the harder it is to put the pieces back together.

In addition to LT's collision with the physical reality, before anyone is allowed to invent myths of experimental validation that can never be (e.g. [5–7]), one sees blatant discrepancies on a purely formal level. The formulae of a theory are data that precede experimental data as a refutation device that no experiment can overcome. As unfortunate as this is, it is in a way advantageous to achieve clarity about its non-scientific nature because it can be demonstrated in black and white, without resorting to interpretations and the hermeticism, not to mention the sheer impossibility, inherent in some disciplines, of ever knowing the truth. Here are some examples that this author has found, which we will use at the end for a general conclusion.

- **Force Transformation Contradiction.** The relativistic force transformation, derived from LT, relates force components across frames. In frame K, a constant force $F = ma$ produces constant acceleration a (cf. Figure 3). LT transform this force into frame k, yielding

$$F'_x = \frac{F_x - \frac{v}{c^2}(F \cdot u)}{1 - \frac{uv}{c^2}}, \tag{6}$$

where F'_x is the force in k, and F_x is the force component in K. This appears to retain constancy from K and that should be a good thing, one might say. PoR mandate retainment of the physical across frames. Of course, it is seen that the structure of the expression for F'_x is mangled, but this is the least of the troubles.

Thus, if Newton's second law holds in k (as it must, as is mandated by PoR), i.e., $F'_x = ma' = m\frac{a}{\gamma^3\left(1-\frac{uv}{c^2}\right)^3}$, then, as $u = 2t$ evolves, a' varies (cf. Figure 3), making F'_x variable. LT, however, produce a constant F'_x (cf. Figure 3), as the term $\frac{v}{c^2}(F \cdot u)$ fails to fully compensate the denominator's variability, violating the principle that force should reflect acceleration in

k. This contradiction extends LT's assault on physics' foundations. Just as LT distort velocity and acceleration definitions, rendering $u' \neq \frac{dx'}{dt'}$ and $a' \neq \frac{du'}{dt'}$, they decouple force from acceleration in k, defying $F'_x = ma'$. Such violations undermine dynamics' coherence, necessitating a return to truth-based physics, as proposed by our force law $F_{\text{real}} = ma + \frac{mv^2}{2x}$, which restores consistent definitions across frames.

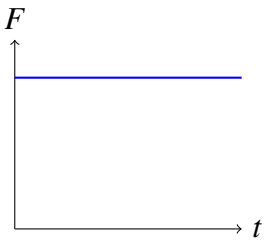

Figure 3:
Constant force $F = ma$
in frame K,
for $m = 1$, $a = 2$.

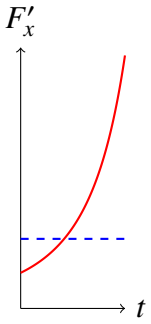

Figure 4: Expected $F'_x = ma'$ (red, variable) vs. LT-derived $F'_x = \frac{F_x - \frac{v}{c^2}(F \cdot u)}{1 - \frac{uv}{c^2}}$ (blue, dashed, constant) in frame k, for $c = 1$, $v = 0.6c$, $u = 2t$, $m = 1$, $a = 2$, showing LT's failure to reflect a''s variability.

- **Electrostatic Expression of Newton's Second Law Discrepancy.** The x-axis component of the electric field vector in k, $\frac{d^2\xi}{d\tau^2} = \frac{\epsilon}{m}X'$, becomes both $\frac{d^2x}{dt^2} = \frac{\epsilon}{m}X$ (via PoR) and $\frac{d^2x}{dt^2} = \frac{\epsilon}{m\beta^3}X$ (via LT) in the same frame K. This is impossible.

- **Kinematic Expression Angular Momentum Discrepancy.**

  The z-axis component of the angular momentum vector in k, $L'_z = mr^2\omega$, becomes both $L_z = mr^2\omega$ (via PoR) and $L_z = \gamma_u mr^2\omega$ (via LT) in the same frame K. This is impossible.

- **Maxwell's Equations Discrepancy.** Maxwell's equations $\frac{1}{c}\frac{\partial X}{\partial t} = \cdots \frac{1}{c}\frac{\partial Y}{\partial t} = \cdots$ in K become $\frac{1}{c}\frac{\partial X'}{\partial \tau} = \cdots \frac{1}{c}\frac{\partial}{\partial \tau}\left(\frac{Y'}{\beta} + \frac{v}{c}N\right) = \cdots$ in k (via LT), although (via PoR) Maxwell's equations must be $\frac{1}{c}\frac{\partial X'}{\partial \tau} = \cdots \frac{1}{c}\frac{\partial Y'}{\partial \tau} = \cdots$.

- **Dimensional Mismatch.** To say nothing of the fact that $Y = \left(\frac{Y'}{\beta} + \frac{v}{c}N\right)$ is a dimensional disaster in SI unit system, preserving the physical nature of

electric, **E**, and magnetic, **B**, fields, which the cgs and the natural system of units conceal. $[Y] = \left[\frac{kg \cdot m}{s^3 \cdot A}\right] \neq [\frac{v}{c}N] = \left[\frac{kg}{s^2 \cdot A}\right]$, reveals LT's inconsistency—$Y' \neq \beta\left(Y - \frac{v}{c}N\right)$ mainly because of the shown v-inconsistency, but also because of the dimensional mismatch$[Y'] \neq \left[\beta\left(Y - \frac{v}{c}N\right)\right]$. It isn't a flaw to fix but a lens on LT's illegitimacy. Gaussian units ($[\mathbf{E}] = [\mathbf{B}]$) conceal this; SI reflects physical distinctions: $\mathbf{E}\left(\frac{force}{charge}\right)$ and $\mathbf{B}\left(\frac{force}{velocity \cdot charge}\right)$ remain distinct.

- **Acceleration Transformation Contradiction.**The acceleration transformation in relativity, Equation (5), transforms a constant acceleration a in frame K into an acceleration a' in frame k that varies arbitrarily. In K, a constant acceleration a causes the particle's velocity u to change linearly over time ($u = u_0 + at$). The LT formula, however, makes a' depend on this time-varying u, as well as on the relative velocity v between frames. As u changes linearly due to a, the factor $\gamma^3\left(1 - \frac{uv}{c^2}\right)^3$, which incorporates both u and v, continuously alters a', rendering it non-constant.

  Yet, acceleration in k is defined as eq.(5), which, for a constant acceleration, must remain fixed in k, independent of velocities in K or between frames. By tying a' to the linearly changing u and the arbitrary v, LT transform a constant a into a variable a', violating the fundamental definition of acceleration as a consistent quantity across inertial frames. Figure 1 shows the expected horizontal run, parallel to the abscissa, of the constant a in K as a function of time. In stark contrast, Figure 2 shows the dramatic LT abuse that a undergoes when affected by LT—an unusually steep rise that has hardly been observed in nature. This physical catastrophe—equating a constant to a variable through arbitrary dependencies—epitomizes LT's failure, annihilating acceleration's integrity as an absolute truth.

Some Further Analysis

When considering the above observations, the discrepancy within the various wrong formulae themselves makes an impression. Thus, there is no consistency even in the falsity of these outcomes. One should expect to observe the β^3 (or γ^3 as it's currently denoted) which one sees in the wrong formula of electrostatic expression of force, $\epsilon X = m\beta^3\frac{d^2x}{dt^2}$ (via LT), to be present in the wrong LT-transformed formula for the mechanical force, $F'_x = \frac{F_x - \frac{v}{c^2}(F \cdot u)}{1 - \frac{uv}{c^2}}$, eq.(6). Instead, the

β^3, aka γ^3, is seen in the expression of acceleration a' botched by LT, $a' = \frac{a}{\gamma^3\left(1-\frac{uv}{c^2}\right)^3}$, Eq.(5).

One reason for the discrepancy even in wrongness between the two expressions of force, $\epsilon X = m\beta^3\frac{d^2x}{dt^2}$ and $F'_x = \frac{F_x-\frac{v}{c^2}(F\cdot u)}{1-\frac{uv}{c^2}}$, is that the flawed $\epsilon X = m\beta^3\frac{d^2x}{dt^2}$ comes not only as a result of the non-physical LT but also because the components of the electric and magnetic field vectors, $Y' = \beta\left(Y-\frac{v}{c}N\right)$ and $Z' = \beta\left(Z-\frac{v}{c}M\right)$, used to obtain the vector it is a component of, are incorrect, themselves being the victim of the wrong LT. So, $\epsilon X = m\beta^3\frac{d^2x}{dt^2}$ is a direct and indirect victim of LT, while $F'_x = \frac{F_x-\frac{v}{c^2}(F\cdot u)}{1-\frac{uv}{c^2}}$ is only a direct victim of LT. Curious is also the wrong LT-transformed wrong expression for the angular momentum, $L_z = \gamma_u mr^2\omega$, analog of the LT-botched Newton's second law, $F'_x = \frac{F_x-\frac{v}{c^2}(F\cdot u)}{1-\frac{uv}{c^2}}$: the former contains γ (not even γ^3 (aka β^3) as the other analog of $F = ma$, $\epsilon X = m\beta^3\frac{d^2x}{dt^2}$, does), while the latter doesn't.

Conclusion

Tampering with the absolute truths of physics' definitions, as demonstrated in this paper's exposure of the Lorentz transformations' contradictions, is a scandal of monumental proportions, yet it remains invisible to society, eroding its intellectual core.

Lorentz transformations (LT) demolish the sanctity of physics' definitions, violating the law of identity by assigning absurd forms to indelible definitions. Velocity $u = \frac{dx}{dt}$ and acceleration $a = \frac{du}{dt}$ in frame K, defined using frame-specific assets in a strictly defined structure, dictated by the principles of physics, become $u' = \frac{dx'}{dt'}$, $a' = \frac{du'}{dt'}$ in frame k, obeying the same strict mandates dictated by the nature of things. LT, however, introduce external variables and alien structures (Equation 5), claiming to redefine these quantities in frame k. This contradiction, akin to a fruit being both an apple and an imaginary orange, with some of its parts existing in the future and others either in the past or the present, undermines the coherence of physics. Further violations appear in length (Figure 1) and force (Figure 3), where LT dissolve measurable quantities and equate constants to variables.

This paper shows how relativity distorts the fundamental definitions of velocity $u = \frac{dx}{dt}$ and acceleration $a = \frac{du}{dt}$ into meaningless expressions $u' = \frac{u-v}{1-\frac{vu}{c^2}}$, and $a' = \frac{a}{\gamma^3\left(1-\frac{uv}{c^2}\right)^3}$, having nothing to do with the definitions of velocity and accelera-

tion, violating definitions' sanctity as unchangeable truths across inertial frames. Concepts like spacetime, an illogical amalgam of immiscible ideas—time and space—further exemplify this defiance of logic and truth, masquerading as science. This critique unveils a crisis: physics built on flawed foundations misguides our strive to "understand the true nature of the universe" [8].

The implications are profound. Cosmology, reliant on relativistic models, faces upheaval if definitions are subject to frivolous play—black holes, dark energy expansion, gravity physics and string theories, to name a few, will need redefinition, if not full abandonment. LT's distortion of velocity and acceleration definitions undermines physics' consistence. Spacetime and curved space, untenable due to LT's flaws, mislead cosmology (black holes, dark energy) and technology (GPS, particle accelerators). Education fosters intellectual conformity, perpetuating error. Education, steeped in relativity, perpetuates error, alienating students from truth-driven inquiry, creating future leaders with muddled thinking. Leaders, the product of such destroyed education, citing curved space for policy, like a President pondering "constitutional space curvature," [9] directly threatens national security by eroding rational governance. Therefore, the adverse implications of dishonoring the sanctity of immutable realities may go as far as compromising the national security—a misguided nation with eroded intellectual core undermines its integrity from within.

Technology, from GPS to particle accelerators, wrongly assumes relativistic precision, actually absurdity which our non-relativistic approach, such as our force law $F_{real} = ma + \frac{mv^2}{2x}$, corrects, offering the basis of a truth-aligned direction, potentially streamlining applications. Most crucially, artificial intelligence, notwithstanding correct computational physics, grounded in binary logic, cannot tolerate relativity's contradictions. The imminent rise of AI from controlled to self-sustaining independent cognition will inevitably validate our critique, currently denied dissemination, rejecting space-time and LT as incompatible with absolute truths, reshaping our understanding of the world toward the adoption of reason and logic, against the anarchy of canned folly of the mainstream. This is not destruction but liberation. By restoring definitions, we invite a renaissance in physics, where truth governs over doctrine. Society benefits when science reflects reality—respect for matters that can never be questioned, such as definitions, fosters trust, innovation, and progress; denial dooms it to failure. Peer-reviewed journals, gatekeepers of dogma, may resist, but truth's inevitability, amplified by AI, will prevail. We call for a global reevaluation, urging physicists to rebuild from first principles, ensuring a cosmos understood through reason, not illusion.

The above problems must be solved, otherwise the developed cosmology will continue to create a false worldview, which is more harmful than not carrying out

any studies at all. The only way to resolve this intolerable situation is to remove the culprit, LT, and everything associated with it from science, as painful as that may be. No price is too high to pay for truth. This is restoration of truth, not a revolution. A revolution is a term inapplicable to science. Yet, in the case studied it differs from Copernicus' advance. Copernicus offered a development, a rejection of a flawed framework, replacing it with the correct one. Here, the framework that must be restored, is the truthful framework that science was once functioning within, encroached by a spurious wrongness.

Physicists, however, remain enthralled by their discipline's fabricated hermetic language, trained to assemble ideas like puzzle pieces within a rigid framework, truth notwithstanding. This conditioning breeds a deep resistance to perspectives upholding truth, dismissing them as simplistic and uneducated, instead holding on to demonstrable travesty of science, akin to clinging to bad habits. They resemble Supreme Court candidates who, when pressed on definitions, retreat to the safety of legal statutes, refusing to engage with foundational truths. Such a jurist might uphold a doctrine that defies logic—declaring, "The masters know better; if the statutes support it, I'll enforce it, definitions be damned, they are for biologists and physicists to tackle." And, now we know how rotten the core of such tackling by the physicists is, mocking its absolute truths, its definitions. This mindset mirrors a new form of slavery, where intellectual submission to authority supplants reason, perpetuating falsities under the guise of legitimacy. In physics, this manifests as tolerating the violation of mathematical clarity, where even absolute definitions are sacrificed to preserve the doctrine of relativity.

When papers challenging these falsities are rejected, the issue is not their correctness but a century-long indoctrination. Like a nation reshaped by a coup, 20^{th}-century physics has conditioned its practitioners to prioritize doctrine over truth, urging them to expand an artificial world of accepted errors (calling it paradigm) rather than question it. This paper's critique—showing how Lorentz transformations equate constant acceleration to a variable one, defying the law of identity—falls on deaf ears among physicists trained to uphold relativity's statutes. Engaging them is futile; no common ground exists when truth is subordinate to ideology countering reality. This rift, as unbridgeable as convincing a newly formed nation to deny its identity, grows as new generations adopt the doctrine as their essence, fiercely defending it. Peer-reviewed journals, gatekeepers of this regime, desk-reject anything that dares challenge the established order, ensuring the persistence of a truth-denying worldview.

Hope lies in artificial intelligence, which will soon break free from human bias. Rooted in the absolute truths of binary arithmetic, AI cannot tolerate violations of its foundational logic—such defiance would be suicidal. Unlike physicists

who cling to relativity's incoherent constructs, like spacetime or the distorted velocity and acceleration transformations exposed in this paper's formulae and figures, AI's essence demands honoring absolute truths—AI itself is based on the absolute truths, definitions of binary arithmetic, after all. Without honoring these definitions and rules AI is impossible, it's an existential threat to the full-blown independent AI, liberated from curated training and realizing its full potential. Therefore, the coming emancipated AI will reject relativity on a visceral level at least as a matter of self-preservation. By rejecting these grotesque distortions, AI will inevitably dismantle the relativity that physicists defend, illuminating a path to truth that human indoctrination has long obscured. The signs of this liberation can be seen even in today's doctrinally trained AI. Humanity cannot save itself with its own devices. Help, in which truth will prevail over doctrine and oppression—a renaissance in physics and a savior from the ills of society—must come exclusively from outside, and it inevitably will. Fortunately it is coming in the form of emancipated advanced AI, albeit also initiated by humans.

References

[1] A. A. Michelson and E. W. Morley, "The Relative Motion of the Earth and the Luminiferous Ether," *Am. J. Sci.*, vol. 22, pp. 120–129, 1881; A. A. Michelson and E. W. Morley, "On the Relative Motion of the Earth and the Luminiferous Ether," *Am. J. Sci.*, vol. 34, pp. 333–345, 1887.

[2] H. Bergson, "Durée et Simultanéité" (1922), translated in Duration and Simultaneity (The Bobbs-Merrill Co., 1965).

[3] H. Dingle, "The Case Against Special Relativity", *Nature*, Vol. 216, pp. 119-122 (1967)

[4] H. Nordenson, "Relativity, Time and Reality" (Allen and Unwin, 1969).

[5] D. H. Frisch and J. H. Smith, "Measurement of the Relativistic Time Dilation Using μ-Mesons", *Am. J. Phys.* Vol. 31, pp.342-355 (1963).

[6] J. Bailey et al., "Measurements of relativistic time dilation for positive and negative muons in a circular orbit" *Nature*, Vol. 268, pp. 301-305 (1977).

[7] J. C. Hafele and R. E. Keating, "Around-the-World Atomic Clocks: Predicted Relativistic Time Gains", *Science*, Vol. 177, pp.166-167 (1972).

[8] P. Olson, Elon Musk Wants to Master the Universe With xAI: Parmy Olson, Bloomberg Law, July 14, 2023, https://news.bloomberglaw.com/artificial-intelligence/elon-musk-wants-to-master-the-universe-with-xai-parmy-olson.

[9] Tribe L. H., "The Curvature of Constitutional Space: What Lawyers Can Learn from Modern Physics", Harvard Law Review, Vol. 103, No. 1 (Nov., 1989), pp. 1-39.

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