

Navigating the Landscape of Theoretical Physics and Cosmology: From Newton's Metaphysics to Einstein's Theological Insights

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ABSTRACT

This paper examines the transformative journey of theoretical physics and cosmology from the metaphysical foundations established by Isaac Newton to the theological implications posed by Albert Einstein's theories. By analyzing the philosophical underpinnings of Newtonian mechanics and contrasting them with Einstein's revolutionary concepts of relativity and spacetime, we explore how these shifts have shaped our understanding of the universe. The study delves into the implications of these transitions for contemporary physics, highlighting the interplay between science and philosophy. Ultimately, this exploration aims to provide insights into the ongoing dialogue between theoretical frameworks and the broader metaphysical and theological questions they evoke.

INTRODUCTION

Newton's numerical optimism based, magical law of general gravitational fascination; randomly figured out disregarding the observationally laid out divine elements of Kepler, Brahe, Leibniz, and later Hegel's rationalizations; was as a matter of fact an endeavor to reestablish Ptolemaic Epicycles and God's standard over the sky, which was disturbed by the Copernican upset. Newton's otherworldly regulation, significantly more, supported by Einstein's similarly dreamer hypotheses of relativity, since the turn of the twentieth century has prompted reductionism in present day hypothetical physical science and cosmology to find logically less

difficult and bringing together standards for the final reality of the universe, making physical science a piece of religious philosophy. There is little miracle that philosophy, similar to the bygone eras has acquired an undeniably unmistakable job in present day hypothetical material science and cosmology. This would be obvious from what Geoffrey Burbidge [1], a conspicuous astrophysicist needed to say about the "Theory of how things came to be:" "By 1982 when a gathering on cosmology was held at the Vatican, another methodology was taken. The extremists around, like F. Hoyle, V. Ambartsumian, and this speaker (to make reference to a couple) were not even welcomed. The gathering was confined totally to Huge explosion cosmology and its advocates. As a matter of fact, in the prologue to the distributed volume of the procedures of the gathering (Pontifical Foundation of Sciences, 1982) it was underscored that main professors in (the Enormous detonation) were available; and that there was plainly a conscious choice of the coordinators".

The discernment that every one of the peculiarities of the universe are deliberately interconnected drives inherent science to demonstrate this interconnection all through, both overall and exhaustively. The pith of positive information is to dynamically uncover as an endless cycle; the finer subtleties of the functions of the universe - Nature, Life, Society, and Thought; through friendly/verifiable practice, examination, innovation, and so forth - making science basically a useful and rationalistic epistemology. Any presence

is an inconsistency and as Hegel brought up, "... it is just to the extent that something includes an inconsistency inside it that it moves, has an inclination and action". The goal of the inconsistency in each degree of presence; through the refutation of the nullification and intervened by some coincidence and need; brings about the phenomenology of the universe. The objective truth (positive information) in this manner, comprises in uncovering how rationalistic inconsistencies sort themselves out in the subtleties of Nature.

Transcendentalism (causality and formal rationale based epistemology), going against the norm, looks to "comprehend" the peculiarities gathered through human sense discernment, with next to no respect for genuine reality or the ontological supporting of the issues; which stay a secret or, best case scenario, as the Kantian mysterious things-in-themselves. In the event that follows, accordingly, that transcendentalism just arrangements with basically erratic emotional optimism; bringing together ideas imagined in thought (formal rationale/science), which can lead just to scholasticism and secrets. These two ways to deal with heavenly elements have led to two precisely inverse perspectives on the universe - a magical one (of Newton and Einstein) that sets a finite universe ostensibly made about fifteen quite a while back, through a solitary demonstration of a destructive occasion; brought about by an inescapable and all-knowing God and a rationalistic one; which places an infinite, timeless and steadily evolving universe; interceded by some coincidence and need. The two perspectives (- mystical and argumentative) additionally prompts two precisely inverse perspectives about the beginning, the advancement, morphology and the arrangement of

systems and other vast bodies in the universe. The first one, which is fundamentally founded on numerical optimism and is for the most part acknowledged; sees universe development as deterministic and a basically unidirectional buildup of diffuse matter made through the early stage Enormous detonation blast, The subsequent view (persuasive and quantum electrodynamical), in light of (restricted) observational and exact proof states a fairly natural beginning of the grandiose bodies, where new cosmic systems are framed from material catapulted as well as scattered from the center of the current worlds; where new matter-antimatter is made as a goal of the ontological inconsistency "Being Nothing" [2]. The accompanying conversation would uncover the significant strategic contrast between the two perspectives. The rationalistic view demands that logical inconsistency of the solidarity of the contrary energies is the quintessence of any presence and matter in timeless movement and the goal of the logical inconsistency through the nullification of the refutation; is the premise of all phenomenology. Transcendentalism going against the norm is basically reductionist, absolutist and proverbial; stating balance, solidarity a mathematical and quantitative methodology at human scale; prompting erratic detailing of hypotheses, Catch 22s and secrets.

Isaac Newton It is a verifiable truth [3,4] that in a long contention with Leibniz's Vis Viva and radial power in the planetary framework, Newton needed to bring back the standard of God (class rule) in the sky and the earth; after the Copernican upset disturbed it and carried a danger to philosophy. Engaged by the English majestic predominance, the Congregation and his own situation as the Leader of the Illustrious Society, Newton appropriated amazingly crafted

by his counterparts like Hooke's mechanics, Leibniz's analytics as his own and forced his optimist and wonderful round (modified Epicycles) circles in the nearby planet group, in defiance of the right physical science of the curved circles of Kepler and Leibniz. A similar custom go on till today. The significance of outward power is considerably more far reaching than is normally suspected. It is eagerly denied by official material science and cosmology. Yet, it is one of the fundamental elements in the distinction between official (Newtonian/Einsteinian)

material science/cosmology and the argumentative physical science/cosmology of Leibniz and Hegel, (as the accompanying conversation and the references would demonstrate). Leibniz's Vis Viva detailing as opposed to Newton's one structures the fundamental premise of training in astronomy and space investigation endeavors. The fundamental distinction [5,6] between official (Newtonian/Einsteinian) physical science and argumentative physical science include the accompanying issues: contrast in earthly and heavenly mechanics and gravity; the contrast between mathematical way to deal with physical science by Descartes (went on by Newton, Einstein), and the persuasive one of Leibniz and Hegel; the distinction between moderated energy as mv of Descartes and mv^2 of Leibniz; the contrast between absolutely mechanical movement and Vis Viva; the ontological inquiries of issue and movement and so on, in addition to heaps of profound "thinking-thought" (reasoning) not simply standard idea utilized in old fashioned presence of mind, formal rationale and arithmetic - the pabulum of official physical science. Just in earthly old style mechanics; the two methodologies generally (however not

precisely) relate, yet in the extraterrestrial world and the quantum microcosm the two methodologies shift broadly and as a matter of fact a remarkable inverse of one another. Vis Viva is dynamic in earthbound mechanics, however not clear, as it is overwhelmed by earth's gravity and is dispersed either as intensity or in the inner construction of issue. The accompanying images apply: r = distance, t = time, v = speed, G = the Newtonian gravitational steady, M = mass of the aggregate, m = mass of any planet in the nearby planet group.

A. Momentum and force Descartes: $\text{force} \times t = mv$; applies anywhere in the universe Leibniz: $\text{force} \times r = mv^2$; subdued on a cosmic body like earth, but is more forceful in outer space Ratio: $mv^2/mv = v$ (Vis Viva), which represents the extra v term in Leibnizian momentum, centrifugal force etc. **B. Nature seems to follow power laws (in gravitational, electric, magnetic, nuclear, luminosity etc., phenomena)** Galileo: r/t^2 , dominant on or near the surface of a cosmic body Kepler: r^3/t^2 active in outer (planetary) space Ratio: $r^3/t^2 / r/t^2 = r^2$, relevant to Hegel's absolute sovereign motion of matter! **C. Gravitational potential between the sun and any planet in a two body system** Newton: $E = -GMm/r$, includes only central force, applies everywhere in the universe Leibniz: $E = mA/r^3 - GMm/r$, where A is a constant and includes both central and centrifugal force; active anywhere in the universe. **Total dialectical (Leibniz, Newton and Hegel) Potential:** $E = mA/r^3 - GMm/r - mCr^2$, [5] (where A, C are constants), is more appropriate for any cosmic formation; planetary, star clusters, galaxies etc.

The solar system The Figure 1 shows the simple Desmos Plot (without considering the constants) of the total potential = $mA/r^3 - GMm/r - mCr^2$,

vs. distance, Figure 1(a); Leibniz’s potential $= a/r^3 - b/r$ vs. distance, Figure 1(b); and only Newton’s potential $= 1/r$ vs. distance (Figure 1(c)). It is obvious from these figures that considering only the Newtonian potential as Figure 1(c), requires much more critical requirements for distance than the other two cases for a metastable planetary orbit; indicating a dialectical contradiction in planetary motion.

Albert Einstein Meanwhile during the long period from Newton to Einstein, both the Newtonian cosmology and Christian theology (and hence the ruling idea) had lost much of their glamour with the subsequent development in astrophysics and biology (Darwin) and particularly fatally, with the recognition of the Evil Quanta; which destroyed all notions of causality, certainty, determinism, symmetry, mathematical consistency etc., on which official physics made claims to its highest merit. Newton’s theory of gravitation and Maxwell’s theory of electromagnetism, which formed the backbone of theoretical physics, cosmology and classical materialism and also the ruling idea of a class society; was shattered

with the recognition of the quantum phenomena at the turn of the 20th century. All certainty, continuity, determinism, cause and effect, formal logic, mathematical methods etc.; the foundation of the old epistemology suddenly became undone overnight. The earthquake of the quantum phenomena – a totally unthinkable, unimaginable and a new revolutionary aspect of objective reality, the reverberation of which is still strongly felt today, after more than a century of its discovery; defines the conundrum of official science and the ruling order of monopoly capitalism and resurgent theology. At the same time, the discovery of the photoelectric effect and related quantum phenomena raised new question about the nature of light as a particle or a wave; about the nature of objective reality, space and time and other ontological questions in general - questions which were of little or no significance in previous history. In addition to the heightened crisis due to its own internal contradictions; the recognition of the quantum phenomena (in both realms of microcosm and macrocosm) inflicted a

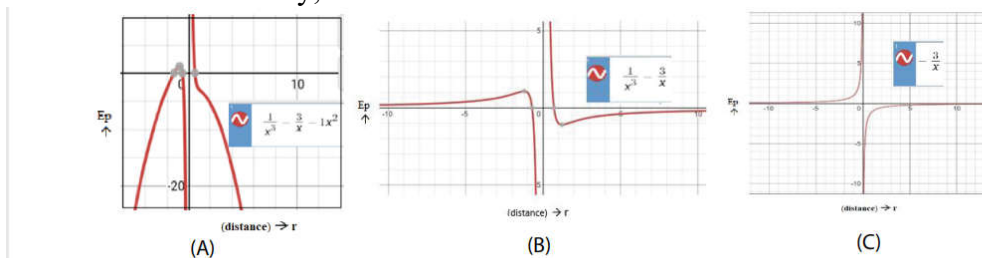
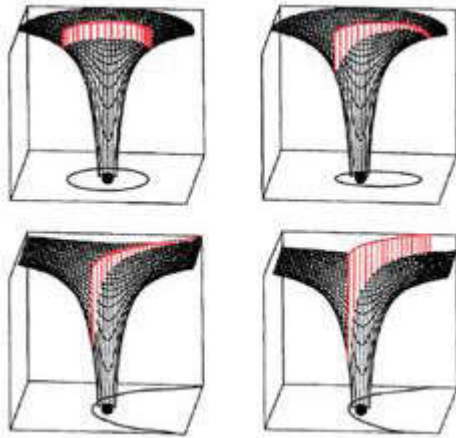


Figure 1: (A) Plot for $E_p = a/r^3 - b/r - Cr^2$, (B) Plot for $E_p = a/r^3 - b/r$, (C) Plot for $E_p = -b/r$.



devastating blow to the continued rule of the capitalist world order in its modern monopoly form. The crisis of capitalist world order, in both the economic and ruling front continues unabated till to this day.

Lorentz transforms, theories of relativity - Special and general As well as supporting Newton's hypothesis of widespread attraction as talked about above, combining Maxwell's hypothesis of electromagnetism was considered to be one more unmistakable method for countering the thought of quantum vulnerability in Nature. As the steady speed of light c appeared to be a principal part of Nature as it is demonstrated in Maxwell's hypothesis; it turned into a revitalizing cry with regards to the current epistemology against the shock interruption of the quantum vulnerability. The issues of the estimation and the hypothesis of the engendering of light c of traditional electromagnetism, turned into an incredible enthusiasm and distraction of the post-quantum hypothetical physical science and cosmology at the turn of the twentieth 100 years. Recharged interest was centered around crafted by Ole Rømer and Christiaan Hugen on the speed of light, Doppler's Impact, Deviation in the movements of the enormous bodies and so forth, in endeavors to stretch out Maxwell's electromagnetism to moving frameworks. The way that the

Michaelson-Morley try created an invalid outcome, turned into the celebratory accomplishment of current physical science; which thusly led to the much-respected Lorentz Changes and Einstein's hypotheses of relativity. In a new distribution backtracking the first sources, Engelhardt [21] plainly exhibited that the acknowledged type of the Lorentz Changes (LTs) emerged from an error committed by Woldemar Voigt [22] in fostering his "Hypothesis of Doppler's Principle". Einstein [23] alongside Minkowski, utilized the thought of the outright consistency of the speed of light to determine the LTs thus called "spacetime", a theoretical mathematical develop apparently with substantial material, mechanical and metric credits, which frames the premise of genuine reality and the speculations of relativity - extraordinary and general. It is currently been shown [10,13] definitively by this creator that LTs and "Spacetime" are invented and dozy numerical builds that have no importance to genuine reality.

The quantum peculiarities In demonstrate hatred for the overall dismissal of quantum vulnerability, Quantum Material science not just prompted an undeniably phenomenal comprehension of the miniature universe of iotas and particles; improvement of different sorts of spectroscopies; flourishing of beforehand unbelievable electronic, substance and biochemical and so on, advancements, specifically; yet in addition opened the way for a scientific comprehension of the ontological inquiries of the universe overall. The quantum peculiarities uncovered that objective reality at miniature level is innately, discrete, unsure and of unsound nature - appearing and dropping of presence, interceded by rationalistic possibility and need. The large scale (human) level of existing elements is just the gross,

arrived at the midpoint of out and generally speaking aggregate impacts of the quantum processes endlessly happening at the sub-level of quantum reality! [13,14]. After lengthy refusal yet at the same time being not able to fight with the evil quanta; the issue has now been moved to the "Thought World" where the trapeze artistry of arithmetic and astonishing dream substitute for science. Endeavors are being made to suffocate the "Insidious Quantum" into the "constant" and sweet fluid "fields" (spacetime, quantum, Higgs and so forth); to exorcize the vulnerability, creepiness of the Underhanded Quanta. Super ventures in the domains of both microcosm and the world proceeds unabated to "demonstrate" fighting obscure speculations at the colossal expense of social assets.

CONCLUSION

In hindsight, it is reasonable to surmise that the revival of Newtonian and Maxwellian classical theories was a purposeful, backward, and reactionary attempt to undermine the idea of quantum uncertainty in nature. The development of quantum electrodynamics, whose laws are the direct manifestation of materialist dialectics that pervade any material existence from the microcosm to the macrocosm of the universe, has been severely harmed by the exclusive focus on re-establishing the old theories in modified form and the denial of quantum phenomena as a determined effort to save the outdated notions of the established order [24]. The theory of materialist dialectic, which holds that the dominant ideologies of a historical era are those of its ruling class, is shown concretely in this book. The clean and seemingly aimless expression of this phenomenon may be easily identified or delimited from the advancements in theoretical physics and cosmology throughout modern history, from Newton to Einstein to the present. At the

insistence of the governing order and religion, Newton forcibly imposed an ideal circular but incorrect celestial dynamics on the solar system, defying Kepler and Leibniz's accurate and scientific description of an elliptical one. "Now that (since Bacon) the substantial forms (of Aristotelian materialism) have been abandoned from natural philosophy, mathematics should replace them to the maximum extent possible," Newton said in the first phrase of the Foreword [25] of his Principia, asserting this governing authority. extent."

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