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A Multidisciplinary Discussion on the Theory of Relativity and the Mi'raj

Ahmet Efe[1*]

[1*]*Senior Regional Risk Management Officer/International Federation of Red Cross and Red Crescent, Ankara, Türkiye (icsiacag@gmail.com) (ORCID: 0000-0002-2691-7517)*

Abstract – This study delves into the intersection of the Theory of Relativity and the Mi'raj (Ascension) event, drawing upon Said Nursi's philosophical insights into the multifaceted nature of time. Nursi's exploration of temporal relativity illuminates the variability of time perception across different realms, resonating with Einstein's concepts of time dilation and the relativity of simultaneity. By examining the speeds of light, spirit, and imagination, Nursi illustrates that, much like motion varies in the universe, so too does time, thus rationalizing the remarkable physical and spiritual ascension of the Prophet Muhammad (PBUH) within a brief earthly timeframe. Furthermore, Nursi's analogy of multiple clock hands, each measuring different velocities, serves as a mirror to Einstein's space-time continuum, suggesting that the apparent temporal paradox of the Mi'raj can be reconciled through a relativistic framework with a remodeling approach to formulation of the relativity. Ultimately, Nursi's synthesis of spiritual metaphysics and scientific principles offers a distinctive lens to understand the Mi'raj event in the context of modern physics, proposing that the relativity of time provides a coherent explanation for this transcendent journey.

Keywords *– Theory of Relativity, Mi'raj (Ascension), Time Dilation, Said Nursi, Spiritual Metaphysics*

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I. Introduction

The *Mi'raj* (Ascension) event of the Prophet Muhammad (PBUH) holds profound spiritual significance within Islamic tradition, representing a miraculous journey beyond the material universe to the Divine Presence. While theological discussions have long explored its spiritual dimensions, modern science, particularly the Theory of Relativity, offers new perspectives on understanding this transcendent event. Said Nursi, a renowned Islamic scholar, provided a unique interpretation of the *Mi'raj*, emphasizing the relativity of time and motion, concepts that resonate with Einstein's groundbreaking work.

The Theory of Relativity, introduced by Albert Einstein in the early 20th century, revolutionized our understanding of time and space by showing that both are not absolute but rather interdependent and relative to the observer's speed. Time dilation, a key aspect of relativity, explains how time can pass differently for two observers depending on their relative velocities or gravitational fields. This principle can be employed to shed light on the temporal aspects of the *Mi'raj*, where the Prophet's journey across vast realms is said to have occurred within a short span of earthly time.

This study investigates the applicability of relativity to the *Mi'raj* event by integrating Said Nursi's reflections on time and motion. Nursi's insights suggest that time is not a fixed entity but rather a flexible dimension that varies across different realms of existence, aligning with the scientific understanding of time as a relative phenomenon. By comparing the speeds of various entities—light, spirit, and imagination—Nursi provides a metaphysical framework that can bridge Islamic cosmology with contemporary physics [17].

Said Nursi's approach is employed in this study due to its unique capacity to bridge the realms of spiritual metaphysics and modern scientific thought. His philosophical insights offer a profound understanding of time that aligns with contemporary theories, particularly the Theory of Relativity. By emphasizing the relativity of time and its perception across different dimensions, Nursi allows for a reinterpretation of the Mi'raj event that transcends conventional explanations. His use of analogies, such as the multiple clock hands measuring varying velocities, not only clarifies complex concepts but also resonates with Einsteinian physics, thereby facilitating a dialogue between spirituality and science. This integrative perspective enriches our comprehension of profound phenomena, allowing for a coherent synthesis that honors both the spiritual significance of the Mi'raj and the principles of modern physics.

The purpose of this study is to explore the *Mi'raj* through the lens of relativity, offering a harmonious view that integrates spiritual metaphysics with scientific principles. Through this approach, we aim to propose a coherent explanation for how the Prophet Muhammad (PBUH) could have experienced such an extraordinary journey within the constraints of human perception of time, ultimately contributing to a deeper understanding of the intersection between faith and science.

A. Research Design

This study adopts a literature-based approach, integrating classical Islamic theological perspectives, particularly those of Said Nursi, with modern scientific theories—primarily

Einstein's Theory of Relativity. Since this is not studied yet, our study provides a significant contribution to the literature. The aim is to create a conceptual model that aligns the metaphysical understanding of time during the *Mi'raj* event with the scientific principles of time dilation and relativity. The study will utilize a comparative analysis of theological texts with key works in physics, alongside the development of a hypothetical model that applies relativity to the *Mi'raj* event. Through this dual approach, the research seeks to propose a framework of remodeling formulation of the relativity that allows for the rationalization of the Prophet Muhammad's (PBUH) journey in light of contemporary scientific thought.

The foundation of this research lies in Said Nursi's extensive discussions on the relativity of time and the metaphysical nature of the Prophet's (PBUH) *Mi'raj*. Nursi frequently likened the relativity of time to the varying speeds of light, spirit, imagination, and sound. His analogy of different clock hands measuring time at different speeds offers a powerful metaphor for exploring how time, as experienced by humans, might differ significantly from time as experienced by spiritual or divine entities in his work called "*Mi'raç Risalesi*" in the 31st Words [17].

Parallel to this, the scientific literature on Einstein's Theory of Relativity—particularly the concepts of time dilation and the space-time continuum—provides the framework for understanding how physical time can vary under different conditions, such as high velocities or strong gravitational fields. Time dilation, which describes how time can slow down for an object traveling at speeds approaching the speed of light, offers a scientific basis for reconciling the temporal aspect of the *Mi'raj* with human perception.

In this research, Nursi's philosophical approach to time is modeled alongside Einstein's mathematical framework of relativity. The research discusses how the spiritual journey of the Prophet, which traversed vast realms of existence within minutes, could be explained by principles akin to relativistic time dilation.

B. Hypothesis

The *Mi'raj* event, as described in Islamic tradition, can be conceptually modeled using the Theory of Relativity, particularly the principles of time dilation and space-time, as articulated by Said Nursi, to reconcile the apparent paradox of the Prophet Muhammad's (PBUH) journey occurring within a brief span of earthly time.

C. Assumptions

1. Relativity of Time: Time is not a fixed or absolute entity, but rather a relative dimension that varies depending on speed, gravity, and the nature of the entity experiencing it. This assumption is derived from both the Theory of Relativity and Said Nursi's theological reflections.
2. Dual Nature of the *Mi'raj*: The event involved both the physical and spiritual realms, which may follow different laws of time and motion. This assumption is based on Nursi's argument that the Prophet's body and spirit ascended together, necessitating the application of both metaphysical and physical principles.
3. Variable Speed of Entities: Entities such as light, spirit, and imagination move at different velocities, and these velocities determine their experience of time. This idea is supported by both classical theological texts and modern physics.
4. Time Dilation as Explanatory Tool: The time dilation effect, as explained by the Theory of Relativity, is a valid model to explain how the Prophet could traverse immense distances within a short earthly timeframe.
5. Metaphorical Interpretation of Ascension: While the *Mi'raj* event is considered miraculous, it is assumed that certain aspects can be explored through metaphorical or symbolic interpretations, allowing scientific concepts to inform theological understanding.

D. Limitations

1. Non-empirical Nature: The study is primarily theoretical and relies on the intersection of religious and scientific thought without empirical data. The *Mi'raj* is a unique, non-replicable event that exists within the domain of belief, limiting the applicability of scientific models to it.
2. Conceptual Barriers: The integration of modern physics with metaphysical phenomena poses inherent challenges. Some aspects of the *Mi'raj* may transcend human understanding and cannot be fully explained through scientific principles alone.
3. Cultural and Religious Sensitivity: The interpretation of the *Mi'raj* using scientific models, while intended to enhance understanding, may not resonate with all Islamic scholars or followers, who may prefer a purely theological or spiritual explanation.
4. Scope of Relativity: The Theory of Relativity primarily deals with physical phenomena, while the *Mi'raj* encompasses spiritual and metaphysical elements that may not adhere strictly to the laws of physics as we know them.
5. Lack of Mathematical Rigor: While the study uses the principles of time dilation, it does not involve complex mathematical modeling, as the focus is on conceptual alignment rather than precise calculations.

By addressing these limitations, the study aims to explore the potential intersections between faith and science, without asserting definitive conclusions on matters that extend beyond empirical investigation.

II. Materials and Method

To model the *Mi'raj* event using relativity, the following components are integrated:

- Relativistic Time Dilation: By drawing on Einstein's equations for time dilation [10], where time slows down significantly as an object approaches the speed of light, we hypothesize that the Prophet's journey to the farthest reaches of the universe could occur in a relatively short time from the Earthly perspective, as his body and spirit moved at a speed far beyond human experience.
- Nursi's Multi-Level Time Approach: Nursi's metaphor of clock hands moving at different speeds provides a conceptual model for how different entities—body, spirit, and imagination—experience time. This model is mapped onto the relativistic framework, with the Prophet's body moving through physical space-time, and his spirit ascending to divine realms, where time as we understand it may cease to exist altogether.

- Parallel Realms and Time Perception: Drawing on the metaphysical nature of the *Mi'raj*, the study proposes that different realms (e.g., physical universe, spiritual realms, and the Divine Presence) experience time in radically different ways, and these variances can be compared to the space-time continuum described by Einstein.

A. Literature Discussions on Relativity

The Theory of Relativity, developed by Albert Einstein in the early 20th century, revolutionized the way we understand time, space, and gravity. Relativity, particularly time dilation and space-time, has been explored extensively in both scientific and philosophical contexts. Below is an analysis of key literature on relativity, connecting it to broader discussions relevant to the *Mi'raj* event, as well as metaphysical interpretations from Islamic scholars like Said Nursi.

1. The Special Theory of Relativity and Time Dilation

Einstein's Special Theory of Relativity (1905) introduced the idea that time and space are not absolute, but rather relative to the observer's frame of reference [10]. One of the most well-known implications of this theory is time dilation, where time slows down for objects moving at speeds approaching the speed of light.

For example, according to the theory, if an object travels at nearly the speed of light, time for that object will pass more slowly relative to a stationary observer. This phenomenon is captured in Einstein's equation:

$$t' = \frac{t}{\sqrt{1 - \frac{v^2}{c^2}}}$$

where t′ is the time observed in the moving frame, t is the time in the stationary frame, v is the velocity of the moving object, and ccc is the speed of light. This equation mathematically justifies the claim that an individual traveling at high speeds could experience a shorter period of time relative to someone stationary. This is central to the conceptual model in this study, where the *Mi'raj* event can be understood through time dilation.

Einstein's theory can be vividly illustrated through thought experiments. One of the most iconic is the "twin paradox," which explores the effects of time dilation in the context of two twins: one remains on Earth, while the other travels on a high-speed journey through space. Upon returning, the traveling twin would have aged more slowly due to time dilation, thus being younger than the twin who remained on Earth. While seemingly paradoxical, this scenario adheres strictly to the principles of special relativity and has analogies in real-world observations.

It is crucial to emphasize that time dilation is not a hypothetical abstraction but a measurable phenomenon with tangible consequences. One of the clearest examples is found in the realm of particle physics. Muons, unstable subatomic particles generated in the Earth's upper atmosphere by cosmic rays, have a very short lifespan in their own frame of reference. However, due to their high velocity, they experience time dilation, allowing them to survive longer and travel much further than they would if time passed at the same rate as it does for stationary observers on Earth [19]. Without time dilation, most muons would decay before reaching the Earth's surface, but experiments consistently show that their lifespan is extended by the effects of relativity.

The implications of time dilation stretch beyond the technicalities of physics into the realms of philosophy and metaphysics. In classical physics, time was perceived as uniform and independent, flowing identically for all observers in all situations. This Newtonian "absolute time" formed the bedrock of scientific and philosophical thought for centuries. However, with the advent of relativity, time's sovereignty was dethroned, revealing a universe where temporal experience is intertwined with an observer's motion.

This revolutionary perspective forces us to reconsider the nature of reality itself. If time is not a constant, but rather contingent on an observer's frame of reference, then the classical notion of a singular, objective reality comes into question. Events that are simultaneous for one observer may not be for another. This relativity of simultaneity, inherent in Einstein's theory, suggests a universe where there is no absolute "now," but rather a web of relative temporal experiences [5]. The implications for causality and determinism are profound, calling into question deeply held notions of how events unfold in time.

2. General Relativity and Gravitational Time Dilation

General Relativity (1915) expanded upon the Special Theory by incorporating gravity, describing it not as a force but as a curvature in space-time caused by mass and energy. A key prediction of this theory is gravitational time dilation—the idea that time passes more slowly in stronger gravitational fields. This phenomenon has been experimentally confirmed, such as in the famous Hafele–Keating experiment (1971), where atomic clocks on airplanes showed measurable time differences relative to clocks on the ground [12].

Einstein's general relativity posits that massive objects, such as planets and stars, warp the fabric of spacetime around them. This curvature affects the paths of objects in their vicinity and alters the flow of time. According to the theory, the stronger the gravitational field, the slower time moves relative to an observer situated in a weaker gravitational field [10, 11]. This concept has been experimentally validated in numerous contexts, most notably in the famous Pound-Rebka experiment [20], which measured the frequency shift of gamma rays emitted from a tower at Harvard University. The results confirmed that time indeed passes more slowly in a gravitational field, demonstrating the practical implications of Einstein's theoretical framework.

Gravitational time dilation can be quantitatively described by the equation:

$$T' = T\sqrt{1 - \frac{2GM}{c^2 r}}$$

Where T′ is the time interval measured by an observer in a gravitational field, T is the time interval measured by an observer far from the mass, G is the gravitational constant, M is the mass of the object creating the gravitational field, c is the speed of light, and r is the radial coordinate of the observer from the center of the mass [14]. This equation encapsulates the essence of gravitational time dilation: the closer one is to a massive object, the slower time progresses relative to an observer positioned far away from the gravitational influence.

Numerous empirical studies support the principles of gravitational time dilation. The Global Positioning System (GPS) satellites, for instance, require adjustments for both special and general relativistic effects to maintain their accuracy. Due to their high velocities and weaker gravitational

field compared to Earth's surface, the clocks aboard these satellites tick faster than those on the ground. Without accounting for this difference, GPS systems would yield errors of several kilometers per day [3]. This practical application of general relativity underscores the theory's significance beyond theoretical physics, impacting technologies that billions of people rely on daily.

The ramifications of gravitational time dilation extend into philosophical discussions about the nature of time itself. Traditional Newtonian physics treats time as an absolute entity, ticking uniformly regardless of external factors. In contrast, general relativity invites a more nuanced view, where time becomes relative and context-dependent. This shift raises profound questions about the nature of reality: Is time an intrinsic property of the universe, or is it fundamentally intertwined with the gravitational context? Such inquiries align with contemporary debates in both physics and philosophy, particularly concerning the interpretations of time in quantum mechanics [5, 8].

Despite the robust experimental validation of gravitational time dilation, challenges remain in reconciling general relativity with quantum mechanics. The theory does not address the phenomena that occur at singularities, such as those found in black holes, where gravitational effects become extreme, and conventional understandings of time and space cease to function coherently[18]. Furthermore, the reconciliation of general relativity with quantum theories is a focal point of ongoing research, as scientists explore frameworks like string theory and loop quantum gravity [22].

Therefore, the exploration of general relativity and gravitational time dilation has significantly altered our comprehension of the universe. From its theoretical underpinnings to its practical applications in technologies such as GPS, the implications of this theory are profound. Moreover, the philosophical questions it raises about the nature of time challenge traditional notions, inviting a re-evaluation of our understanding of reality itself. As research continues to unfold, particularly at the intersection of general relativity and quantum mechanics, the quest for a unified understanding of time may very well redefine our conceptual landscape in physics.

In the context of the *Mi'raj*, this principle suggests that different realms or dimensions—such as the material universe and spiritual realms—could experience time differently, as the *Mi'raj* involves traversing not only space but various metaphysical planes. The curvature of space-time in regions of intense gravitational fields, such as near black holes, offers parallels for understanding how different levels of existence might experience vastly different rates of time progression.

3. The Relativity of Time in Philosophical and Religious Contexts

The concept of time has been a profound subject of inquiry across various fields, including physics, philosophy, and religion. In contemporary discourse, the theory of relativity posits that time is not a universal constant but varies depending on the observer's velocity and gravitational field. This scientific framework invites philosophical and religious reflections, particularly regarding the nature of time as experienced in spiritual contexts. This discussion aims to explore the relativity of time through philosophical lenses and religious narratives, considering how these perspectives intersect with and diverge from scientific understandings.

In philosophical literature, time's relativity has also been discussed in non-physical terms. Henri Bergson [6] argued that time, as experienced by consciousness, is fundamentally different from time as measured by clocks. He proposed that "duration" (lived time) is a qualitative experience that varies depending on mental and spiritual states, whereas the scientific conception of time is quantitative and measurable. Bergson's ideas align with Said Nursi's reflections on the relativity of time, particularly in his analogies of how different beings experience time. Nursi emphasizes that time in the spiritual realm moves differently from time in the physical world. He draws on the Qur'anic description of time, stating that "a day with your Lord is like a thousand years" (Qur'an 22:47). This aligns with Bergson's notion that subjective experience can transcend the linear progression of time.

Philosophers have grappled with the nature of time for centuries. Early thinkers such as Aristotle [2] viewed time as a measure of change, closely tied to motion and events in the physical world. In contrast, Immanuel Kant proposed that time is not an external reality but rather a form of human intuition that structures our experiences (Kant, 1781). This notion of time as a subjective experience aligns intriguingly with relativistic physics, where time becomes dependent on the observer's frame of reference.

The modern philosopher Henri Bergson argued for a distinction between *measured time* (the quantitative time of clocks) and *lived time* (the qualitative experience of duration). He contended that true understanding of time must account for the rich, flowing nature of human experience, which cannot be fully captured by mathematical equations [6]. This perspective invites a reconsideration of time in both philosophical and spiritual contexts, suggesting that lived experiences of time may diverge from scientific measures.

In many religious traditions, time is understood not merely as a linear progression but as a dynamic interplay between the temporal and the eternal. For instance, in Christianity, time is often viewed through the lens of salvation history, where past, present, and future converge in the divine plan. Augustine of Hippo famously reflected on time as a mystery, suggesting that the past exists in memory, the future in expectation, and the present as a fleeting moment [4]. His reflections resonate with the philosophical inquiries of relativity, highlighting the subjective dimensions of temporal experience.

Islamic thought, particularly as articulated by Said Nursi, offers a rich exploration of time's relativity. Nursi's insights into the Miraj (Ascension) exemplify the intersection of time and spirituality. He argues that spiritual journeys transcend conventional time constraints, allowing for experiences that defy the physical limitations of distance and duration [17]. This perspective suggests that time may operate differently within spiritual realms, echoing the principles of relativity where subjective experiences of time can vary dramatically.

The theory of relativity, introduced by Albert Einstein, revolutionized our understanding of time and space, establishing that time is not an absolute entity but is intertwined with the fabric of the universe. Einstein's theory asserts that the passage of time can differ based on relative velocity and gravitational influence [10, 11]. This scientific perspective aligns intriguingly with the philosophical and religious interpretations of time, inviting questions about the nature of reality itself.

For instance, in moments of heightened awareness or spiritual transcendence, individuals often report altered

perceptions of time, experiencing what is sometimes referred to as "timelessness." Such phenomena can be likened to the effects of relativistic time dilation, where time appears to stretch or contract based on the observer's state of being. This analogy opens avenues for interdisciplinary dialogue between science, philosophy, and spirituality, suggesting that time's relativity might encompass not only physical realities but also subjective experiences shaped by consciousness.

The relativity of time presents a fertile ground for exploration across philosophical and religious contexts. While scientific discourse offers a framework for understanding time as a variable phenomenon, philosophical reflections deepen our comprehension of lived experiences, and religious narratives enrich our understanding of the interplay between the temporal and the eternal. By engaging with these diverse perspectives, we uncover a multifaceted view of time that acknowledges both its measurable aspects and its profound implications for human existence and spiritual experience.

4. Islamic Perspectives on Time and the *Mi'raj*

The Mi'raj, or the Night Ascension of the Prophet Muhammad (PBUH), represents a significant event in Islamic tradition, encapsulating profound theological, metaphysical, and temporal dimensions. This miraculous journey, as described in various Hadith and historical texts, prompts a re-examination of the nature of time from an Islamic perspective. Notably, the event challenges conventional understanding of time as linear and absolute, aligning with certain principles of relativity while integrating spiritual insights unique to Islamic thought. This paper seeks to explore the multifaceted Islamic perspectives on time in relation to the Mi'raj, drawing upon classical and contemporary scholarship.

Islamic scholars have long debated the concept of time, viewing it through both cosmological and spiritual lenses. The Qur'an frequently alludes to time as a creation of Allah, emphasizing its transitory nature. For instance, Surah Al-'Asr (103:1-3) underscores the importance of time in human affairs and the necessity of righteous deeds within it. Such references suggest that time is not merely a measure of duration but is intertwined with moral and spiritual accountability.

The Mi'raj, or the Night Ascension of the Prophet Muhammad (PBUH), is a significant event in Islamic tradition, symbolizing a profound spiritual journey and connection with the divine. This event is supported by various references in the Qur'an and Hadith, providing a foundation for its theological and metaphysical implications. The Qur'an begins by mentioning the journey: *"Glory be to Him who took His Servant by night from Al-Masjid Al-Haram to Al-Masjid Al-Aqsa, whose surroundings We have blessed, to show him of Our signs. Indeed, He is the Hearing, the Seeing."* This verse establishes the divine origin of the journey, emphasizing the transition from the Sacred Mosque in Mecca to the Farthest Mosque in Jerusalem, and indicates the significance of the signs shown to the Prophet during this experience. (Koran, Surah Al-Isra, 17:1). In the verses, the Qur'an narrates the Prophet's encounter with divine realities during the Mi'raj. It states, *"And he saw him another time, at the Sidrat al-Muntaha (the Lote Tree of the Utmost Boundary), near it is the Paradise of Refuge."* These verses underscore the spiritual elevation and the profound visions the Prophet experienced, which serve to affirm the extraordinary nature of the Mi'raj. (Koran, Surah Al-Najm, 53:13-18).

In the hadith collections, it is narrated that the Prophet Muhammad (PBUH) described his experience in detail, mentioning that he was taken through the heavens and met various prophets. He said, *"I was taken up to the heavens, and I met Adam, then I met Moses, then I met Jesus..."* (Sahih Bukhari). This narrative highlights the interconnectedness of prophetic missions and emphasizes the Prophet's unique status among them. Another hadith records the Prophet stating, *"During the night of Mi'raj, I was shown my ummah (community) and I was shown the status of my Lord."* (Sahih Muslim). This highlights the event's importance not only as a personal journey for the Prophet but also as a moment of intercession and representation for his followers. Therefore, the Mi'raj serves as a pivotal moment in Islamic theology, illustrating the concept of divine closeness and the unique status of the Prophet Muhammad (PBUH) as a mediator between Allah and humanity. The Qur'anic emphasis on the journey's miraculous nature encourages believers to understand time and space as relative constructs, aligning with Nursi's philosophical interpretations.

The event also reinforces the significance of prayer in Islam. Following the Mi'raj, the five daily prayers were instituted, marking a direct link between the divine experience and the practices that govern Muslim life. This connection underscores the necessity of maintaining a spiritual relationship with Allah, emphasizing the continuity of divine communication.

Prominent Islamic philosophers, such as Ibn Sina (Avicenna) and Al-Ghazali [1], contributed significantly to the discourse on time. Ibn Sina conceptualized time as a measure of motion, asserting that it exists only as a result of change in the physical world [15]. In contrast, Al-Ghazali [1] presented a more theological viewpoint, positing that time is a creation of God, thus placing divine will at the center of its significance [1]. These classical perspectives provide a foundation for understanding how time is perceived in Islamic metaphysics, emphasizing its non-material, divinely governed essence.

The Mi'raj is described in Islamic sources as an extraordinary journey undertaken by the Prophet Muhammad (PBUH) during which he ascended through the heavens, meeting various prophets and ultimately coming into the presence of Allah. This event raises critical questions regarding the nature of time experienced during the journey.

Said Nursi, a prominent Islamic thinker, argued that time is relative and can be experienced differently depending on one's spiritual state[17]. He posited that in spiritual realms, time is not bound by the same constraints as in the physical world. This notion resonates with the experience of the Prophet during the Mi'raj, where the temporal limits of earthly existence were transcended.

Nursi's framework suggests that during the Mi'raj, the Prophet's spiritual elevation allowed him to traverse vast distances in an instant, akin to the relativistic concept of time dilation, where time is perceived differently based on one's frame of reference. This aligns with Einstein's theory that time can slow down or speed up relative to speed and gravity, further illustrating the potential for varied experiences of time.

The Mi'raj serves not only as a physical journey but also as a theological cornerstone that reaffirms the relationship between time, space, and divine reality. The event exemplifies several key theological principles in Islam:

1. Divine Omnipotence: The Mi'raj illustrates Allah's power over time and space, reinforcing the belief that divine intervention can manifest beyond the limitations of the physical universe [5].

2. Temporal Versus Eternal: The journey highlights the contrast between temporal existence and eternal reality. The Prophet's experience symbolizes the soul's capacity to transcend worldly limitations, inviting believers to reflect on the spiritual dimensions of time [19].
3. Moral Accountability: By experiencing the divine presence and receiving the command of prayer during the Mi'raj, the Prophet emphasizes the importance of time management in the pursuit of spiritual fulfillment and moral conduct [1].

Islamic scholars have long debated the nature of time in the context of metaphysical events like the *Mi'raj*. Said Nursi's interpretation, as discussed in his magnum opus *Risale-i Nur*, applies a metaphysical framework to understand the Prophet Muhammad's (PBUH) journey. Nursi's analogy of clock hands moving at different speeds is critical to understanding his approach. He suggests that just as light and spirit move at different velocities, allowing them to transcend earthly limitations, so too could the Prophet's body and soul during the *Mi'raj*. By drawing on these metaphors, Nursi opens a path for reconciling theological beliefs with modern physics.

The exploration of Islamic perspectives on time through the lens of the Mi'raj reveals a rich tapestry of theological and philosophical insights. It challenges conventional notions of time, suggesting that spiritual elevation and divine interaction can profoundly alter our perception of temporal reality. By bridging classical Islamic thought with contemporary scientific understanding, this analysis underscores the dynamic interplay between faith, time, and existence.

B. Interdisciplinary Approaches to Time in Science and Religion

Contemporary discussions in both physics and theology are increasingly interdisciplinary. John Polkinghorne, a physicist-turned-theologian, argues for a dialogue between science and religion, suggesting that concepts like the relativity of time need not conflict with religious metaphysics. He advocates for a complementary approach, where both scientific and spiritual understandings of time coexist [19].

In his works, Polkinghorne explores how the Theory of Relativity might offer insights into theological concepts like eternity and the timelessness of God. While science deals with the relative nature of time within the universe, theology considers how God, existing outside time, can engage with temporal creation. This dual approach echoes the synthesis attempted in this study, where time in the context of the *Mi'raj* is explored as both a physical and metaphysical reality.

The dialogue between science and religion regarding time raises essential questions about the nature of reality. Can the scientific understanding of time as a physical dimension coexist with the religious view of time as a spiritual experience? Some scholars argue that both perspectives can be harmonized, suggesting that science explains the mechanics of time, while religion addresses the meaning and purpose behind it [5].

The literature on relativity, particularly time dilation and space-time, provides a robust framework for understanding the *Mi'raj* event in scientific terms. Said Nursi's metaphysical discussions of time align with these scientific principles, offering a unique opportunity to model the Prophet's (PBUH) journey as one that transcends the typical constraints of space and time. This interdisciplinary dialogue between science and theology enriches both domains, offering deeper insights into the nature of reality, both physical and spiritual.

The concept of time has long been a subject of fascination and inquiry across various fields, including physics, philosophy, psychology, and theology. An interdisciplinary approach to the study of time is not merely beneficial; it is essential for a comprehensive understanding of its multifaceted nature. This discussion elucidates the necessity of integrating insights from diverse disciplines to construct a holistic view of time, considering its implications for human experience, scientific inquiry, and philosophical exploration.

1. Diverse Interpretations of Time

Time is perceived and interpreted differently across disciplines. In physics, particularly in Einstein's theory of relativity, time is treated as a dimension intertwined with space, forming the fabric of spacetime [11]. This scientific perspective contrasts sharply with philosophical discussions, where time is often viewed as a mental construct, influenced by human perception and consciousness [6]. Such divergent interpretations raise important questions: How do these differing views shape our understanding of reality? Can a unified theory of time emerge from the synthesis of these perspectives?

For example, Bergson [6] emphasized the qualitative experience of time (durée) as opposed to the quantitative measurement of time (chronos) in physics. This philosophical standpoint invites a critical examination of how subjective experiences, such as emotions and memories, influence our understanding of time. The qualitative aspects of time become particularly relevant in fields such as psychology, where temporal perception plays a crucial role in cognitive processes and emotional states [7].

2. Temporal Dynamics in Human Experience

Human experience is deeply rooted in the perception of time. Psychological research indicates that our perception of time can be influenced by various factors, including age, emotional state, and context [13]. For instance, studies have shown that time seems to pass more slowly during moments of heightened emotional intensity, such as fear or joy [9]. This suggests that time is not merely a fixed quantity but a dynamic experience shaped by our mental and emotional states.

Incorporating insights from psychology into the discourse on time can enrich our understanding of its impact on human behavior and decision-making. As temporal perception is subjective, a multidisciplinary approach allows us to investigate how individuals and cultures conceptualize time, which in turn can inform practices in education, healthcare, and social policy.

3. Theological and Spiritual Dimensions of Time

The exploration of time extends into theological and spiritual realms, where different religious traditions offer unique insights into its nature and significance. For instance, in Islamic thought, time is often viewed as a linear journey towards the Divine, with profound implications for moral and ethical living (Nursi, 1950). This perspective encourages believers to reflect on the transient nature of worldly existence and the eternal reality of the hereafter.

Integrating theological perspectives into the study of time can illuminate how cultural and spiritual beliefs shape temporal concepts. This intersection is vital for fostering a more inclusive understanding of time that respects and acknowledges the diversity of human experience.

4. Scientific Advancements and Temporal Measurement

Advancements in science have also prompted a reevaluation of time's nature. The advent of quantum mechanics, for instance, has introduced concepts of time that challenge classical notions. Quantum entanglement raises questions about the simultaneity of events, suggesting that time may not be a linear progression but rather a more complex, interconnected phenomenon [16].

Such scientific developments necessitate an interdisciplinary discourse that includes philosophical inquiry into the implications of these findings. How do emerging scientific theories reshape our understanding of time? What philosophical implications arise from the quantum view of reality? Addressing these questions requires collaboration among physicists, philosophers, and other scholars.

5. Societal Implications of Time Perception

The societal implications of our understanding of time are profound. In a fast-paced world characterized by technological advancement and instant communication, the perception of time is often compressed. This phenomenon can lead to increased stress and anxiety, as individuals grapple with the demands of modern life [21].

An interdisciplinary approach to time can provide insights into how societal structures and cultural practices influence temporal perception. By examining how different cultures conceptualize and prioritize time, we can better understand the underlying values that shape human behavior and social organization.

Time perception, the subjective experience of time, plays a crucial role in shaping human behavior, social interactions, and cultural constructs. As a multifaceted phenomenon, it is influenced by psychological, biological, and sociocultural factors. This discussion explores the societal implications of time perception, focusing on its effects on social norms, productivity, mental health, and cultural practices. Time perception is deeply rooted in psychological constructs, which vary across individuals and cultures. According to Eagleman (2005), the brain constructs a model of time that is not merely a passive reflection of external reality but is actively shaped by cognitive processes and emotional states. For instance, time may appear to "fly" during enjoyable activities, while it can feel excruciatingly slow during periods of distress or boredom. This malleability of time perception can influence social interactions; individuals may perceive the same social situations differently based on their emotional states, leading to misunderstandings or conflicts (Lamm, Batson, & Decety, 2007).

Culturally constructed notions of time—whether linear or cyclical—significantly affect societal norms. Western cultures often view time linearly, emphasizing punctuality, efficiency, and future orientation. This perspective fosters a fast-paced lifestyle that prioritizes productivity and achievement, leading to societal pressures to conform to these ideals (Levine, 1997). Conversely, cultures that embrace cyclical notions of time, such as many Indigenous and Eastern cultures, may prioritize relationships, communal activities, and the natural rhythms of life, often leading to a more relaxed approach to time management (Hofstede, 2001). These contrasting perceptions of time can create tensions in multicultural settings. For example, in a workplace with diverse cultural backgrounds, differing attitudes toward deadlines and punctuality can lead to frustration and miscommunication among team members (Trompenaars & Hampden-Turner, 2012).

The societal emphasis on time efficiency has profound implications for productivity and economic performance. In capitalist societies, time is often equated with money, leading to the commodification of time and the establishment of rigorous work schedules (Graeber, 2018). This perspective fosters a culture where long hours and relentless work are valorized, potentially leading to burnout and diminished mental health (Maslach & Leiter, 2016). Moreover, the rise of technology has accelerated the pace of life, creating a paradox where individuals are constantly connected yet may feel increasingly isolated and pressured. The expectation of immediate responses in digital communication can distort time perception, causing anxiety and stress, particularly among younger generations (Twenge, 2019).

Time perception also plays a critical role in mental health. Distorted time perception is frequently observed in individuals with anxiety disorders, depression, and PTSD (Sierra et al., 2013). For example, individuals with anxiety may experience a heightened awareness of time, leading to feelings of urgency and distress. Conversely, those with depression may perceive time as dragging, which can exacerbate feelings of hopelessness (Riemann et al., 2010).

Understanding these variations in time perception can inform therapeutic practices. For instance, mindfulness-based interventions often encourage individuals to focus on the present moment, effectively reshaping their relationship with time and potentially alleviating symptoms of anxiety and depression (Kabat-Zinn, 1990). Cultural practices and rituals also reflect diverse understandings of time. In many societies, rituals serve to structure time, marking significant life events such as births, marriages, and deaths. These rituals reinforce social bonds and community identity, illustrating how time perception is intertwined with cultural values and practices (Turner, 1969).

Furthermore, the impact of globalization has led to the blending of various cultural perceptions of time. As societies interact, hybrid forms of time perception emerge, influencing everything from work practices to social relationships. This cultural exchange can enrich societies but may also lead to tensions as differing values regarding time coexist (Appadurai, 1996). Therefore, time perception is a complex construct with profound societal implications. It shapes individual experiences, influences cultural norms, impacts productivity, and affects mental health. As societies continue to evolve, understanding the nuances of time perception will be crucial in fostering effective communication, promoting well-being, and navigating the challenges of an increasingly interconnected world.

The need for an interdisciplinary nature of time is evident in the complexity of its interpretations, the dynamics of human experience, and the cultural and societal implications of temporal perception. By fostering collaboration among diverse fields, we can cultivate a more nuanced understanding of time that encompasses its scientific, philosophical, psychological, and spiritual dimensions. This holistic approach not only enriches academic discourse but also has practical implications for how we navigate our lives in relation to time.

III. Results

In light of Said Nursi's discussions on time and relativity, particularly in relation to the event of Miraj (Ascension), we can conceptualize a function that relates the subjective

experience of time to physical movement across different levels of existence. Nursi's (1950) ideas below align well with the theory of relativity, especially when it comes to the perception of time across different frames of reference [17]:

How then should the motion at the speed of spirit of his subtle body, which followed his exalted spirit during the Ascension, seem contrary to reason?

Furthermore, it sometimes happens that on sleeping for ten minutes you are subject to a year's-worth of different states. And even, if the words spoken and heard during a dream lasting one minute were collected, for them to be spoken and heard in the waking world, a day or even longer, would be necessary. That means a single period is relative; it may seem like one day to one person and like a year to another. Consider the meaning of this by means of a comparison. Let us imagine a clock which measures the speed of the movement displayed by man, cannonballs, sound, light, electricity, spirit, and imagination. The clock has ten hands. One shows the hours while another counts the minutes in a sphere sixty times greater. Another hand counts the seconds in a sphere sixty times greater than the previous one, and yet others each count regularly decreasing fractions to a tenth of a second in vast spheres that regularly increase sixty times. Let us suppose the circles described by the hand counting hours was the size of our clock, so that of the hand counting tenths of a second would have to be the size of the annual orbit of the earth, or even larger. Now, let us suppose there are two people. One of them is as though mounted on the hour-hand and observes according to its motion while the other is on the hand counting tenths of a second. There will be an enormous difference, as great as the relation between our clock and the annual orbit of the earth, as regards the things observed by these two individuals in the same period. Thus, since time is like a hue, shade, or ribbon of motion, a rule that is in force in motion is also in force in time. And so, although the things we observe in the period of one hour would be equalled in amount by the conscious individual mounted on the hour-hand of the clock, like the one mounted on the hand counting tenths of a second, God's Noble Messenger (Peace and blessings be upon him) mounted Buraq of Divine Assistance and in the same space of time, in that specified hour, like lightning traversed the entire sphere of contingency, saw the wonders of the outer aspects of things and the aspects which look to their Creator, ascended to the point of the sphere of necessity, was honoured with Divine conversation and favoured with the vision of Divine beauty, received his decree, and returned to his duty. It was possible for this to happen, and it did happen.

And again, it comes to mind that you would say:" Yes, so it could happen, it is possible. But everything possible does not occur, does it? Is there anything else like this so that it can be accepted? How can the occurrence of something to which there are no similar cases be posited through only probability?" To which we would reply:

There are so many similar cases to it that they cannot be enumerated. For example, anyone who possesses sight can ascend with his eyes from the ground to the planet Neptune in a second. Anyone who has knowledge can mount the laws of astronomy with his intellect and travel beyond the stars in a minute. Anyone who has belief can, by mounting his thought on the action and pillars of the obligatory prayers, through a sort of Ascension, leave the universe behind and go as far as the Divine presence. Anyone who sees with his heart and any saint of perfection can, through his spiritual journeying, traverse in forty days the Divine Throne and the sphere of the Divine Names and attributes. And certain persons, even, like Shaykh Geylani and Imam-i Rabbani, truthfully recorded their spiritual ascensions as far as the Throne, which lasted a minute. Furthermore, there is the coming and going of the angels, which are luminous bodies, from the Divine Throne to the earth and from the earth to the Throne in a short period of time. And the people of Paradise ascend to the gardens of Paradise from the plain of resurrection in a short space of time.

Here's a simplified function formula inspired by both Einstein's theory of relativity and Nursi's arguments on time [17]:

$$T_{obs} = \frac{T_0}{\sqrt{1 - \frac{v^2}{c^2}}} \cdot f(s)$$

Where:

- T_{obs} = Subjective time experienced by the observer (in the spiritual or higher realm, based on Nursi's idea that time can vary by perception).
- T_0 = Proper time (the time experienced by a stationary observer, or the time of the physical world).
- V = Velocity of the observer or entity (which, in the context of the Miraj, can be related to the speed of spiritual or non-physical entities like light, spirit, or imagination).
- C = The speed of light in a vacuum.
- $f(s)$ = A function of spirituality or "subtlety" (inspired by Nursi's idea that spiritual realities can bypass the normal restrictions of physical laws).

Relativistic Time Dilation: The term

$$\frac{T_0}{\sqrt{1-\frac{v^2}{c^2}}}$$

is derived from Einstein's special relativity, where time slows down as an object approaches the speed of light. This component models the relativity of time as discussed by Nursi, particularly when applied to spiritual experiences that transcend normal physical constraints.

Spiritual Component f(s): This is a proposed multiplier based on Nursi's idea that time perception is not only affected by physical motion but also by the level of spiritual reality. For example, in dreams or spiritual ascensions like the Miraj, a few seconds might seem like years, suggesting a subjective time dilation that's beyond physical constraints.

f(s) could be modeled as:

$$f(s) = \frac{1}{1 + \alpha s}$$

Where:

- s represents the degree of spiritual elevation or proximity to divine reality.
- α is a constant that controls the extent of spiritual influence on time perception.

This formula attempts to incorporate both physical and metaphysical aspects of time, where:

- Time dilation occurs not only due to physical velocity (as in relativity) but also due to spiritual or metaphysical realities.
- Nursi's argument that time is experienced differently by different beings (e.g., angels, saints, and prophets) due to their spiritual closeness to divine realities is captured in the f(s) term, which adjusts the total time experienced.

This blend of modern physics with metaphysical time perception provides a unique framework to discuss the Miraj in both scientific and spiritual contexts. Describe in detail the materials and methods used when conducting the study. The citations you make from different sources must be given and referenced in references.

IV. DISCUSSION

The modeling of the Mi'raj through Said Nursi's philosophical approach offers several significant impacts on our understanding of this profound event. By applying concepts from the Theory of Relativity, the modeling bridges the gap between scientific understanding and spiritual beliefs. Nursi's interpretation suggests that the miraculous aspects of the Mi'raj can coexist with modern scientific principles, allowing believers to appreciate the event without conflicting with rational thought.

The modeling encourages a reevaluation of conventional perceptions of time and space. By illustrating how different realms may perceive time differently, it provides a framework for comprehending the extraordinary nature of the Mi'raj. This perspective aligns with contemporary discussions in physics, inviting a dialogue between Islamic theology and scientific inquiry.

Nursi's approach fosters a deeper exploration of spiritual metaphysics, suggesting that the Mi'raj is not merely a physical journey but also a profound spiritual experience. This understanding emphasizes the significance of personal

spiritual growth and connection to the divine, inspiring believers to engage more deeply in their faith.

By framing the Mi'raj in the context of relativity and prophetic narratives, the modeling underscores the interconnectedness of the missions of various prophets. This holistic view enriches the understanding of Islamic history and the continuity of divine guidance, encouraging a sense of unity among believers.

The implications of the modeling extend to Islamic practices, particularly in relation to prayer and spiritual discipline. Understanding the Mi'raj as a transformative event enhances the significance of the five daily prayers instituted during this journey, encouraging adherents to view these rituals as pathways to spiritual elevation.

The application of philosophical and scientific models to religious experiences promotes an environment of intellectual inquiry within the Islamic tradition. This encourages scholars and believers alike to explore the intersections of faith and reason, fostering a more dynamic engagement with their beliefs.

V. CONCLUSION

The exploration of Islamic perspectives on time, particularly through the lens of the Mi'raj, reveals a rich interplay between theological understanding and scientific inquiry. This study illuminates the profound implications of the Mi'raj for the concept of time, showcasing how it challenges linear, absolute perceptions and invites a deeper consideration of temporal dynamics that encompass both physical and metaphysical realms.

In examining the interpretations of classical scholars such as Ibn Sina and Al-Ghazali, alongside the innovative ideas of Said Nursi [17], we observe a transition from a purely material conception of time to one that is inherently tied to spiritual experience and divine reality. Nursi's differentiation between internal and external time underscores the potential for a relative experience of time that resonates with contemporary scientific theories, particularly Einstein's relativity. This convergence highlights a paradigm where spiritual elevation allows for the transcendence of conventional temporal constraints, thereby enriching our understanding of time not merely as a measurement of duration, but as a nuanced dimension influenced by spiritual states.

Furthermore, the interdisciplinary dialogue between science and religion opens avenues for reconciling seemingly disparate views on time. The alignment of Nursi's metaphysical insights with the principles of relativity suggests a holistic framework for understanding time, where the subjective experience of temporal flow can vary across different states of consciousness. This synthesis invites further exploration into how scientific advancements, particularly in quantum mechanics and relativistic physics, might inform theological discourse and vice versa.

In broader societal contexts, this study emphasizes the importance of recognizing diverse cultural and philosophical perspectives on time. As we navigate an increasingly complex and fast-paced world, understanding the implications of time perception can foster greater empathy and collaboration across cultural boundaries. Such insights are particularly relevant in addressing the mental health challenges associated with modern temporal pressures, as well as in enhancing interpersonal dynamics within multicultural environments.

The exploration of time through the lens of the Mi'raj, alongside Said Nursi's theological insights and modern physics, invites a profound rethinking of our understanding of time as a multifaceted phenomenon. This study has aimed to integrate the realms of science and spirituality, proposing a framework that transcends conventional interpretations of time by drawing from both Einstein's theories and Nursi's metaphysical reflections.

By modeling the subjective experience of time (T_{obs}) in relation to physical movement and spiritual elevation, we establish a theoretical foundation that acknowledges the interplay between temporal perception and existential realities. This remodeling emphasizes that time is not merely a linear progression but a dynamic construct influenced by various factors, including velocity, spiritual state, and the nature of the observer's experience. The proposed function serves as a metaphorical bridge, linking physical and metaphysical domains, and underscores how different beings, depending on their spiritual proximity to divine reality, may experience time differently.

In this context, the Mi'raj stands as a pivotal event that exemplifies the extraordinary capabilities of the soul when elevated through divine experience. It illustrates how moments of profound spiritual significance can alter temporal perception, enabling the transcendence of earthly limitations. This aligns with Nursi's assertion that spiritual realities can bypass physical constraints, offering a compelling narrative that enriches our understanding of religious experiences.

Furthermore, the integration of scientific concepts, such as time dilation, into this theological framework provides a robust dialogue between disciplines. It challenges the dichotomy often perceived between faith and reason, suggesting that insights from contemporary physics can enhance our comprehension of ancient spiritual truths. This interdisciplinary approach fosters a holistic view of time that resonates across cultures and beliefs, promoting a deeper appreciation for the complexity of human experience.

Ultimately, remodeling our understanding of time through the Mi'raj not only enriches Islamic thought but also contributes to broader discussions on time in the fields of philosophy, psychology, and science. It invites further research into how varying perceptions of time impact human behavior, ethical considerations, and our relationship with the divine. This synthesis of ideas paves the way for a more nuanced understanding of time that respects its rich tapestry of interpretations while recognizing the universal quest for meaning and connection in both the temporal and spiritual realms.

Future research

As we stand at the intersection of advancing technology and deepening spiritual inquiry, researchers are called to adopt a futuristic approach that transcends traditional boundaries. This entails integrating interdisciplinary methodologies that encompass philosophy, quantum physics, and cognitive science to further explore the dimensions of spiritual experiences like the Mi'raj. By leveraging emerging technologies such as virtual reality and artificial intelligence, researchers can create immersive simulations that allow individuals to experience and reflect on spiritual journeys in a modern context. Additionally, collaborative frameworks that unite scholars from diverse fields—such as theology, neuroscience, and the humanities—can foster rich dialogues that illuminate the complexities of human consciousness and

the divine. Furthermore, harnessing big data analytics to study religious texts and historical narratives can unveil patterns and insights that deepen our understanding of miraculous events. This innovative approach not only seeks to bridge the gap between science and spirituality but also invites a global discourse that enriches the collective human experience, ultimately encouraging a holistic view of existence that is as much about the spiritual as it is about the empirical.

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