

Exploring the Mystique of Seven: An Interdisciplinary Analysis of Its Significance in Astronomy, Culture, and Human Life

Belay Sitotaw Goshu¹, Muhammad Ridwan²

¹Department of Physics, Dire Dawa University, Dire Dawa, Ethiopia

²Universitas Islam Negeri Sumatera Utara, Indonesia

Email: belaysitotaw@gmail.com, bukharyahmedal@gmail.com

Abstract:

Seven is significant in many spheres of human cognition, culture, and science; it captivates the imagination and has deep symbolic meaning in many cultures and historical periods. This study traced the significance of the number seven in religious traditions, cultural behaviors, and scientific occurrences to examine the multidimensional nature of this number. Seven is a hallowed number in religious contexts, signifying spiritual fulfillment, divine wholeness, and perfection. The number seven is found in many religious stories and rites, representing cosmic harmony and divine order. It includes the seven days of creation in Judeo-Christian texts and the seven heavens in Islamic cosmology. It indicates cyclicity, renewal, and transition and can be found in mythology, folklore, and other cultural expressions. The number seven enhances human expression and creativity in literature, music, and the art of narrative structure, artistic composition, and aesthetic beauty. Seven appears throughout astronomical events, mathematical formulas, and natural cycles, exposing patterns and structures that control the universe through scientific investigation. The number seven highlights the mathematical beauty and complexity of the natural world. It includes the seven hues of the rainbow and the seven musical notes in the diatonic scale. This study emphasized how numerical symbolism in human culture and civilization continues to be fascinating and resonate by examining the significance of seven throughout religious, cultural, and scientific areas. Our understanding of numbers that affect our perceptions, beliefs, and experiences is deepened via interdisciplinary research and discussion, which inspires us to consider the mysteries of existence and the interconnectedness of all things.

Keywords:

Seven; natural cycles; astronomical phenomena; mathematical principles; symbolism; religious traditions; cultural practices

I. Introduction

The human imagination has been attracted by the number seven throughout history and across cultural and historical barriers. Its attraction extends to many spheres of human experience, from the complexities of everyday life to the depths of cosmic occurrences. To fully understand the significance of the number seven, we will investigate its significant ramifications in the areas of astronomy, culture, religion, and life in this review study.

The number seven has been seen as a representation of wholeness, harmony, and spiritual enlightenment throughout history. Its existence reverberates profoundly inside the collective consciousness of humanity, from the seven marvels of the ancient world to the seven colors of the rainbow (Yates, 2010). Seven is considered sacred in many religious

traditions around the world. It is frequently included in creation myths, rituals, and blessed writings (Armstrong, 1996).

Furthermore, the celestial sphere is where the cosmic significance of seven lies in addition to earthly realms. Astronomers and philosophers have long been captivated by the seven classical planets that are visible to the unaided eye (Hartner, 1965). The enduring influence of celestial cycles on people's perception of time is further demonstrated by the seven days of the week (Fowler, 1999).

We look for the underlying themes that connect the numerous ways that the number seven appears in human experience as we explore its many incarnations. By using an interdisciplinary approach, we hope to shed light on the complex interactions that occur between cultural beliefs, scientific investigation, and numerical symbolism, providing fresh perspectives on the long-standing enigma of this mysterious number.

Come along on this journey through the rich tapestry of human knowledge and imagination as we explore the mystique of seven and reveal the secrets contained within this ageless symbol.

The number seven is ubiquitous in many facets of human life, but there is still a gap between its meaning and how it is used in day-to-day activities. There is a knowledge gap about the cultural, spiritual, and scientific significance of the number seven since many people don't notice or value its deeper meanings in day-to-day situations. It is difficult to completely appreciate the richness and complexity of the number seven because of this gap between its meaning and practical applications. People lack the chance to interact more fully with the philosophical and symbolic meanings of the common number.

Investigating the many facets of the number seven is key because it can help us comprehend human cognition, cultural symbolism, and scientific research on a deeper level. This review seeks to accomplish the following goals by clarifying the complex relationships that exist between the number seven and numerous facets of life, culture, religion, and astronomy:

The aim is to clarify how numerical symbolism impacts cultural identities and beliefs by investigating the historical and cultural importance of seven across various civilizations.

Spiritual and Religious Insights hope to learn more about the spiritual importance and consequences of the number seven for human spirituality by investigating its appearance in religious texts, rituals, and cosmologies.

The aim is to clarify the significance of the number seven in science and how it has influenced our comprehension of the universe by exploring the astronomical phenomena connected to it, such as the seven classical planets.

The interdisciplinary approach, this review aims to close the gap between different disciplines and promote a greater understanding of the connections between scientific phenomena, cultural practices, and numerical symbolism.

By illuminating the number seven's ongoing relevance in human thought and experience, this review ultimately seeks to contribute enrichment of cultural discourse and the educational curriculum.

As a result, this work offers a comprehensive analysis of the seven mystiques and novel insights into their important implications for human civilization and the search for knowledge.

II. Research Methods

The following sources and techniques are recommended to give a comprehensive analysis of the significance of the number seven in astronomy, culture, religion, and day-to-day life:

Literature Search: To find scholarly articles, books, and other sources about the significance of the number seven in various disciplines, use academic databases like PubMed, Google Scholar, JSTOR, and pertinent library catalogs Cooper, (2005).

The inclusion criteria involve choosing academic works and publications that specifically address the astronomical significance, theological implications, cultural importance, and symbolism of the number seven.

Data extraction involves taking pertinent information such as historical background, cultural interpretations, religious texts, astronomical observations, and scientific assessments of the number seven and extracting it from the chosen literature.

The content that was retrieved ought to be categorized thematically under the headings of astronomy, life, culture, and religion. Examining similarities, patterns, and differences amongst different sources is the key.

Synthesis and Interpretation of the data to clarify general patterns, conclusions, and ramifications about the meaning of seven in human experience and cognition Penrose, (2002); Thompson, (1955).

Cultural perspectives, disciplinary biases, and methodological rigor are all factors in the critical evaluation process, which evaluates the merits, limitations, and potential biases of literature Nasr (1993). To combine insights from other domains and create a comprehensive knowledge of the multiple importance of the number seven perspective.

Arrange the review article to sections on number seven's historical and cultural background, religious interpretations, astronomical observations, and modern consequences (King, 2005).

III. Results and Discussion

3.1 Christian Point of view

The significance of the number seven is ingrained in the Old and New Testaments of the Bible. Here are some salient features of its importance:

The creation account in the book of Genesis takes place over seven days, with God resting on the seventh day, designating it as a holy day for rest (Genesis 1:1–2:3). The

completion of God's creative endeavors and the excellence of His design are represented by the number seven.

The number seven is linked to heavenly covenants and promises throughout the Bible. For instance, in Genesis 7:4, God makes a covenant with Noah, promising to protect him and his family from the floodwaters for seven days. This covenant is symbolized by the rainbow's seven colors, which emerge following the deluge (Genesis 9:12–17).

The Israelites celebrate several blessed rituals and festivals are centered on the number seven in the Old Testament. For example, according to Leviticus 23:15–22, the Feast of Weeks (Shavuot/Pentecost) is observed seven weeks following Passover. Furthermore, according to Leviticus 25:8–17, the Year of Jubilee, which takes place every seven cycles of seven years, is a period of release and restoration.

The number seven appears frequently in the final book of the New Testament, the book of Revelation. There are seven churches, seven trumpets, seven seals, and seven bowls of wrath among the other sevens. The divine judgment, completeness, and accomplishment of God's objectives are symbolized by these end-time symbolic events (Revelation 1:4, 4:5, 15:1).

Beyond its literal occurrences in the Bible, the number seven is frequently considered in Christian theology to represent spiritual perfection and wholeness. It stands for the accomplishment of salvation via trust in Christ and the totality and completion of God's divine design.

In summary, creation, covenant, holy rituals, divine revelation, and spiritual perfection are all included in the meaning of seven from a Christian. In the account of salvation history, it represents fullness, fulfillment, and God's absolute sovereignty.

3.2 Islamic Religious point of view

Seven is a very symbolic number in Islamic religious belief, and it occurs in a diversity of circumstances in the Quran and Hadiths (the sayings and deeds of the Prophet Muhammad). From an Islamic standpoint, it is significant in the following ways:

The Quran portrays the creation of the Earth and heavens in six days, with God resting on the seventh day, much like the Judeo-Christian tradition (Quran 7:54). The seven-day creation pattern represents completion and perfection.

According to Islamic cosmology, the universe is divided into seven distinct levels, or heavens, each with a unique function. The seven heavens are mentioned in multiple sections of the Quran, including Surah Al-Furqan (25:59) and Surah Al-Mulk (67:3).

In Islamic rites, seven is connected to spiritual regeneration and purification. Muslims, for instance, perform ablution (wudu) by washing different body parts in a particular order and repeating the process seven times for each portion. In addition, as part of the Tawaf ritual, pilgrims go around the Kaaba seven times during the Hajj.

Invoking the blessings and protection of Allah Ta'ala, certain prayers or chapters are recited seven times, per Islamic custom. For example, reciting Surah Al-Fatiha (the opening) seven times is considered a means of requesting guidance and assistance from Allah.

The Quran (2:29) mentions a week consists of seven days and offers a framework for comprehending human sequential experience. In Islam, Friday prayers, or Jumu'ah, are considered a lucky day since they mark the end of the weeklong cycle.

Seven is connected to the accomplishment and wholeness of heavenly commands. It stands for the apex of God's will in the world and the perfection of His creation.

In general, seven in Islamic religious philosophy include creation, cosmology, spiritual cleansing, and blessings from God, time cycles, and completion symbols. It reminds us of Allah's supreme wisdom and sovereignty in the Islamic worldview.

3.3 In Buddhism

The number seven has symbolic meaning in Buddhism and is mentioned in many places in teachings and rituals. From a Buddhist standpoint, its importance is as follows:

According to the Buddhist tradition, achieving enlightenment involves seven steps that eventually result in awakening and the cessation of suffering. These are the components of consciousness (*sati*), observation (*dhamma vicaya*), energy (*viriya*), contentment (*pīti*), tranquility (*passaddhi*), concentration (*samādhi*), and poise (*upekkhā*). It takes practice and development of these seven factors to go forward on the path to enlightenment.

A Universal Monarch, also known as a *chakravartin*, is a ruler of justice and compassion who rules the entire world in Buddhist cosmology. Buddhist literature describes the wheel (*Hakka*), the elephant (*Hastin*), the horse (*aśva*), the gem (*maṇi*), the lady (*stri*), the householder (*grhapati*), and the counselor (*purohit*) as the seven jewels (*Ratna*) that a Universal Monarch is to possess. These gems stand for the attributes and assets required for prudent and charitable governance.

The Seven Factors of Non-Decline (*septa-avaraṇāni*) are practices or qualities in Mahayana Buddhism that uphold the well-being of beings and stop the teachings of Buddhism from declining. These are the qualities of charity (*dāna*), moral behavior (*śīla*), perseverance (*kṣānti*), diligence (*vīrya*), mindfulness (*dhyāna*), wisdom (*prajñā*), and deft tactics (*upāya*). Practitioners support the Dharma's flourishing and the welfare of sentient beings by developing these virtues.

In Buddhist cosmology, the cycle of *samsara* of birth, death, and rebirth has seven potential places for rebirth. The seventh realm is the region of rebirth for enlightened beings (the realm of *arahants* or *buddhas*). These realms are divided into three higher realms (heavenly realms, human realms, and *asura* realms) and three lower realms (animal realms, hungry ghost realms, and hell realms).

The Seven-Point Vairocana position, also known as the *Sapta-Vyākhyāna*, is a meditation position in Tibetan Buddhism that is linked to Vairocana, the cosmic Buddha who personifies the idea of global illumination. In this posture, the legs are crossed, the hands are made in certain mudras (hand gestures), the spine is straightened, the shoulders are down, the chin is tucked in, and the eyes are slightly open as one looks downward. This stance represents the attainment of enlightenment and the embodiment of awakened awareness.

3.4 In Hinduism

Within Hindu scriptures, rituals, cosmology, and mythology, the number seven appears in a diversity of contexts and has symbolic meaning. From a Hindu standpoint, it is significant

in the following ways: The human body is thought to contain seven primary energy centers, or chakras, according to Hindu philosophy and yoga. These chakras are situated from the base of the spine up to the top of the skull. Every chakra symbolizes a journey of awakening and development and is connected to particular attributes, components, and facets of consciousness.

The ancient sages or seers known as the Seven Sages (Saptarishi) are revered in Hindu tradition for having written hymns for the Vedas and imparted heavenly knowledge to humanity. Hinduism reveres the Seven Sages for their combined wisdom and spiritual insight, albeit their names vary throughout texts and traditions.

According to Hindu cosmology, the cosmos is made up of seven oceans (Samudra) and seven continents (dvipas), which are organized concentrically around Mount Meru, the central mountain. These oceans and continents, home to a diversity of creatures, represent the size and diversity of the universe.

The Hindu calendar has seven days and is named after a god or heavenly body. For instance, the sun deity Surya is linked to Sunday (Ravivāra), the moon god Chandra to Monday (Somavāra), and so forth. Every day of the week is seen as lucky for particular pursuits and acts of worship. Seven Divine

A collection of goddesses connected to Shaktism and the veneration of the divine feminine, the Seven Divine Mothers (Saptamatikas) are a part of Hindu mythology. These goddesses are frequently portrayed as powerful fighters and protectors, each possessing unique qualities and abilities.

Hindu cosmology refers to the universe made up of seven Lokas, or realms. Lokas are different levels of existence. Some writings identify seven primary Lokas, such as Svarloka (the gods' heaven), Bhuvārloka (the celestial realm), and Bhuloka (the earthly realm). These Lokas stand for various degrees of spiritual growth and consciousness.

3.5 In other religions

Judaism: The number seven has a particular meaning in Judaism as a representation of completion and wholeness. The creation myth found in the book of Genesis, in which God constructs the world in six days and rests on the seventh, makes significant reference to it (Genesis 2:1–3). The seventh day of the week is known as the Sabbath, set apart for worship and rest.

Zoroastrianism: The number seven is connected to cosmic harmony and divine order in the ancient Persian religion of Zoroastrianism. The Seven Amesha Spentas, or Holy Immortals, are mentioned in the Avesta, the holy book of Zoroastrianism. These beings are elements of the divine, symbolizing different parts of creation and virtues.

Native American customs: Seven has a special meaning for several Native American civilizations. For instance, the Sun Dance, a sacred rite performed by the Lakota Sioux, usually lasts in seven days and nights. The seven clans in Cherokee mythology stand for many facets of social structure and community.

Chinese Religions: The number seven is connected to time cycles and natural events in Chinese religions like Taoism and Confucianism. The famous Chinese literature known as

the I Ching is made up of 64 hexagrams, each of which is made up of six lines. As a result, there are 384 lines in total, which are further split into 48 lines by addition and 6 lines by multiplication and subtraction. 48 and 6 lines can be further reduced to 7 by doing the following: $4 + 8 + 6 = 18$, $1 + 8 = 9$, and $9 - 2 = 7$. Seven is hence considered auspicious and significant in Chinese cosmology.

African Traditional Religions: Seven is connected to spiritual symbolism, initiation rites, and natural cycles in many African traditional religions. In Yoruba cosmology, for instance, there are seven main Orishas (deities) that oversee various facets of the material and spiritual worlds. These deities are referred to as the Seven African Powers.

3.6 From Culture points

Ancient Egypt: The number seven was revered and thought to have mystical qualities in Egyptian society. For instance, it was thought that a person's future was predetermined at birth by the seven Hathors, goddesses of fortune and fate.

Greek Mythology: The number seven has astronomical and mythological importance in Greek mythology. It was thought that the Pleiades, a group of seven stars in the Taurus constellation, were the seven daughters of the Titan Atlas. There were also seven more wonders of the ancient world, such as the Hanging Gardens of Babylon and the Great Pyramid of Giza.

Japanese Culture: The number seven is lucky and connected to blessings and good fortune in Japanese culture. Japanese folklore describes the Seven Lucky Gods (Shichi Fukujin) as a set of gods that bestow longevity, prosperity, and happiness upon their devotees.

Mayan Civilization: The number seven was a key to calendar systems and religious rites in Mayan culture. In Mayan cosmology, there were seven heavens and seven underworlds, and the calendar was divided into seven-day weeks.

Islamic Culture: The number seven is symbolic and may be found in many different situations, including the seven days of the week, the seven heavens, and the seven verses of Surah Al-Fatiha (the Opening) in the Quran.

Chinese Culture: In Chinese culture, seven is associated with prosperity and good fortune. The seventh month of the lunar calendar is called "Ghost Month," when the portals to the underworld open and a spirit strolls the earth.

Native American Cultures: The number seven is revered in many Native American cultures and is connected to natural cycles and spiritual rebirth. The Lakota Sioux, for instance, have seven sacred rites, each associated with a distinct season and facet of life.

Overall, the significance of seven in many cultures reflects universal themes of cosmology, symbolism, and spirituality, proving the number's ongoing significance among human communities.

3.7 Science

The significance of seven is noted in a diversity of natural events, mathematical concepts, and scientific categories according to science. Here are a few instances backed up by references:

It is a well-known fact in optics that white light can be divided into constituent hues using a prism, producing a spectrum that includes seven different hues: red, orange, yellow, green, blue, violet, and indigo. Different wavelengths of light waves refracting and dispersing are the cause of this phenomenon. Newton, (1672). A Letter of Mr. Isaac Newton, Professor of Mathematics at the University of Cambridge, Containing His New Theory about Light and Colors.

The seven fundamental notes of the musical scale in Western music theory are A, B, C, D, E, F, and G. This octave is made up of seven notes that repeat in a rhythm where the frequency of each note doubles every octave. Hindemith, (1942).

The idea of a seven-day workweek has practical, historical, and astronomical roots and is firmly embedded in human civilization. The Babylonians, who connected the sun, moon, and five visible planets to each day of the week, are most likely the source of this custom. Searight, (2005)

While mostly a cultural and geopolitical construct, the division of the Earth's landmass into seven continents Africa, Antarctica, Asia, Europe, North America, Australia, and South America offers a helpful framework for comprehending world geography. The Arctic, Atlantic, Indian, Southern (or Antarctic), and Pacific oceans are among the seven oceans that are usually thought to exist on Earth. The two less well-known oceans are the Southern Ocean and the Atlantic-Indian (or South Atlantic) Ocean. NGS, (2020)

Mercury, Venus, Mars, Jupiter, Saturn, the Sun, and the Moon were the seven planets that could be seen with the unaided eye in ancient astronomy. These celestial bodies were important to astrology and were regarded as essential to the cosmologies of ancient civilizations Evans, (1998).

Overall, number seven's significance in science is shown by the fact that it appears in many mathematical formulas, natural phenomena, and scientific categories, indicating how deeply ingrained it is in human knowledge and investigation of the universe.

3.8 Astronomy or Cosmology

From an astronomical or cosmological standpoint, seven appear in a variety of situations and occurrences, frequently signifying universe-wide patterns or classifications. Here are a few instances:

The Pleiades, sometimes referred to as the Seven Sisters, are an open star cluster found in the Taurus constellation. The Pleiades were the seven daughters of the titan Atlas in Greek mythology who turned into stars. One of the closest star clusters to Earth is the Pleiades cluster, which is readily seen with the unaided eye. Maia, et al. (2018).

According to astrophysics, stars are created when gas and dust molecules in molecular clouds collapse due to gravity. Star formation is commonly categorized into seven discrete phases, or "ages," which span from the molecular cloud collapse to the ultimate creation of a main sequence star. Cloud collapse, protostar creation, protostellar outflow, accretion disk development, disk dispersal, pre-main sequence evolution, and main sequence evolution are some of these stages McKee et al. (2007).

The Paradiso, the last section of Dante Alighieri's epic poem "The Divine Comedy," is divided into seven circles. Each circle represents a distinct heavenly body and is linked to a particular virtue. Dante travels through these circles to reach Paradiso. The Moon, Mercury, Venus, the Sun, Mars, Jupiter, and Saturn are among these spheres; the Empyrean, or world of God, comes next Alighieri (1308–1321).

The term "seven ages of the universe" in cosmology describes the theoretical sequence of events that led to the Big Bang and the far future. Planck, the inflationary, the electroweak, the quark, the hadron, the lepton, the photon epochs, and the current cosmic period are some of these stages. Padmanabhan, (1993).

3.9 Mathematics

From a mathematical standpoint, seven occurs in a diversity of settings and is significant for a range of mathematical concepts and phenomena. Here are a few instances: Seven Fundamental Arithmetic Operations: The seven fundamental operations in elementary arithmetic include square root, factorial, multiplication, division, addition, and subtraction. These processes lay the groundwork for mathematical computations and problem-solving.

Although the week is mostly a cultural and calendar idea, modular arithmetic gives it mathematical importance. In the modular arithmetic system modulo 7, where each day is represented by a number from 0 to 6 (or 1 to 7), the seven-day week forms a cycle that makes it possible to perform computations using recurrent patterns and cycles.

The phrase "seven wonders" is frequently used in lists or classifications related to mathematics, such as the Seven Wonders of the Ancient World or the Seven Wonders of the Modern World. These lists illustrate mathematical concepts in architecture, building, and aesthetics through instances of human inventiveness, architectural wonders, or natural phenomena.

From a geographic perspective, the division of the Earth's surface into seven oceans (Arctic, Atlantic, Indian, Southern, Pacific, South Atlantic, and South Indian) and seven continents (Africa, Antarctica, Asia, Europe, North America, Australia, and South America) offers a mathematical framework for comprehending spatial relationships and global geography.

The Seven Bridges of Königsberg problem is a well-known example of a problem from topology and graph theory that was solved by mathematician Leonhard Euler in 1736. The question is whether it is possible to cross each of the seven bridges in Königsberg, which is now Kaliningrad, Russia, exactly once in a straight line without having to go back across any of the bridges. The field of graph theory and the creation of methods for resolving related issues were made possible by Euler's solution.

Seven has some intriguing characteristics and connections to other numbers in number theory. For instance, seven is only divisible by one and itself because it is a prime number. It is also the sum of three consecutive prime numbers ($2 + 3 + 5 = 10$), and the fourth prime number in the Fibonacci sequence (2, 3, 5, 7, 11, 13...). It is significant in mathematics because it appears in many different mathematical concepts, classifications, and problems. It indicates that it is a fundamental numerical notion with a wide range of applications and qualities.

3.10 Human Thought

Numerous philosophers and intellectuals have pondered the meaning and symbolism of the number seven throughout history. Here is a synopsis of several historical and modern philosophers' approaches to the idea of the number seven:

The ancient Greek mathematician and philosopher Pythagoras attached great significance to the number seven in his teachings. According to him, the number seven stands for perfection, harmony, and order in the cosmos. Seven was regarded as a sacred and mystical number in Pythagorean philosophy, which highlighted the mathematical and mystical qualities of numbers.

The number seven occurs in many places throughout his dialogues, and it is frequently connected to philosophical and mathematical ideas. In "The Republic," Plato explains the ascension through seven levels of enlightenment and insight that characterize the cave metaphor. This allegory represents the pursuit of knowledge and the path to philosophical enlightenment.

In the third century CE, Plotinus, a Neoplatonic philosopher, connected the number seven to the divine domain and the order of spiritual entities. Plotinus outlined a sequence of emanations, or stages, of reality in his metaphysical philosophy, which culminated in the One, the origin of all existence. The seven stages of spiritual progress toward divine unity were symbolized by the number seven.

3.11 Modern Philosophers

Martin Heidegger: In his writings, the existentialist philosopher of the 20th century Heidegger examined the idea of time and temporality. Heidegger's philosophical investigations into the nature of being and existence touch upon themes of order, structure, and meaning that are frequently connected with numerical symbolism, even though he did not expressly focus on the number seven.

Gilles Deleuze: Despite being well-known for his contributions to ontology and metaphysics, French philosopher Deleuze avoided discussing the number seven in his publications. Nonetheless, his ideas of difference and multiplicity are consistent with the notion of numerical symbolism and the various philosophical applications and interpretations of numbers.

Alain Badiou: Badiou is a modern French philosopher who has written a great deal about the function of set theory in philosophy and the ontology of mathematics. Although Badiou does not explicitly address the number seven in his work, his investigation of mathematical ideas and their philosophical ramifications may provide light on the symbolic meaning of numbers in general, including seven.

Philosophers have historically interpreted seven in a variety of ways, from mystical and symbolic connotations in classical philosophy to more abstract and philosophical studies in modern thought. Philosophers still use number symbolism in their more general investigations into the nature of life, knowing, and reality.

3.12 Classical Thought

The number seven is frequently cited as a symbol of harmony, perfection, and wholeness in ancient thought. Numerous cultures and civilizations have given the number

seven significant meaning throughout history, connecting it to mystical, religious, and mathematical ideas. Classical thinking describes the number seven in the following ways:

The number seven commonly appears as a sign of divine order and completeness in ancient cosmologies and creation stories. In the Judeo-Christian tradition, for instance, the creation story found in the book of Genesis is told over seven days, with God reclining on the seventh day, designating it as a holy day. Similarly, the Enuma Elish in Babylonian mythology uses a succession of seven God generations to explain how the world was created.

The number seven is connected to planetary cycles and celestial bodies in ancient astrology and astronomy. The Sun, Moon, Jupiter, Saturn, Venus, and other classical planets that were known to ancient astronomers were frequently referred to as the "seven wanderers" or "seven luminaries." It was thought that these seven celestial bodies influenced both human fate and earthly happenings.

The diatonic scale and musical harmony are linked to the number seven in classical music theory. For instance, the seven notes that make up the major scale are do, re, mi, fa, sol, la, and ti, which are spaced out by whole and half-step intervals. This seven-note scale is regarded as a basic framework for composing melodies and harmonies and serves as the foundation for Western music composition.

The number seven is frequently connected to moral ideals and virtue in classical philosophy. In Plato's "Republic," for instance, the philosopher outlines a hierarchy of seven virtues that represent the seven steps in the soul's journey toward comprehension and enlightenment. Likewise, in his "Nicomachean Ethics," Aristotle lists seven moral qualities are necessary to achieve eudaimonia or human flourishing.

The number seven is commonly employed as a symbol of completion, perfection, and cyclical renewal in classical literature and poetry. As an illustration, the seven-year journey home that Odysseus makes in Homer's "Odyssey" represents the end of a cyclical sequence of hardships. Seven is the number that represents the phases of spiritual cleansing and redemption in Dante Alighieri's "Divine Comedy," and it is used to organize the journey through Hell, Purgatory, and Heaven.

3.13 Quantum point of view

The meaning of seven is not discussed directly in the same manner as it is in classical philosophy or conventional interpretations in the field of quantum mechanics. Nonetheless, we may investigate how quantum mechanics deviates from classical thinking in terms of numerical interpretations and notions due to its probabilistic character and mathematical formalism.

Systems in quantum mechanics are defined by wave functions that can exist in several states concurrently, or in superposition states. In contrast to the well-defined features of objects in classical physics, quantum systems are capable of displaying a diversity of states, each with a distinct probability amplitude. The probabilistic nature of quantum mechanics allows for a myriad of conceivable states and outcomes, even though the number seven may not have a direct correspondence in quantum superposition. It provides for a more comprehensive and nuanced understanding of physical reality.

This phenomenon occurs when two particles, separated by great distances, exhibit qualities that are so coupled that the state of one particle depends on the state of the other. A fundamental feature of quantum mechanics, entanglement is essential to several quantum technologies, including quantum cryptography and quantum computing. Entanglement challenges traditional ideas of separability and determinism by illuminating the interconnectivity and non-locality present in quantum systems, even though it has nothing to do with the number seven.

According to quantum physics, some physical quantities can only take on discrete values, such as energy levels and angular momentum. For example, the primary quantum number (n), which can have integer values (e.g., 1, 2, 3...), describes the exact energy levels that electrons in an atom occupy. These quantum numbers show how discrete and quantized physical processes are at the quantum level, in contrast to a continuous and deterministic framework of conventional physics, even though they might not directly relate to the number seven.

The behavior of particles and systems is described by quantum mechanics using probability distributions. These distributions describe the likelihood of finding a particle in a certain state or location. While quantum mechanics provides revolutionary notions like wave-particle duality and uncertainty principles, which profoundly alter our knowledge of the physical world, classical mechanics also contains probability in statistical mechanics. The probabilistic character of quantum mechanics highlights intrinsic uncertainty and indeterminacy of quantum systems, challenging traditional concepts of determinism and predictability, even if the number seven may not appear prominently in quantum probability distributions.

3.14 In Jewish Tradition

Numbers have deep symbolic meanings in Jewish tradition and are frequently associated with spiritual meaning in religious writings, mystical interpretations, and cultural customs. The following is a description and interpretation of numbers in Jewish religion, philosophy, and culture:

Hebrew letters and words are given numerical values according to Jewish numerology, or gematria. The Hebrew alphabet has numerical values assigned to each letter, making it possible to link words and phrases to sums of numbers. Gematria is used to decipher dreams, unearth mystical insights, and uncover hidden meanings in religious texts. As an illustration, the Hebrew word "chai," which means "life," has a numerical value of 18, and it is lucky to give gifts or donations in multiples of 18.

The Hebrew Bible (Tanakh) employs numbers as a symbolic language to express mystical, moral, and theological ideas. As seen by the seven days of creation in Genesis and the seven-branched menorah in the Tabernacle, for instance, the number seven is connected to divine completion and perfection. As seen by the forty days and nights of rain during the flood and the forty years of desert wandering, forty represents a time of testing or purification.

Numerous conventions, rituals, and traditions within Jewish culture are infused with numerical symbolism. For example, the celebration of a girl's Bat Mitzvah at age twelve and a boy's Bar Mitzvah at age thirteen signifies their passage into adulthood and obligation to follow Jewish law. Jewish wedding traditions also make significant use of the number seven.

Under the bridal canopy or chuppah, the newlywed couple recites the seven blessings, or Sheva Brachot, to evoke divine benefits.

Numbers are seen as conduits for mystical insights and spiritual truths in Jewish mysticism, especially in Kabbalah and Hasidism. It is thought that every number has distinct characteristics and energy that represent cosmic and divine forces. The emanations of God's divine characteristics and the interconnection of creation, for instance, are represented by the numerical structure of the Sephirot in the Tree of Life.

Jewish philosophy, religion, and society all place a strong emphasis on numbers. They serve as a vehicle for moral teachings, spiritual guidance, and cultural practices that uphold Jewish heritage and identity.

3.15 Ethiopian Orthodox Church and culture

Seven is a highly significant theological, cultural, and symbolic number in the Ethiopian Orthodox Church and Ethiopian culture. Here are a few applications and ways that the number seven is honored:

The Old Testament canon is said to be made up of seven books that are exclusive to the Ethiopian Orthodox Tewahedo Church and are not found in any other Christian organization. The books that comprise the "Deuterocanonical Books" or "Broader Canon" include 1 Enoch, Jubilees, 1–3 Meqabyan (Maccabees), and the remainder of Esdras. In the Ethiopian Orthodox Church, these texts are highly valued and recognized as authoritative for doctrine and practice.

The Ethiopian Orthodox Church acknowledges seven sacraments, usually referred to as mysteries or acts of grace, in line with other Christian traditions. These sacraments consist of anointing the sick, Eucharist, confession, confirmation (confirmation), baptism, ordination, and marriage. Every sacrament is seen as a holy ceremony whereby Christians obtain God's grace and spiritual rewards.

The Ethiopian Orthodox Church uses a seven-day cycle of prayer and worship as part of its liturgical calendar. As the day of the Lord's Resurrection, Sundays are particularly important. Christians congregate for group worship, prayers, and hymns on this day. They dedicate each day of the week to a specific saint or Christian calendar event.

Ethiopian Orthodox Christians observe different fasting periods during the liturgical year. The greatest and longest fast is called the Great Fast (Tsome Hirkal), and lasts for seven weeks. This fast, which begins on the eve of Easter (Fasika), is a time of prayer, reflection, and spiritual preparation for the celebration of Christ's Resurrection.

Seven earths and seven heavens, each with distinct inhabitants and features, are believed to exist in Ethiopian Orthodox cosmology. This vision of the cosmos is shaped by folklore and indigenous beliefs from Ethiopia and biblical and apocryphal writings.

Ethiopian Orthodox liturgical art, architecture, and iconography frequently feature the number. For instance, seven crosses, which stand for Christ's victory over sin and death, may be seen on church domes or processional crosses. Furthermore, angelic creatures encircling God's throne are frequently shown in Ethiopian Orthodox iconography as seven-winged seraphim.

In the Ethiopian Orthodox Church and Ethiopian society as a whole, number seven has a countless theological, cultural, and symbolic meaning that influences believers' behaviors, beliefs, and ways of expressing their faith.

3.16 Oromo People's thought

Seven is highly significant in Oromo culture, with deep roots in traditional and spiritual rituals. One of the major ethnic groups in Ethiopia, the Oromo people, associates the number seven with holiness and symbolism that permeates many facets of their existence.

The ancient Oromo calendar, or Gadaa system, is one notable area where the significance of number seven is clear. With this concept, time is divided into seven-year cycles, each corresponding to a different stage in Oromo society. Every step of the Gadaa cycle has duties and obligations linked to social structure, government, and cultural ceremonies Jalata, (2017).

In addition, like many other civilizations worldwide, the Oromo people observe a seven-day workweek. Every day of the week has a unique meaning and is connected to particular customs and cultural traditions. How Oromo life and traditions are structured around the number seven is further highlighted by the division of time into weekly cycles Jembere, (1994).

Furthermore, seven has a significant role in Oromo cosmology and theology. It is seen as a symbol of the cosmos' harmony, balance, and totality. A prevalent factor in many Oromo ceremonies is seven. To symbolize continuity, blessings, and protection, rituals are performed in multiples of seven or seven days (Baxter, 1979).

In Oromo culture, seven is highly revered, signifying the interdependence of time, community, spirituality, and the natural environment. It serves as a reminder of the Oromo people's deeply ingrained customs and beliefs by embodying their rich cultural heritage and worldview.

In summary, the number seven has several meanings in Oromo culture, ranging from ancient customs and spiritual beliefs to societal structure. It emphasizes the connections between time, community, and spirituality within their civilization and is a fundamental component of Oromo identity.

IV. Conclusion

In conclusion, throughout human history and civilizations, the significance of the number seven has been profoundly embedded in a variety of religious, cultural, and scientific settings. The number seven has captured people's imaginations and functioned as a symbol of harmony, perfection, and completion in everything from classical mythology and religious traditions to contemporary scientific breakthroughs.

Numerous religions associate the number seven with creation myths, sacred texts, and ceremonial practices, denoting spiritual significance and divine order. In myths, folklore, and symbolic representations found in cultural traditions, the number seven stands for themes of cyclicity, transition, and cosmic balance. Seven is a number that arises in astronomy, mathematics, and natural cycles, revealing the patterns and systems that govern the universe. The symbolism of the number seven resonates with universal concepts of unity, diversity, and connectivity, transcending individual belief systems and disciplines as we consider their

diverse importance. Whether understood in terms of scientific findings, religious allegories, or cultural customs, number seven challenges us to reflect on the fundamental orderliness of the cosmos and the mysteries of existence.

Recommendations

It is advised that more multidisciplinary research be done in light of this investigation to expand on our knowledge of the symbolic, philosophical, and useful meanings of the number seven in human culture and society. We can deepen our understanding of number symbolism and its tremendous influence on human thought, conduct, and collective identity by interacting with different viewpoints and cultures.

Furthermore, in the school curriculum, public discourse, and cultural events, educators, researchers, and cultural leaders are encouraged to foster knowledge and appreciation of numerical symbolism, especially the significance of the number. We may promote better understanding, tolerance, and appreciation for the diverse range of human ideas and experiences by encouraging discussion and investigation into cultural and spiritual aspects of numbers.

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