Relativity's Collapse: From §10's Apex of the Flaw to the Germinal Violation of Truth

Vesselin C. Noninski

New York Sofia Institute, 149 West 12th Street, New York 10011

March 24, 2025

Abstract

Relativity fails at its apex in §10 of Einstein's 1905 paper, where $\frac{\epsilon}{m}X = \frac{\epsilon}{m\beta^3}X$—a v-free force equating a v-laden term—holds only at $v = 0$, defying uniform translatory motion (UTM), the prerequisite of relativity. §6's $Y' = \beta\left(Y - \frac{v}{c}N\right)$ manifests this, its v-dependence unphysical. Lorentz transformations (LT) violate the principle of conservation of truth—laws must remain v-free across inertial frames—exposing relativity as incoherent, a fraud no tweak or experiment salvages.

Introduction

Coherent physics never gives a special attention to the transformation of coordinates across inertial frames because should the need arise, it is trivial—the principle of the conservation of coordinates holds. Physics demands laws that are invariant under uniform translatory motion (UTM)—a banality that relativity denies. In §10 [1], this denial reaches an irresolvable peak: a v-free force cannot match a v-dependent term, which ends relativity outright. §6 manifests this flaw, and §2 shows that it originates from the violation of truth conservation in LT—two inviolable truths: uniform velocity forbids length contraction and locked clocks forbid time dilation. This flaw descends from §10's apex to relativity's root collapse.

Apex of the Flaw: §10's Fatal Contradiction

Claimed coexistence of $\frac{d^2\xi}{d\tau^2} = \frac{\epsilon}{m}X' \iff \frac{d^2x}{dt^2} = \frac{\epsilon}{m}X$ and $\frac{d^2\xi}{d\tau^2} = \frac{\epsilon}{m}X' \iff \frac{d^2x}{dt^2} = \frac{\epsilon}{m\beta^3}X$ is impossible. This invalidates relativity in its entirety

In §10, Einstein presents the equation of an electron at rest in system K:

$$\frac{d^2x}{dt^2} = \frac{\epsilon}{m}X, \tag{1}$$

where ϵ is the electron's charge, m its mass, and X the electric field in K. The same electron is also at rest in system k, for which Einstein presents the equation,

$$\frac{d^2\xi}{d\tau^2} = \frac{\epsilon}{m}X', \tag{2}$$

despite the fact that, for its part, k moves at velocity $v \neq 0$ relative to K, where $X = X'$ is the electric field in k.

Notably, velocity v does not affect either equation in any way, shape or form. Eq.(2) is obtained from eq.(1) via the foundational Principle of Relativity (aka the First Postulate of the Theory of Relativity, called here just relativity), which demands that the physical laws are not affected in all inertial frames (cf. §2, point 1., of the cited 1905 paper), despite k moving at velocity $v \neq 0$ relative to K. In other words, when k and K move uniformly relative to each other, there is no other way for eq.(2) to correspond to any other equation in K than eq.(1)—the relation $\frac{d^2x}{dt^2} = \frac{\epsilon}{m}X \Longleftrightarrow \frac{d^2\xi}{d\tau^2} = \frac{\epsilon}{m}X'$, establishes the equivalence of these equations for the same electron, despite k's motion.

Consequently, it is impossible to claim, in the same breath, a different correspondence between the equation $\frac{d^2\xi}{d\tau^2} = \frac{\epsilon}{m}X'$ in k and an equation in K. For example, it is impossible to claim the equivalence $\frac{d^2\xi}{d\tau^2} = \frac{\epsilon}{m}X' \iff \frac{d^2x}{dt^2} = \frac{\epsilon}{m\beta^3}X$, where $\beta = \frac{1}{\sqrt{1-\frac{v^2}{c^2}}}$, justifying it by the electron's motion at $v \neq 0$ in K, since eq.(2) and eq.(1) also refer to the same electron moving at $v \neq 0$ in K. Such a claim, namely, insisting on the validity of $\frac{d^2\xi}{d\tau^2} = \frac{\epsilon}{m}X' \iff \frac{d^2x}{dt^2} = \frac{\epsilon}{m\beta^3}X$, comprises an internal contradiction, since the Principle of Relativity recognizes only the first pair, $\frac{d^2x}{dt^2} = \frac{\epsilon}{m}X \iff \frac{d^2\xi}{d\tau^2} = \frac{\epsilon}{m}X'$, invalidating the relativistic derivation $\frac{d^2\xi}{d\tau^2} = \frac{\epsilon}{m}X' \iff \frac{d^2x}{dt^2} = \frac{\epsilon}{m\beta^3}X$ that introduces β^3. Relativity is thus a non sequitur, incapable of producing consistent predictions.

Claims of empirical confirmations, like time dilation, are misattributions, since an absurd theory cannot yield valid outcomes, just as 1 cannot equal 2. Given this unequivocal argument, choosing to retain relativity would mean choosing delusion over truth. Relativity's persistence perpetuates an erroneous framework, misleading science.

Claimed expressing of electron's acceleration $\frac{d^2x}{dt^2}$ in K by two different expressions, $\frac{\epsilon}{m}X$ and $\frac{\epsilon}{m\beta^3}X$ is impossible. This brings down relativity in its entirety.

You may observe the above argument also in this way. The foundational principle of relativity (PoR) mandates that the v-free $\frac{d^2\xi}{d\tau^2} = \frac{\epsilon}{m}X'$ in k leads in K to the v-free:

$$\frac{d^2x}{dt^2} = \frac{\epsilon}{m}X \tag{3}$$

for any value of v.

Yet, in §10, the v-free $\frac{d^2\xi}{d\tau^2} = \frac{\epsilon}{m}X'$ in k is alternatively transformed in K by LT into the v-laden:

$$\frac{d^2x}{dt^2} = \frac{\epsilon}{m\beta^3}X, \tag{4}$$

where $\beta = \frac{1}{\sqrt{1-\frac{v^2}{c^2}}}$.

Equating eq.(3) and eq.(4):

$$\frac{\epsilon}{m}X = \frac{\epsilon}{m\beta^3}X \tag{5}$$

fails unless $v = 0$—a v-free left cannot equal a v-laden right. This ends relativity for UTM in one stroke, a discovery from Noninski [2] superseding critiques such as Bergson, Nordenson and Dingle [3–5] that seek impossible debunking of LT based on LT's own framework, not on their collision with the foundational truth such as PoR. Up until this catastrophic critique, proponents' reply has always been that this is how relativity works and we must deal with it. However, as we saw above relativity works by setting up a dead-end—an irresolvable internal contradiction, which is nothing to celebrate. Analysis stops here—relativity is finished.

Flaw Manifested: §6's Unphysical Velocity

§6 [1] applies this flaw:

$$Y' = \beta\left(Y - \frac{v}{c}N\right). \tag{6}$$

Y' (electric field in k) should match Y (in K)—v-free under PoR. Yet $\frac{v}{c}N$ and β inject v (cf. facsimile). This is absurd: a v-free term cannot depend on v. This, in itself, is enough to invalidate relativity.

Two Inconsistent Field Expressions for One System, In One Frame

In a foundational electromagnetic analysis, a single system in a stationary frame K yields in a moving frame k field expressions $X = X'$ and $Y = \frac{Y'}{\beta} + \frac{v}{c}N$, because "[e]vidently the two systems of equations found for system k must express exactly the same thing", with $v \neq 0$, $\beta \neq 1$ (cf. facsimile, showing also the meaning of the parameters). These expressions tie to K's system, $\frac{1}{c}\frac{\partial X}{\partial t} = \dots$, $\frac{1}{c}\frac{\partial Y}{\partial t} = \dots$, presumed consistent with k's $\frac{1}{c}\frac{\partial X'}{\partial \tau} = \cdots$, $\frac{1}{c}\frac{\partial Y'}{\partial \tau} = \cdots$. Yet, rewriting K's equations with k's terms distorts them: $\frac{1}{c}\frac{\partial X}{\partial t} \to \frac{1}{c}\frac{\partial X'}{\partial \tau} = \dots$, while $\frac{1}{c}\frac{\partial Y}{\partial t} \to \frac{1}{c}\frac{\partial}{\partial \tau}\left(\frac{Y'}{\beta} + \frac{v}{c}N\right) = \dots$. Unless $v = 0$, $\beta = 1$, which violates the initial conditions. This skews K's form: $Y \neq Y'$, and the derivative misaligns with k's structure. The text asserts both expressions, $\frac{1}{c}\frac{\partial Y'}{\partial \tau} = \cdots$ and $\frac{1}{c}\frac{\partial}{\partial \tau}\left(\frac{Y'}{\beta} + \frac{v}{c}N\right) = \cdots$, hold in k without resolution; for $v \neq 0$, they imply incompatible field behaviors under identical conditions, an unaddressed duality. This persists notwithstanding the fact to be mentioned next, that $Y = \frac{Y'}{\beta} + \frac{v}{c}N$ is dimensionally inconsistent in the SI unit system, a flaw cloaked by Gaussian units or ad hoc adjustments in natural units, masking the flaw in unit-agnostic derivations.

On the Dimensional Mismatch

In SI, $[Y] = \left[\frac{\text{kg·m}}{\text{s}^3\text{·A}}\right] \neq [\frac{v}{c}N] = \left[\frac{\text{kg}}{\text{s}^2\text{·A}}\right]$, revealing LT's inconsistency—$Y' \neq \beta\left(Y - \frac{v}{c}N\right)$ isn't a flaw to fix but a lens on their illegitimacy. Gaussian units ($[\mathbf{E}] = [\mathbf{B}]$) conceal this; SI reflects physical distinctions—$\mathbf{E}$ ($\frac{\text{force}}{\text{charge}}$) and $\mathbf{B}$ ($\frac{\text{force}}{\text{velocity·charge}}$) differ naturally in Maxwell's equations ($c^2 = \frac{1}{\mu_0\epsilon_0}$). Yet SI rewrites—e.g., $B'_y = \gamma\left(B_y + \frac{v}{c^2}E_z\right)$—acknowledge the discrepancy. Why adjust a "fundamental" transformation to fit units? If LT were valid, rewriting wouldn't be needed—Gaussian's alignment doesn't justify SI's mismatch. It's a contrivance, suggesting LT's v-dependence lacks physical grounding.

SI's mismatch signals LT's failure—$\mathbf{E}$ and $\mathbf{B}$ shouldn't mix this way if PoR holds—while Gaussian's artificial unity bends physics to fit relativity, equating $\mathbf{E}$ and $\mathbf{B}$ despite their distinct roles. Units

shouldn't dictate physics—laws must be invariant across systems. LT's reliance on Gaussian alignment or SI's "c-normalization" (scaling with c or c^2) exposes a flaw beyond dimensions, rooted in the conservation of coordinates—ultimately, conservation of truth, the tenor of this work. This manifests §10's collapse.

Origin of the Flaw: Violation of Truth Conservation by LT

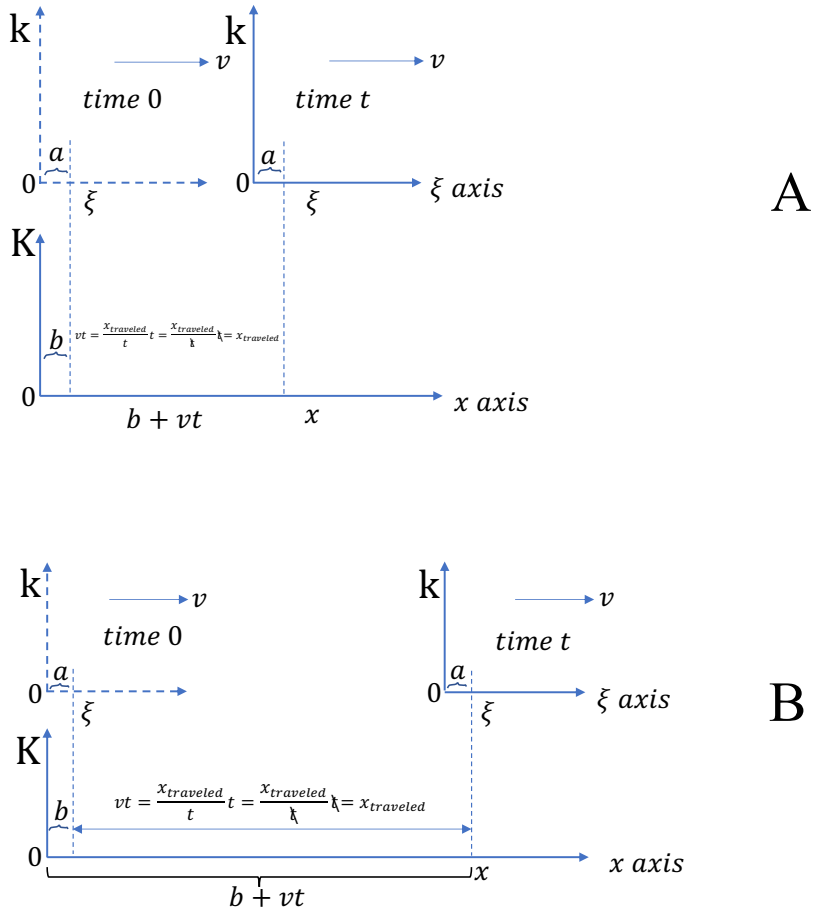

Fig. 1. Frame k displaced for the same time t at two velocities, A (lower v) and B (higher v), demonstrating truth conservation—for a given time t, k has moved to a given x in K. While for the same time t, but at a different v, k has moved to a different x in K, showing that the initial segments $a = b$ in K and in k, retain their value at any v—a triviality violated by LT (the triviality is the principle of coordinate conservation, which demands that upon imparting velocity v to the rigid body resting in k, all of rigid body's points enjoy the same velocity v, a principle violated by LT).

Relativity's flaw originates in LT's violation of the principle of conservation of truth: laws remain v-free across inertial frames under UTM, preserving physical reality (Fig. 1). For time t, frame k moves to $x = vt$ in K; at a different v but same t, k reaches a different x, yet segments $a = b$ (in K and k) retain their value at any v—a triviality LT defy.

Two inviolable truths define this:

Usual Way to Think that Relativity Leads to Length Contraction

1. When v is imparted to a rigid rod (§2 [1]), all points enjoy the same v—length contraction ($l' = \frac{l}{\beta}$) is impossible. LT's:

$$x' = \beta(x - vt) \tag{7}$$

yield $l' = \frac{l}{\beta}$: for a rod from $x_1 = 0$ to $x_2 = l$ in K, at $t = 0$ in K, $x'_1 = \beta(0 - v \cdot 0) = 0$, $x'_2 = \beta(l - v \cdot 0) = \beta l$, suggesting $l' = \beta l > l$.

But to measure length in k, endpoints must be simultaneous there (t' equal)—set $t' = 0$:

$$t' = \beta\left(t - \frac{vx}{c^2}\right) \tag{8}$$

Then $t = \frac{vx}{c^2}$; so $x'_1 = 0$, $x'_2 = \beta(l - v \cdot \frac{vl}{c^2}) = \frac{l}{\beta}$. Thus, $l' = \frac{l}{\beta} < l$.

Sadly, LT Don't Even Give Us a Chance to Test Length Contraction

Indeed, consider $v = 0.6c$, $c = 1$, $\beta = 1.25$, rod at $x_1 = 0$, $x_2 = 1$, $t = 0$ in K: LT give $x'_1 = 0$, $t'_1 = 0$, $x'_2 = 1.25$, $t'_2 = -0.75$—a mirage, not rigid, its ends non-coexistent (one in the past). This impossible variance ($v(x) \neq v$) defies rigidity, while truth demands $x' = x - vt$, $l' = l$, as Fig. 1 shows.

2. Einstein locks clocks at A and B on the moving rod to K's world time—time dilation is impossible. LT's:

$$t' = \beta\left(t - \frac{vx}{c^2}\right) \tag{9}$$

desynchronize them, defying this lock and absolute simultaneity (Fig. 1).

§6's v-laden fields and §10's β^3 flow from these—LT shatter truth's invariance.

Conclusion

Relativity falls from §10's flaw apex—$\frac{\epsilon}{m}X \neq \frac{\epsilon}{m\beta^3}X$—through §6's manifest flaw, to the origin: LT's violation of truth conservation. Uniform v and locked clocks—physical truths—render length contraction and time dilation impossible. SI unmasks this; Gaussian cloaks it—neither saves it. Physics must reject this fiction for v-free laws. So, anytime anyone comes up with anything even remotely resembling relativity, it must be rejected without further ado.

References

[1] A. Einstein, Zur Elektrodynamik bewegter Körper, *Ann. Phys.* **17**, 891 (1905). Translated in *The Principle of Relativity*, Dover, 1952, pp. 37-65.

[2] V. C. Noninski, A Demonstrable Inconsistency Between the Principle of Relativity and the Lorentz Transformations, `timeisabsolute.org/v-free_vs_v-laden_section6.pdf` (2025).

[3] H. Bergson, *Durée et Simultanéité*, Presses Universitaires de France, 1922. Translated in *Duration and Simultaneity*, Bobbs-Merrill Co., 1965.

[4] H. Nordenson, *Relativity, Time and Reality*, Allen and Unwin, 1969.

[5] H. Dingle, *Science at the Crossroads*, Martin Brian & O'Keeffe, London, 1972, p. 112.