The Dynamic Interplay of Opposites in Zoroastrianism

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Citation:

Abstract

This exploration addresses some aspects of Zoroastrianism, examining how the ancient Persian belief system aligns with the dynamic and indeterminate principles of Fuzzy, Neutrosophic, and MultiAlist systems. Zoroastrianism, rooted in the eternal struggle between good and evil, light and darkness, exhibits parallels with Neutrosophy's acknowledgment of indeterminacy, incompleteness, and the dynamic interplay of opposites. The prophet Zarathustra's vision of a neutrosophic God challenges conventional notions of divine attributes, emphasizing a dynamic and evolving universe. Before investigating these vague areas, the concept of unclear conceptual borders is explored, emphasizing the indeterminacy and imprecision inherent in defining opposites or partially opposite concepts. The law of included infinitely-many-middles suggests that between opposites, there exist infinitely many nuances or middle values. Sorites' paradoxes challenge traditional logic by exposing the difficulties in defining vague boundaries. Neutrosophic Interpretation suggests introducing a buffer zone between opposites, resulting in Neutrosophic Sorites Paradoxes. Moreover, this exploration highlights the need for a more flexible and nuanced understanding of conceptual boundaries, acknowledging the dynamic and indeterminate nature of many philosophical and logical constructs. Finally, we delve into the application of neutrosophy to various cultural and philosophical concepts. The legendary figure of Gilgamesh, described as two-thirds god and one-third human, is examined through both traditional and neutrosophic perspectives. Additionally, Hindu concepts of Dharma, Adharma, and Karma are reexamined within the context of neutrosophy. The logic of the Diamond Sutra in Mahayana Buddhism, characterized by paradoxical language and a focus on emptiness, aligns with neutrosophic principles in challenging fixed notions and embracing the interconnected and indeterminate aspects of reality. Despite diverse cultural origins, these examples share a common thread in questioning absolutes and embracing the dynamic nature of existence.

Keywords: Zoroastrianism, Zarathustra, Ahura Mazda, Gilgamesh, Dharma, Adharma, Karma, Happiness, Diamond Sutra, Chinvat bridge, Cyrus the grate, Vagueness, Neutrosophy, Sorites paradoxes, Neutrosophic sorites paradoxes, Fuzzy information, Granulation, MultiAlism, MultiAlist systems, MuliPolar thinking.

1 | Introduction

In two recent articles [1], [2], i extended the concepts of 'pluralism', 'neutrosophy', 'refined neutrosophy', 'refined neutrosophic set', 'multineutrosophic set,' and 'plithogeny' [3]–[8], into a larger category that i referred to as MultiAlism, conceptualizing a MultiPolar System formed not only by multiple elements that might be random, or contradictory, or adjuvant, but also by accepting features from more than one basic system (UniPolar, BiPolar, TriPolar, or PluriPolar systems). One of the illustrations of a MultiPolar system that i proposed in the previously mentioned paper was from the realm of religions, namely Zoroastrianism, with its seemingly fuzzy characteristics, which most Western observers find it difficult to categorize as monotheistic, dualistic, or pluralistic [9]. In the following, i discuss again some unclear conceptual borders, not before reminding some basics of the theory of fuzzy information granulation and of neutrosophics, as to return to the example of Zoroastrianism for a deeper understanding of some Fuzzy, Neutrosophic, and MultiAlist facets of this religion. I dedicate the subsequent hypotheses and inferences to the kind memory of Professor Zadeh, for his profound effect on a wide range of scientific and technical domains, but also for the connection he had with the cultural spaces to which this paper refers [10].

Fig. 1. Lotfi Aliasker Zadeh (father of fuzzy theories) and Florentin
Smarandache (father of neutrosophic theories).

Lotfi Aliasker Zadeh (father of fuzzy theories) and Florentin Smarandache (father of neutrosophic theories) at the 2003 BISC FLINT-CIBI International Workshop on Soft Computing for Internet and Bioinformatics, University of Berkeley, California, December 15-19, 2003, where I presented the paper "Generalization of the Intuitionistic Fuzzy Set to the Neutrosophic Set".

1.1 | The Fuzzy Information Granulation

Let us first remind the quiddity of the theory of fuzzy information granulation, regarded by Zadeh as central in human reasoning [11]. According to Zadeh [11], human cognition is based on three fundamental concepts: granulation (the division of a whole into pieces), organization (the integration of parts into a whole), and causality (the association of causes with effects). Granulation of an 'object' <A> generates a cluster of granules of <A>, that are indistinguishable, similar, close together, or functionally related, generally hierarchical in nature, and their attributes and values are fuzzy — since their boundaries are not sharply defined.

1.1.1 | Fuzzy sets

In traditional set theory, an element either belongs to a set or does not. In fuzzy set theory, elements can have partial membership in a set. The membership degree is a value between 0 and 1, where 0 means no membership, 1 means full membership, and values in between indicate partial membership.

1.1.2|Granulation

Granulation involves the grouping or clustering of elements based on their similarity or relevance. It is the process of creating fuzzy sets to represent subsets of elements with similar characteristics. Granulation helps in organizing information and dealing with the inherent imprecision in human knowledge.

1.1.3|Information granules

Information granules are the result of the granulation process. They are fuzzy sets that represent a higher level of abstraction or grouping of elements. These granules make it easier to handle complex and uncertain information by providing a more compact and manageable representation.

1.1.4|Human reasoning

Zadeh [12] argues that human reasoning involves thinking at different levels of granularity. People naturally organize information into categories or concepts that are not strictly defined but have fuzzy boundaries. Fuzzy information granulation reflects this human cognitive process by allowing for the representation of imprecise and uncertain knowledge [12]–[14].

1.2|The Neutrosophics

The Neutrosophy explores the interdependence and interplay of opposites. Rooted in a foundation of neutrality, the neutrosophic concepts challenge traditional binary thinking and offer a nuanced perspective on the complexities of the world.

This theory considers every notion or idea <A> together with its opposite or negation <antiA> and with their spectrum of Neutralities <NeutA> in between them (i.e., notions or ideas supporting neither <A> nor <antiA>). The <NeutA> and <antiA> ideas together are referred to as <nonA>. Neutrosophy is a generalization of Yin-Yang Ancient Chinese Philosophy and of Hegel's and Marx's Dialectics (which are based on <A> and <antiA> only).

For example, in mathematics, neutrosophic numbers and neutrosophic algebra provide tools for handling uncertainties in numerical data. These concepts find applications in decision-making processes where incomplete or ambiguous information is prevalent. In physics, neutrosophic mechanics extends classical mechanics to account for indeterminate forces and imprecise measurements. This approach is particularly relevant in quantum mechanics, where the nature of particles and their properties often defy deterministic description [3], [6].

1.2.1|The philosophical framework

Neutrosophy is a philosophy that acknowledges the existence of indeterminacy in human knowledge and perception. It embraces the idea that many phenomena, concepts, and propositions are neither true nor false but rather exist in a state of partial truth. Neutrosophy introduces the notion of the 'neuter', emphasizing the presence of indeterminacy as a fundamental aspect of reality.

1.2.2|Neutrosophic logic

Neutrosophic logic extends classical logic to accommodate indeterminate, incomplete, and inconsistent information. It introduces the concepts of truth-membership, falsehood-membership, and indeterminacy-membership degrees, providing a more flexible and nuanced representation of reality [4].

1.2.3|Neutrosophic set

Neutrosophic set theory generalizes classical set theory to handle indeterminate elements. A neutrosophic set allows for the inclusion of objects with indeterminate membership degrees, acknowledging the uncertainty inherent in defining clear boundaries for certain concepts.

1.2.4 | Neutrosophic probability

Neutrosophic probability generalizes classical probability theory to address situations where uncertainty, indeterminacy, and ambiguity play a crucial role. It provides a framework for dealing with incomplete information and reflects the imprecision inherent in various real-world scenarios, having three sub-functions: chance that an event occurs, indeterminate-chance that the event occurs, and chance that the event does not occur.

1.2.5 | Beyond binary thinking

The interdisciplinary approach of neutrosophics challenges the binary nature of traditional Western philosophy and embraces the inherent complexity and ambiguity present in the world. While facing criticisms, neutrosophy and neutrosophics continue to stimulate intellectual discourse and contribute to our evolving understanding of uncertainty and ambiguity [15].

1.3 | The Neutrosophic Triad and the MultiNeutrosophy

Numerous schools of thought have extensively examined the dynamics between the opposites <A> and <antiA>. These concepts are known by various names, including dialectics, Yin-Yang, Manichaeism, dualism, Dharma-Adharma, and many others. However, the neutral (or indeterminacy) part (<neutA>) between these opposites has rather either been ignored or retracted. The neutral or indeterminate, as I emphasized in my studies on neutrosophic theory [3], [4], usually intervenes in the dynamics (or conflicts) from one side or the other, tipping the balance in one direction or the other. The boundaries between the opposites can be either fluid (when there is some overlapping or indeterminate/neutral part between the opposites) or rigid (when <A> and <antiA> are clearly separated).

Therefore, I proposed the 'triadic balance', emphasizing the interconnectedness of opposites. The triad – <truth>, <indeterminacy>, <falsity> – forms the cornerstone of the Neutrosophic system of thought. For every element "x" in a neutrosophic triplet set A, there exists a neutral of "x" and an opposite of "x". Also, the neutral of "x" must be different from the classical neutral element [16].

The MultiNeutrosophy [2] is a multiplied neutrosophy, focusing on the dynamics between $G=\{A_1, A_2, \ldots, A_n\}$ and its opposite $G=\{B_1, B_2, \ldots, B^m\}$, with their neutrals $G=\{C_1, C_2, \ldots, C_r\}$.

Let us give some simple examples of MultiNeutrosophy:

I. A group of countries against another group of countries (First and Second World Wars), while the third group of countries still remain neutral.

II. A group of ideas against another group of ideas in philosophy, literature, science, culture, religion.

III. A basketball team vs. another basketball team (as opposite groups), and the neutral group (formed by the referees and the supporters, while the supporters may be split into supporters of the first team, supporters of the second team, and undecided supporters).

1.4 | The MultiAlist System

In [1], i delineated a MultiPolar System that is open to combinations of opposites and neutrals (indeterminacies). The MultiPolar System is an extension of the PluriPolar System. The UniPolar, BiPolar, TriPolar, and PluriPolar systems are uni-valent (one excludes the other), but the MultiPolar System is multi-valent (it contains more than one system) and admits neutrality and indeterminacy between opposites.

The MultiAlism is an open, dynamic system with indeterminacies or neutralities, formed by elements from many systems, exceeding the PluriAlism, which is a closed dynamic system without indeterminacies, a uni-system formed by elements from a single system.

2 | Unclear Conceptual Borders

Let us underline the blur borders between opposite or partially opposite concepts.

Given the fact that the boundaries between concepts are frequently hazy and imprecise, it is conceivable that <A>, <NeutA>, <antiA> (and <nonA> naturally) share two by two, or even all three of them, common parts.

2.1 | The Law of Included Multiple-Middle

I generalized in [17] the Law of Included Middle [<A>, <nonA>, and a third value <T> which resolves their contradiction at another level of reality] (Lupasco-Basarab).

Law of Included Multiple-Middle [<A>, <antiA>, and <NeutA>, where <NeutA> is split into a multitude of Neutralities between <A> and <antiA>, such as $<Neut_1A>$, $<Neut_2A>$, etc.]. The <NeutA> value (i.e., Neutrality or Indeterminacy related to <A>) actually comprises the included middle value. Also, the Principle of Dynamic Opposition [opposition between <A> and <antiA>] is extended to the Principle of Dynamic Neutrosophic Opposition [which means oppositions among <A>, <antiA>, and <NeutA>].

2.1.1 | The law of included infinitely-many-middles

In between the opposites <A> and <antiA> there are infinitely many middles, denoted by $<neutA_i>$, where $i = 1, 2, ..., \infty$ [18].

Let us take a practical example: between <White> and <Black>, there are infinitely many nuances of colors.

I. Between 100% True and 100% False, there are included infinitely many middles, which are truth-values of the form: d% True and (1-d)% False, thus a logical proposition may be, for example, 1% True and 99% False, 2% True and 98% False, etc., where $d \in (0, 1)$.

II. Similarly, between 100% Membership and 100% Nonmembership, there are included infinitely many middles of the form: d% Membership and (1-d%) Nonmembership.

2.2 | Sorites Paradoxes

Sorites paradoxes are a class of paradoxes that arise from the indeterminacy surrounding the vague boundaries of concepts. Let us remind the classic example of the paradox of the heap:

  I. Start with a heap of sand.

  II. If you remove one grain, the heap remains a heap.

  III. Repeat this process: removing one grain at a time.

  IV. At some point, you'll be left with just a few grains.

  V. The question is, at what point does the heap stop being a heap?

The paradox highlights the difficulty in defining when a <heap> becomes a <non-heap>. The problem arises from the inherent lack of preciseness in everyday concepts. Similar paradoxes can be constructed for other vague concepts like 'tallness'', 'baldness', 'age', and so many more.

These paradoxes challenge traditional approaches to logic and set theory, which often assume clear-cut distinctions between categories. They raise questions about the nature of linguistic vagueness and how we handle it in logical reasoning [19], [20]. Various solutions and theories have been proposed to address sorites paradoxes [21], including:

  I. Degree theories: vague predicates should be understood in terms of degrees or degrees of membership.

  II. Supervaluationism: a statement can be true, false, or indeterminate, allowing for multiple acceptable precisifications of vague terms.

III. Contextualism: the meaning of vague terms depends on the context of their use, and the boundaries of concepts can shift based on the context.

IV. Many-valued logic: instead of the classical two-valued logic (true or false), many-valued logics introduce more than two truth values, accommodating the intermediate or fuzzy states between true and false.

2.2.1 | Neutrosophic interpretation

The Sorites Paradoxes, therefore such paradoxes where between two opposite entities there is not a clear frontier, can be interpreted neutrosophically in the following way: one considers a buffer zone, <neutA> (or neutral, indeterminacy), between the opposites.

There is not a clear distinction between some opposites <A> and <antiA>, where <A> is a concept and <antiA> its opposite, but a buffer zone <neutA>.

Fig. 2. A and antiA.

There are three zones: a zone that for sure represents <A>, a second zone that for sure represents <antiA>, and an ambiguous/unclear/vague zone that represents <neutA>, the neutral or indeterminate zone (neither <A> nor <antiA>; or <A> and <antiA> simultaneously). Therefore, a universe of discourse has a neutrosophic partition with respect to the frontier between opposites [22], [23].

2.2.2 | Neutrosophic sorites paradoxes

Between <A> and <neutA>, there is not a clear frontier – this is the first neutrosophic paradox (NSP1).

Then, between <neutA> and <antiA>, there is not a clear frontier – this is the second neutrosophic paradox (NSP2).

2.2.3 | MultiSorites paradoxes

MultiSorites paradoxes—within the frame of Refined Neutrosophy (which is isomorphic to the MultiNeutrosophy)— has n-dimensional form: $T_1, T_2, ..., T_p, I_1, I_2, ..., I_r, F_1, F_2, ..., F_s$, where p, r, s are integers ≥ 0, and at least one of p, r, s is ≥ 2 to assure the refinement (or multiplicity), p+r+s = n, where each T_j, I_k, F_l are refined (or respectively multi) Truth / Indeterminacy / Falsehood.

The frontiers between all these n sub- (or multi-)components, taken two by two, are blurry, unclear, and fluid.

There are C(n,2) (combinations of n taken by 2) = n(n+1)/2 Refined/MultiNeutrosophic Sorites Paradoxes.

3 | Exploring the Interplay between Zoroastrianism and Neutrosophy

Zoroastrianism traces its origins to the teachings of the prophet Zarathustra (Zoroaster). This ancient belief system, originating in Persia (modern-day Iran), emphasizes the eternal (dynamic) struggle between good and evil, light and darkness.

Zarathustra delivered his teachings in a world where duality played a central role. The core tenets of Zoroastrianism revolve around the eternal conflict between Ahura Mazda, the supreme deity representing goodness and truth, and Angra Mainyu, the destructive force embodying falsehood and evil. This cosmic battle, reflected in the opposing principles of asha (truth) and druj (falsehood), mirrors the fundamental dualities inherent in existence but also the neutrosophic zone that spans from asha to druj [24].

In the Zoroastrian context, the neutrosophic triadic balance finds resonance in the perpetual interplay of good, evil, and the ambiguous space between them.

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Edalatpanah comment: "The juxtaposition of Zarathustra's teachings on the concepts of good and evil with the principles of neutrosophy, which focuses on neutrality and the spectrum of ideational phenomena, promises to open new avenues of interpretation for these ancient teachings."

Zarathustra's vision of cosmic order and moral responsibility aligns with the Neutrosophic notion that truth, falsity, and indeterminacy are interconnected and inseparable. The prophet's teachings emphasize the need for individuals to actively participate in the eternal struggle for righteousness, acknowledging the complexities and uncertainties inherent in their choices.

3.1 | Zarathustra's Neutrosophic God

Zarathustra introduced a conception of the divine that transcends the conventional binary notions often associated with gods. Central to Zarathustra's philosophy is the idea that God embodies both masculine and feminine attributes and that existence is a dynamic relationship between the opposites <A> and <antiA>, which mirrors the principles of neutrosophy.

Furthermore, Zarathustra's conception of God challenges the omnipotence and omniscience traditionally ascribed to divine beings. Instead of an all-knowing and all-powerful deity, Zarathustra's God is portrayed as a creator of a dynamic universe—one in constant flux and progression towards perfection. This aligns again with the neutrosophic notion that reality is inherently indeterminate, incomplete, and evolving.

The dynamics of <A> (Good) and <antiA> (Evil) in Zarathustra's worldview are crucial elements in understanding the neutrosophic nature of his God, reflecting a reality where good and evil coexist in various degrees. The universe, in this view, is a dynamic interplay between opposing forces, with outcomes ranging from partially good and partially evil to states of complete neutrality where the degrees of goodness and evilness nullify or balance each other.

This perspective has profound implications for ethical considerations within Zoroastrianism. Instead of viewing morality in absolute terms, Zarathustra's framework suggests a more nuanced understanding, similar to neutrosophic architecture. It invites followers to navigate the intricate web of existence, recognizing that moral judgments may fall within the spectrum of what neutrosophy calls <neutA>, where actions and intentions are not strictly defined as wholly good or wholly evil.

Zarathustra's philosophical canvas expands further as we delve into the rhythmic and dynamic nature of existence. In his vision, everything follows a ceaseless succession of changes, akin to the principles of neutrosophy that acknowledge the inherent indeterminacy and evolution in all aspects of reality. The rhythmic nature of existence implies a perpetual dance between opposites, where the divine, being neutrosophic, orchestrates the symphony of creation.

Therefore, Zarathustra's emphasis on progress echoes the neutrosophic principle that nothing is static. In this dynamic universe, progress is not merely an option but a necessity. Stagnation, as Zarathustra implies, can lead to misery—an idea consonant with the neutrosophic understanding that acknowledges the potential consequences of resisting change and growth. The neutrosophic God encourages continuous evolution, fostering a universe in a state of perpetual becoming.

The concept of self-dominance introduces a dimension of personal responsibility within Zarathustra's philosophy. This self-mastery is crucial in navigating the dynamic interplay of <A> and <antiA>, contributing to the harmonious progression towards perfection. Evolution is not merely a biological concept but a cosmic principle guiding the continuous refinement and enhancement of all existence. Perfection, in this context, is not a static state but a dynamic journey towards an ideal.

The idea that immortality means "behind time" adds a layer of profundity to Zarathustra's philosophy. It aligns with the neutrosophic understanding that time is not a linear constraint but a dynamic dimension where existence transcends conventional temporal boundaries [25], [26].

Summarizing, Zarathustra's God —an orchestrator of the ceaseless rhythm and progression inherent in existence— is neutrosophic.

3.1.1 | Happiness in suffering

Zarathustra's message, "Happiness is for the one who makes others happy," exhibits neutrosophic characteristics by acknowledging the indeterminacy, incompleteness, and dynamic interplay of opposites inherent in the concept of happiness [27], [28]. It suggests that true happiness involves a nuanced understanding of the interconnectedness between individual and collective well-being. Let us briefly interpret it from a neutrosophic point of view.

Indeterminacy of happiness

Neutrosophy acknowledges the indeterminacy present in many concepts, including happiness. The idea that happiness is for the one who makes others happy introduces an element of uncertainty. What brings happiness to one person may not necessarily bring happiness to another, and the factors contributing to happiness can vary widely.

Incompleteness in the pursuit of happiness

Neutrosophy suggests that the pursuit of happiness is an incomplete endeavor. Happiness is not an absolute state but exists on a spectrum with varying degrees of fulfillment. The message implies that one's happiness is intimately connected to the happiness of others, indicating that a holistic understanding of happiness may involve a broader and more interconnected perspective.

Dynamic interplay of giving and receiving

The message emphasizes a dynamic interplay between giving and receiving happiness. Neutrosophy recognizes that this interaction is not a one-dimensional process but a complex, evolving exchange. The act of making others happy and, in turn, experiencing happiness oneself suggests a dynamic and reciprocal relationship.

Balance between opposites

Neutrosophy explores the balance between opposites. In the context of this message, the happiness of the individual is intricately linked to the happiness of others. This interdependence highlights the dynamic balance between self-interest and the well-being of the community, challenging the idea of happiness as a purely individual pursuit.

Degrees of happiness

Neutrosophy introduces the idea of degrees in various phenomena, and happiness is no exception. The message implies that the happiness derived from making others happy can manifest in different degrees. It might range from partial fulfillment to a more complete and harmonious state where the happiness of the individual and others coexist and reinforce each other.

3.1.2 | Chinvat bridge

Roughly, in theology, the soul is described as the component of the individual that shares divinity and is commonly thought to survive the death of the body. Different faiths and philosophers have created various theories and beliefs about its nature, relationship to the body, origin, and mortality. The Egyptian ka (breath) survived death but remained near the body, but the spiritual ba traveled to the realm of the deceased. The Chinese made a clear distinction between a perishable, sensitive soul that ceases with death and a reasoning principle that endures beyond death. Biblical mentions of the soul associate it with the concept of breath, not differentiating between the ethereal soul and the physical body [29]. In Christian theology, St. Augustine characterized the soul as a 'rider' on the body, underscoring the separation between the material and immaterial aspects, where the soul is regarded as the authentic essence of the individual.

In addition to the body (tanū), it was considered that an individual comprised of a number of spiritual aspects, loosely classified as souls. There are six elements: the animating force, the breath of life, the mind or spirit, the soul, the protecting spirit, and the spiritual double: <ahu>, < vyāna>, <manah>, <ruvan>, <fravashi>, <dainā>.

When a person is born, the essence (fravashi) incarnates the soul (ruvan) into the body to experience the material world, i.e., to suffer and fight bad powers to make decisions about good and evil. Therefore, ruvan actively participates in the manifestation of free will. It should be noted that fravashis are classified into three groups, with the central element composed of uncertainties and neutralities: <the living>, <the yet-unborn>, and <the dead>.

At death, ruvan was considered to dwell on earth for a few days while the gods assessed the deceased's life, and then was reunited with its fravashi and journeyed to the Chinvat Bridge, which spans the gulf between the living and the dead [30].

This bridge has neutrosophic qualities: when the righteous soul starts crossing, it becomes larger and larger, up to thirty-seven' poles' long and wide (equal to nine 'lances' or one 'frasang'). Au contraire, it becomes narrower and narrower to a razor blade dimension when the wicked soul steps onto the bridge, falling into hell because of the bridge's coarseness and sharpness [31]. In other words, the Chinvat Bridge's size is an open dynamic system with indeterminacies or neutralities, therefore, a MultiAlist System.

In MultiAlism, one has dynamics between many neutrosophic triads: ($<A_1>$, $<neutA_1>$, $<antiA_1>$), ($<A_2>$, $<neutA_2>$, $<antiA_2>$), ...

3.2 | Granulating the Six Attributes of Ahura Mazda

Ahura Mazda [32], the supreme deity in Zoroastrianism, and the attributes associated with Ahura Mazda are traditionally understood in a more qualitative and symbolic manner rather than as precisely defined attributes. However, here is an attempt to apply the concept of fuzzy information granulation to break down these attributes into groups of three granules, recognizing the inherent vagueness and imprecision in understanding:

3.2.1 | Good mind

Vohu Manah (Good Mind) signifies the divine attribute of good thought, understanding, and mental clarity:

    I. Granule 1: positive and constructive thought processes.

    II. Granule 2: spiritual awareness and enlightenment.

    III. Granule 3: the divine intellect influencing human understanding.

3.2.2 | Righteousness

Asha Vahishta (Best Truth) embodies the divine principles of righteousness, truth, and order in the universe:

    I. Granule 1: moral and ethical perfection.

    II. Granule 2: harmony and balance in the cosmic order.

    III. Granule 3: just and fair governance of the world.

3.2.3 | Divine power

Khshathra Vairya (Desirable Dominion) represents the divine power and authority that upholds the cosmic order:

    I. Granule 1: sovereignty and authority over creation.

    II. Granule 2: manifestation of divine power in the world.

    III. Granule 3: control and protection of the cosmic order.

3.2.4|Holy spirit

Spenta Mainyu (Holy Thought) represents the divine aspect of wisdom, creativity, and positive mentality:

    I. Granule 1: knowledge and understanding of the universe.

    II. Granule 2: divine intelligence guiding creation.

    III. Granule 3: insight into the cosmic order.

3.2.5|Perfection

Haurvatat (Wholeness) stands for the divine quality of completeness, health, and perfection:

    I. Granule 1: spiritual purity and holiness.

    II. Granule 2: devotion to the divine principles.

    III. Granule 3: connection with the divine through rituals and worship.

3.2.6|Immortality

Ameretat (Immortality) symbolizes the divine attribute of eternal life, immortality, and perpetuity:

    I. Granule 1: eternal and unchanging nature.

    II. Granule 2: perpetuity of divine existence.

    III. Granule 3: endless life and vitality.

It's important to note that these granules are created for illustrative purposes and to highlight the fuzzy nature of these attributes. The attributes of Ahura Mazda are deeply rooted in the religious and philosophical context of Zoroastrianism, and attempting to granulate them introduces a level of interpretation and approximation due to the abstract and symbolic nature of these concepts that consequently fall under a MultiAlist system.

3.3|Instrumenting the Zoroastrianism: Cyrus the Great

The historical dynamics of social classes, encompassing the neutrosophic triad <SuperClass, MiddleClass, LowerClass>, have significantly shaped the course of societies, both developed and less developed. The <SuperClass is the upper class, above the law, enjoying all the privileges. The <MiddleClass> and the <LowerClass> are the classes on which the laws act with the cruelest harshness and which suffer most of the time. The influence of these social classes becomes particularly evident when examining the reign of Cyrus the Great and the impact of Zoroastrian principles on governance.

The influence of Zoroastrianism on the cultural, social, and political fabric of the region is profound, with Cyrus the Great emerging as a central figure in the historical narrative of this faith. Cyrus the Great played an instrumental role in shaping and propagating Zoroastrianism.

Cyrus, the founder of the Achaemenid Empire, ruled Persia from 559 to 530 BCE. His reign was not only marked by military conquests but also by a visionary approach to governance, which incorporated Zoroastrian principles into the administrative framework of his vast empire. One of the key tenets of Zoroastrianism is the concept of asha, representing 'truth' and 'righteousness'. Cyrus incorporated these ideals into his governance philosophy, promoting justice, fairness, and religious tolerance [33].

The Cyrus Cylinder, a clay cylinder inscribed with Akkadian cuneiform script, stands as a testament to Cyrus's commitment to Zoroastrian principles. This ancient artifact, often hailed as the first charter of human rights, outlines Cyrus's policies of religious freedom and the repatriation of displaced peoples. It reflects the Zoroastrian concept of Vohu Manah, the 'good mind', as Cyrus exhibited a forward-thinking and inclusive approach to ruling a diverse empire [34].

Cyrus's conquest of Babylon in 539 BCE is another pivotal moment where Zoroastrian influence can be observed. His respect for local customs and religions, as documented in the Cyrus Cylinder, contrasts with the imperial norms of the time. This approach not only facilitated a smooth transition of power but also laid the groundwork for the cultural and religious diversity that characterized the Achaemenid Empire.

The Achaemenid Empire under Cyrus set an example of religious tolerance that was not only ahead of its time but also instrumental in the propagation of Zoroastrianism. While Cyrus himself was a follower of the traditional Iranian religion, he extended respect and patronage to various faiths within his realm. This ethos of inclusivity —a MultiAlist trait— in line with Zoroastrian ideals contributed to the empire's stability and the coexistence of diverse religious communities.

Cyrus's legacy as an instrument of Zoroastrianism extends beyond his lifetime. His successors, including Darius the Great and Xerxes, continued to uphold Zoroastrian principles in their rule. The construction of Persepolis, the grand ceremonial capital of the Achaemenid Empire, serves as a tangible expression of the empire's commitment to the divine attributes of Khshathra Vairya (Desirable Dominion) and Haurvatat (Wholeness).

This monumental project symbolized a departure from the exclusive privileges of the SuperClass and a move toward a more inclusive and balanced society. The SuperClass, traditionally above the law, witnessed a shift towards a more just and compassionate governance. The MiddleClass and LowerClass, instead of enduring harsh treatment, found relief and consideration in the policies of Cyrus, reflecting the influence of Zoroastrian ideals on societal dynamics and governance.

3.3.1 | A multipolar thinking

Cyrus the Great, the ancient Persian ruler, laid the foundation for a governance model that embraced diversity and promoted unity within a vast empire. Fast forward to the contemporary world, and we find ourselves in a MultiPolar World with distinct geopolitical poles, such as the United States, European Union, China, Russia, India, and Brazil.

Cyrus's legacy of inclusive governance serves as a historical precursor to the modern concept of MultiPolar Thinking. The idea of "E Pluribus Unum" (Out of Many, One), embraced by the European Union, has evolved into a more complex narrative in our MultiPolar World. The question arises: Should it now be "E Pluribus Multa" (Out of Many, Many)? Or perhaps "E Pluribus Omnia" (Out of Many, Everything)? The dynamics of a MultiPolar World encourage us to consider alternative spectra, such as "Ex Uno Omnia" (From One, Everything), "Ex Uno Plures" (From One, Many), or even "Ex Uno Multa" (From One, Many Things).

The shift towards "E Pluribus Plures" (Out of Many, Many) appears to be a consequence of contemporary global geopolitics, a phenomenon predicted by experts decades ago. The world is no longer characterized by a single dominating power but by multiple centers of influence, each contributing to the intricate tapestry of global affairs [35]. In this MultiPolar World, identity politics emerges as a notable fracture line in modern societies. As nations navigate the complexities of coexistence within this globalized framework, the question of identity becomes crucial. The diversity inherent in MultiPolar Thinking requires societies to grapple with the challenges and opportunities posed by various identities, be they cultural, political, or economic. The MultiPolar Thinking encourages a departure from a unipolar or bipolar worldview and necessitates embracing the complexity of a world with multiple centers of power and influence.

4 | Other Examples to be Explored

4.1 | Gilgamesh: Two-Thirds God and One-Third Human

The legendary figure of Gilgamesh, as described in the ancient Mesopotamian Epic of Gilgamesh, is said to be two-thirds god and one-third human [36]. This unique composition provides an interesting lens through which we can explore the character of Gilgamesh in the context of neutrosophy.

4.1.1 | Two-thirds god

Traditional Understanding: the divine aspect of Gilgamesh symbolizes his connection to the gods, granting him exceptional strength, wisdom, and abilities beyond those of ordinary humans. This divine heritage represents his elevated status and sets him apart from mortal beings.

Neutrosophic Perspective: within the neutrosophic framework, the two-thirds god aspect introduces an element of indeterminacy. It suggests that Gilgamesh's divine attributes are not absolute or fully defined. Instead, they exist on a spectrum, incorporating a degree of uncertainty and dynamic interaction with his human nature.

4.1.2 | One-third human

Traditional Understanding: the human aspect of Gilgamesh represents his mortality, susceptibility to emotions, and capacity for personal growth and development. This human component adds a layer of relatability to his character, making him more accessible to the human experience.

Neutrosophic Perspective: the one-third human aspect introduces a sense of incompleteness within Gilgamesh. Neutrosophy suggests that his humanity is not a fixed state but a dynamic element that interacts with his divine attributes. This interplay creates a complex and evolving character whose actions and decisions reflect the inherent indeterminacy of the human condition.

4.1.3 | Dynamic interplay

Traditional Understanding: the combination of divine and human elements in Gilgamesh creates a powerful and multidimensional character. His journey, marked by quests for immortality and self-discovery, reflects the struggle to reconcile his dual nature.

Neutrosophic Perspective: neutrosophy emphasizes the dynamic interplay of opposites. In the case of Gilgamesh, the constant interaction between his godly and human attributes illustrates the indeterminacy inherent in his character. His decisions, motivations, and the outcomes of his actions are not predetermined but exist within a realm of constant flux and evolution.

4.2 | Dharma-Adharma and Karma

The concepts of Dharma, Adharma, and Karma are fundamental aspects of Hindu philosophy and are intricately woven into the fabric of life's ethical and moral considerations [37]. When explored within the context of neutrosophy, which deals with indeterminacy, incompleteness, and the dynamic interplay of opposites, these concepts take on new dimensions, offering a nuanced perspective on the complexities of human existence.

4.2.1 | Dharma

Traditional Understanding: Dharma is often translated as duty, righteousness, or cosmic order. It encompasses the moral and ethical principles that govern one's conduct and responsibilities in life. Dharma provides a framework for living in harmony with the universe and upholding virtuous actions.

Neutrosophic Perspective: neutrosophy acknowledges the indeterminacy inherent in ethical decisions. Dharma, within this context, is not a rigid set of absolutes but a dynamic principle that navigates the interplay between opposites. The determination of what is righteous may contain elements of indeterminacy, and the degree of righteousness may exist on a spectrum rather than in binary terms.

4.2.2 | Adharma

Traditional Understanding: Adharma represents actions that go against the moral and ethical order. It signifies behaviors that disrupt harmony, create imbalance, and violate the principles of righteousness.

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Neutrosophic Perspective: Adharma, in the neutrosophic framework, recognizes the inherent incompleteness in labeling actions as solely right or wrong. The dynamic interplay between Dharma and Adharma suggests that ethical evaluations may involve degrees of indeterminacy, reflecting the complex nature of human choices.

4.2.3 | Karma

Traditional Understanding: Karma is the law of cause and effect, where actions have consequences that may manifest in this life or future incarnations. Positive actions lead to positive outcomes (good karma), while negative actions result in negative consequences (bad karma).

Neutrosophic Perspective: Karma, within the neutrosophic lens, acknowledges the dynamic nature of consequences. The law of cause and effect is not deterministic but exists within a framework of indeterminacy. Actions may yield outcomes that fall within a spectrum of possibilities, reflecting the neutrosophic principle that nothing is absolute and everything exists in a state of constant evolution.

4.3 | The Logic of Diamond Sutra

The Diamond Sutra —known as the Vajracchedikā Prajñāpāramitā Sūtra ("Perfection of Wisdom in 700 Lines"), believed to have been composed in the first century CE, making it one of the earliest known dated printed texts— is a central text in Mahayana Buddhism, particularly within the Zen and Chan traditions.

The Diamond Sutra takes the form of a dialogue between the Buddha and Subhūti. The discourse occurs in the context of a larger discussion on the nature of wisdom and the path to enlightenment. The teaching style is characterized by paradoxical language, negations, and the deconstruction of conventional concepts. This style aims to lead the listener or reader beyond conceptual thinking to a direct experience of reality.

The Diamond Sutra emphasizes the transcendence of dualistic thinking, urging practitioners to go beyond concepts of self and other, existence and non-existence. It encourages a direct realization of the interconnectedness of all phenomena [38].

The Diamond emphasizes the concept of "emptiness" (śūnyatā) and the impermanence of all phenomena. Emptiness is not a nihilistic concept but rather an affirmation of the interdependence and interconnectedness of all things. The phrase "form is emptiness, emptiness is form" encapsulates this teaching, highlighting the dynamic and interrelated nature of reality.

The logic embedded in the Diamond Sutra is more experiential and intuitive, aiming to lead individuals toward direct insight (prajñā) into the nature of reality [39].

While the Logic of the Diamond Sutra and Neutrosophic Logic emerge from different cultural and historical contexts, they share a common thread in challenging fixed notions and embracing the dynamic, interconnected, and indeterminate aspects of reality.

5 | Conclusions

In weaving together the tapestry of Zoroastrianism, the teachings of Zarathustra, and the philosophy of Neutrosophy, a rich interplay of ideas emerges. The eternal struggle between good and evil, truth and falsehood, finds expression in both ancient Persian theology and contemporary philosophical discourse. By embracing the triadic balance inherent in Neutrosophy, individuals can navigate the complexities of existence with a greater awareness of the interconnectedness of opposites, seeking a harmonious balance amidst the perpetual struggle. The Neutrosophic framework invites contemplation on the inherent ambiguity and complexity within seemingly binary oppositions. Just as Zoroastrianism acknowledges the ongoing struggle between Ahura Mazda and Angra Mainyu, Neutrosophy suggests that absolute clarity and certainty are elusive, and reality is often nestled in the indeterminate realm.

Acknowledgment

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