

Book III of the Single Monad Model of the Cosmos
**Fractal Complex-Time,
the Incorporeal World
and Quantum Gravity**

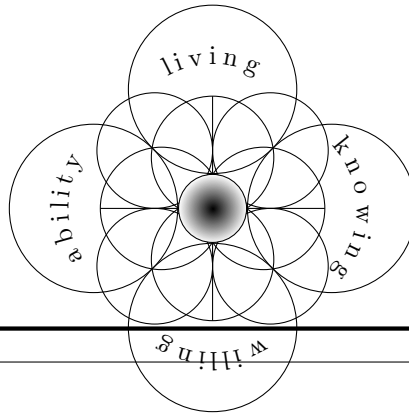
ULTIMATE SYMMETRY



I became in your love
like one abstract point

Mohamed Haj Yousef

Author of the Duality of Time Theory



ULTIMATE SYMMETRY

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the Incorporeal World
and Quantum Gravity

Mohamed Haj Yousef

[Book III of the Single Monad Model of the Cosmos Series]

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ULTIMATE SYMMETRY

Fractal Complex-Time, the Incorporeal World and Quantum Gravity

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*... to the spirits and souls of my parents, may
Allah have His mercy bestowed upon them in
Heavens.*

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Preface

About this Book

This is the third volume in the Single Monad Model of the Cosmos series. In the first volume we introduced Ibn al-Arabi's eccentric conception of time and outlined the general aspects of his cosmological views. In the second volume, this fundamental insight was developed further into the Duality of Time Theory, which provided elegant solutions to many persisting problems in physics and cosmology, including the arrow-of-time, super-symmetry, matter-antimatter asymmetry, wave-particle duality, mass generation, homogeneity, and non-locality, in addition to deriving the principles of Special and General Relativity based on its granular complex-time geometry. In addition to explaining both quantum and relativistic phenomena, this theory can be extended further to describe the incorporeal worlds. In other words, whereas Relativity was able to explain gravity in terms of space-time curvature, the Duality of Time Theory explains all the five fundamental interactions between the physical (corporeal) microscopic particles and macroscopic objects, as well as the structure of incorporeal worlds, including the psychical, spiritual and divine realms; all based on the same discrete and genuinely-complex time-time geometry, whose spatial dimensions are dynamically being generated, in the inner levels of time, from one single metaphysical point, before they start evolving in the outer normal level that we encounter.

Therefore, in this third volume, we want to explore how the apparent physical and metaphysical multiplicity is emerging from the absolute oneness of divine presence, descending through four fundamental levels of symmetry: ultimate, hyper, super and normal. This is equivalent to understanding how the cosmos is perpetually and sequentially emerging from chaos, and then subsequently repairing back into it, at every instance of time. In reality, this is indeed the same acknowledged physical process of matter-antimatter pair

creation and annihilation, but it is happening here between the corporeal and incorporeal worlds, on a global cosmological scale, every single instance of time. The reason why this creation and annihilation process is not causing any devastation or destruction, as we would normally expect from such extremely energetic fissile reaction, even when it happens on the slightest atomic scales, is because it is happening sequentially in the inner levels of time before the physical mass is generated. Rather, this process itself is the fundamental origin of the instantaneous generation of matter particles and antiparticles, which then simultaneously repair and vanish into the past, just to be re-created again, perpetually. This perpetual and sequential dynamic formation causes the illusion of motion and continuity of spatial dimensions, while in fact all this multiplicity is being created from one metaphysical point, which is the Single Monad that is the only entity described by real continuous existence.

In other words, while the spiritual world and divine presence are forming even higher levels of symmetry, the physical and psychical worlds are the two complementary folds of super symmetry, which is the same matter and antimatter symmetry already established in the Standard Model of Elementary Particles. In fact, this model also includes the hyper symmetry between fermions and bosons, or matter and energy, which are nothing but space and time, respectively. Therefore, we don't need to look further for any new particles to realize the super and hyper symmetries, but we need to introduce some fundamental modifications that will reveal the hidden discrete symmetry of space and allow exact mathematical derivation of the Equivalence Principle of General Relativity.

As a result of these essential modifications introduced by the complex-time geometry, super symmetry becomes the same established matter-antimatter symmetry of Quantum Field Theory, and hyper symmetry is the same established space-time diffeomorphism of General Relativity. Therefore, while normal symmetry governs the macroscopic objects, based on the familiar conservation laws of classical mechanics, super symmetry governs the elementary particles of matter and anti-matter, which are the fermions, based on Quantum Mechanics, and hyper symmetry governs the equivalence between these fermionic particles and energy waves, which are the bosons, thus converting between granular and continuous space, or particles and waves. However, because of the presence of mass and

energy, this latter space is non-Euclidean, so the ultimate symmetry comes in the line to explain how this curved (Riemannian) space is emerging from the absolutely homogeneous Euclidean space of infinite number of dimensions, which is also equivalence to absolute Oneness.

This “ULTIMATE SYMMETRY” is a modern scientific interpretation of the same ancient mystical, and extremely controversial, theory of the “Oneness of Being”, that is often misinterpreted in terms of pantheism, or panentheism, but it is indeed the definitive gnostic knowledge of God and creation. This divine wisdom is usually experienced by many Sufi mystics, and also some other philosophers from earlier religions, but it is often expressed in a delicate poetical and highly metaphorical language, lest it can be easily misunderstood and reduced into the various confusing and inadequate philosophical and theological doctrines. For this reason, this virtuous knowledge was intentionally dispersed and widely scattered by Ibn al-Arabi over his numerous works and in different contexts within the various chapters of the Meccan Revelations, but he gave some crucial clues in his introduction on how to accomplish a comprehensive vision. Nonetheless, this critical reality may not be revealed to outsiders via any conventional language or other tools of expression, since it may only be personally experienced on the most profound spiritual levels, usually after extensive and conscientious meditation and contemplation.

As it has been clarified in the first two volumes, all the principles and essential details of the Single Monad Model and Duality of Time Theory are entirely based on Ibn al-Arabi’s original view of creation and his intense interpretation of Islamic cosmology, outlined in the momentary Quranic descriptions of the world and other essential prophetic narrations. However, it must be clearly noted that, although these principles are divinely revealed by Allah, the Exalted, in Quran and through His Prophet Muhammad, peace be upon him, we are not merely relying on any innocent faith to describe physical and cosmological phenomena! Rather, we are applying the Islamic divine revelations to develop concrete logical investigations, supported by rigorous mathematical derivations of the most fundamental laws of nature. So, although we certainly believe that Allah is the One Who is ultimately creating every single thing at every instance of time, this book explains very clearly how this is being

done, and not just a naive resorting to “God did it”.

The Duality of Time Theory exposes a deeper understanding of time, that reveals the ultimate discrete symmetry of space-time geometry, according to which the dimensions of space are dynamically being re-created in one chronological sequence at every instance of the outer level of time that we encounter. In this hidden discrete symmetry, motion is a result of re-creation in the new places rather than gradual and infinitesimal transmutation from one place to the other. When we approximate this discrete motion in terms of the apparent (average) velocity, this theory will reduce to General Relativity. This means that the semi-Riemannian geometry on $\mathbb{R}^4$ is a special approximation of this discrete complex-time geometry on $\mathbb{H}^4$. This approximation is implicitly applied when we consider space and matter to be coexisting together in (and with) time, thus causing the deceptive continuity of physical existence, which is then best expressed by the non-Euclidean Minkowskian space-time continuum of General Relativity, or de Sitter/anti-de Sitter space, depending on the value of cosmological constant. Therefore, the Correspondence Principle is fulfilled by the Duality of Time Theory, which goes much more deeper than just including General Relativity, and also far more deeper than simply reconciling it with Quantum Mechanics, but also opening the doors to the incorporeal worlds and explaining all natural and super-natural phenomena in terms the new dynamic and genuinely-complex time-time geometry.

As we have already introduced in Volume II of this series, the psychical entities have exactly the same structure as the physical objects, with the same kinds of elementary particles, atoms, crystals, and even rocks and mountains; but they are denoted as incorporeal because they exist in an orthogonal dimension of time. Therefore, the fermions in our physical world behave as bosons in the psychical world, and vice versa. The new genuinely-complex nature of time, where the dimensions of space are created dynamically in the inner levels, allows expressing super symmetry, through these two orthogonal arrows of time, without the need to introduce any super space which requires anti-commuting numbers.

With this unification between the two super symmetrical worlds, “consciousness” or “knowledge” is explained as the result of the instantaneous pairing between the two orthogonal time directions, producing a new spatial dimension whose points contain the informa-

tion describing the various objects of awareness. Therefore, super symmetry is responsible for our passive recognition of the present moment of existence, which is perpetually turning into the past right after its instantaneous becoming. When these two physical and psychical arrows are complemented together with the encompassing spiritual dimension, hyper symmetry is achieved, which then adds the creative elements of “living” and “ability”. In other words, the hyper symmetrical geometry contains information about future possibilities before they are realized into the present moment, and the spirit provides the motivation and ability to choose and realize one of these possibilities. However, this ability is greatly constrained by the various current physical and psychical restrictions, and it becomes absolute only on the divine level of ultimate symmetry, which is acting from within each point of the absolute space, through the spin that is producing the magnetic field from which all other quantum fields are generated at each subsequent spatial dimension. The spin is the fundamental property that determines the final state to which the wave-function of every point of space is collapsing at every instance of time.

In simple mathematical terms, the physical dimensions, both as the space-time container and its contents of matter and energy, are defined by the complex-scalar field (of the genuinely-complex time): $z = t_r + jt_i = \cosh(\theta) + j \sinh(\theta) = e^{j\theta}$, and the psychical dimensions are described by the orthogonal number $w = e^{j\phi}$, so that $zw^* = z^*w$. Separately, each one of these fields has its own Lorentzian symmetry, because they are hyperbolic complex numbers $\in \mathbb{H} \equiv \mathbb{R}(j)$, with fractal time dimensions $t_{physical} = \sinh(\theta)$ and $t_{psychical} = \sinh(\phi)$, but together they form the non-Euclidean space that we normally perceive, which is described by normal complex numbers $\in \mathbb{C} \equiv \mathbb{R}(i)$, but with some diffeomorphism, or certain differentiable mappings of the manifold to itself, depending on its contents of matter and energy. The diffeomorphism group defines the hyper symmetry whose transformation is the same mass-energy equivalence relation $E = mc^2$, generalized to include mass and other quantum charges, while of course the group of super symmetry, being the symmetry of fermions, or physical particles, is defined by Lorentz transformation, but also with some essential modifications that reveal the granularity of the hyperbolic space where super symmetry is realized. The Duality of Time theory provides a clear transition, or symmetry breaking

and restoring, between the continuous space of hyper symmetry $\in \mathbb{C}$ and the discrete space of super symmetry $\in \mathbb{H}$, based exactly on the same mass-energy equivalence relation or the principle of equivalence between the inertial and gravitational masses that is now derived mathematically without introducing any thought experiments that rely on plain induction.

In reality, the fractal dimension of time, in either the physical or psychical worlds, separately, is having a negative signature, thus reducing the number of dimensions rather than increasing them, but together they complement each other to make the three spatial dimensions that we feel living in. Therefore, quantum gravity can not be explained without understanding super symmetry that can be realized only with the two complementary physical and psychical worlds together, and then complementing them both with the spiritual world that defines the hyper symmetric space. Nonetheless, the picture can only be completed after understanding the ultimate symmetry that connects the manifested non-Euclidean space with the absolute homogeneous and infinite Euclidean, or Hilbert, space with infinite number of dimensions. This level of symmetry governs the divine realm of God and His Beautiful Names and Attributes, including also the Constant or Immutable Entities, that will be explained in Chapter IV. However, at the highest level, the Divine Ipseity or Quiddity is described by eternal Oneness beyond any symmetry or space nor time.

Therefore, there are five primordial realms, or levels of reality, each having its own distinctive symmetry that is defined with a certain type of geometry:

1. Oneness of God, conceived as abstract point beyond geometry.
2. Ultimate Symmetry of Constant Entities, defined in Euclidean space (without time).
3. Hyper Symmetry in the Spiritual World, defined in Riemannian space-time as normal complex numbers $\mathbb{C}$.
4. Super Symmetry between the Physical and Psychical Worlds, defined in two orthogonal Hyperbolic spaces (with time), as split-complex numbers $\mathbb{H}$.

5. Normal Symmetry in the Physical World, defined in Euclidean space and time as independent variables.

These nested symmetries are reflected on many fundamental levels of nature, including the five Divine Presences, the five regular polyhedra known as the Platonic solids, the four classical elements and their quintessence, the five Pillars of Islam and the five daily prayers. We shall discuss some of these fundamental fives in the Introduction.

After the revolutionary theory of Relativity and the discovery of Quantum Mechanics, and then the subsequent development of Quantum Field Theory that was able to describe the atomic structure of matter and explain some fundamental interactions through the Standard Model of Elementary Particles, thousands of physicists and cosmologists, from many pioneering universities around the globe, have been trying very hard to understand the microstructure of space-time and gravity, by trying to reconcile Quantum Mechanics with General Relativity. The reason why none of these century-long extensive international efforts could ever explain the quantum nature of gravity is due to the fact that it is three-dimensional phenomena, and we are trying to explain it from the same level of existence that is also three-dimensional but only with its two physical and psychical domains together, while each one of them is only a two-dimensional world evolving in time.

In other words, our perception of the three spatial dimensions is occurring only instantaneously as a result of the sequential pairing between the two orthogonal and complementary physical and psychical worlds, while separately they are evolving only in two spatial dimensions, since we can only perceive one two-dimensional image at a time, that is then integrated, in our creative imagination, with the corresponding psychical image, to form a three-dimensional picture of the surrounding world, where gravity is encountered. For this reason, although it is essentially quantized, just as anything else in creation, gravity is always perceived as a continuous phenomena.

Perhaps this is the essential reason why many laypeople are still advocating the flat Earth model, assumed from its archaic shape as a plane or disk, as it is usually depicted in the early cosmography of most ancient civilizations. With the correct understanding of the fractal nature of time, all our direct perception of the (lo-

cal) physical universe is two dimensional, and not only the Earth. When we extend this local view to the apparently infinite dome of the heavens, the dimensions become a whole three, but practically we are confined in a fractal time-dimension between two and three complete dimensions of space.

Consequently, there is no doubt that the ancient Sumerians and other later civilizations once had an extremely precise and detailed understanding of this crucial fact, and they built their profound mathematical model on it, using the sexagesimal system, with base 60, that is still being used for measuring time, angles, and geographic coordinates. What is less known, however, is that the absolute speed of light is implicitly operating in this system, from which the meter is also precisely defined! It is not by any chance that the speed of light is three hundred thousand meters per second, and that the distance between the north and south poles of the Earth is twenty thousand meters, because this is directly related to the apparent dimensions, which are two for the flat Earth and three for the dome of the Sky, or vacuum. Other fundamental constants and units can then be extracted from this system as briefly described at the end of Chapter VII of Volume II and we may also come back to this important subject throughout this book.

The Structure of the Book

In accordance with the creative quadratic design of the cosmos and its quint-essence, this book is divided into an extended introduction and four chapters, each of them is dedicated for one of the four hierarchical levels of symmetry: normal, super, hyper and ultimate, which describe the physical, psychical, spiritual and divine realms, respectively. With each of these four hierarchical levels, a new fundamental divine Attribute is implement: willing, knowing, living and ability, respectively, although all these Attributes are inherently, but relatively, manifested in the human being who is created on the divine Image. So we shall also discuss these four fundamental attributes in their respective chapters.

In the introduction, we shall talk specifically about the Principle of Love, as the primary divine motive behind creating the World, thus forming the most fundamental cause of physical as well as metaphysical motion or activity, because of the breaking of the original

harmony and the subsequent desire for union, inherent in all corporeal and incorporeal entities, whether animate or inanimate beings. This Principle of Love leads to the known principle of least time, or stationary action, which constitutes the starting assumption in formulating all classical and modern physics theories, including Relativity and Quantum Field Theory. In this introduction, we will also briefly describe ancient cosmology and cosmogony; concentrating more on the Islamic view of creation since it forms the foundations of Ibn al-Arabi's cosmology from which the Single Monad Model and the Duality of Time Theory have been developed in the previous two volumes, which then lead to this concept of Ultimate Symmetry.

The first chapter introduces the concept of symmetry, and how it operates on the various levels of nature, starting from the realm of fundamental elementary particles, up into the microscopic structures of atoms, molecules, and crystals, and then up to all the various macroscopic structures they may form on all levels of creation; ranging from geology (such as rocks and mountains), biology (including botanic and animal kingdoms) and astronomy (from planets to galaxies and larger clusters). This normal symmetry is evident on all these diverse levels of creations, and that is simply due to the fundamental **fractal** nature of space-time that is producing all these various structures. As it is well known, fractals are characterized by all kinds of rotational and translational self-similarities, and because space-time itself is fractal, a whole spectrum of overlapping symmetries is actively operating on all levels of creation, both in their physical configuration and other non-figurative processes.

For example, the number and types of elementary particles, according to the Standard Model, are fundamentally related to the number and types of teeth! This is simply because both of these, apparently unrelated systems, are rooted in the four layers of space-time dimensions: *0D*, *1D*, *2D* and *3D*, that are also related to the four elemental states in nature: Earth, Water, Air and Fire. These four classical elements permeate all physical and metaphysical structures, and they are themselves deliberated by the four divine attributes that are necessary and sufficient for omnipotent God: Living, Knowing, Will and Ability. Hence, these four origins are then multiplied by the seven heavens whose motion is producing the seven days of the week, where the first six of them are dynamically form-

ing the six directions of space, that then also produce the six types of fermions that form matter particles, while the seventh day is the outward time which produces the four types of bosons that are the particles of energy, or interaction mediators. All these kinds of symmetries in the physical and metaphysical worlds are rooted in this array of numbers: 4×7 , which produce the original twenty-eight days of the month, but also implicit in all that the original four divine attributes, which can increase this number up to thirty-two: 4×8 . Hence, the number and types of elementary particles, and that of teeth (of humans, in particular) are not accidental at all, and they are also profoundly related to the number and types of letters in the alphabet!

Therefore, in Chapter IV, we shall explain how these four fundamental divine Attributes form the ultimate symmetry, that emerges from the absolute Oneness of God, through the hierarchy of other divine Names and Attributes. Before that, in Chapter III, we shall also explain how these same four fundamental divine Attributes descended to form the spiritual world that is most perfectly manifested in the Perfect Human, and to various relative extents in angels, jinn, humans, animals, plants and inanimate beings. All of these conclusive six types of creation have their own spiritual nature that is governed by hyper symmetry, just as their physical complexions and other configurations are governed by normal and super symmetries.

Nevertheless, what is most important and more relevant to mathematicians, physicists and other scientists, at this critical juncture in the history of scientific research, is the subject of super symmetry, which is necessary to explain quantum gravity. This will be tackled in Chapter II, where we shall explain how this missing symmetry can be realized only with the psychical world that complements our physical existence, and each is evolving in its own arrow of time, as we have already introduced in Volume II of this series. With these two orthogonal arrows of time, there is no need to introduce any super space, which requires anti-commuting super numbers, because the fermions in our physical world behave as bosons in the psychical domain, and vice versa.

However, because of the novelty of these ideas, and since this is the first attempt to treat these esoteric subjects under the umbrella of physics and cosmology, the discussion in these two chapters will be limited to the general description of their hierarchical structures

according to Ibn al-Arabi. We will also explain how the corresponding level of symmetry could be generated from the same complex-time geometry that is forming our normal space-time container of the physical world. These novel and extremely essential subjects may be the subject of a future work.

Note on the Opening Epigraphs

In accordance with the same tradition by Muhyieddin Ibn al-Arabi in his Meccan Revelations and many other books, where he usually starts each chapter with a short poem that highlights the subjects to be discussed, we also started every chapter in this book by some related epigraphs from Ibn al-Arabi and other famous thinkers. It is always good to come back to these opening epigraphs as you progress through the chapters, because they provide the essence of the matter under discussion, in a short but profound nested layers of meanings which will be certainly revealed more upon each subsequent reading.

Note on References and Bibliography

In addition to the usual bibliographical references that will be included at the end of this book, and referenced properly in the text, most of the other quotes are based on Ibn al-Arabi's major comprehensive work of the "Meccan Revelations" ("Al-Futuhāt Al-Makkiyya").

Therefore, because we are going to refer to this book very often, we shall use a short reference style directly in the text, without using footnotes, enclosed by medium brackets with the form: [Futuhāt, X.000.00], which means: [volume.page.line]. When the line number is omitted, the reference is in the entire page, or a range of pages like this [II.229-231].

For all this, we have used the standard edition re-published by many houses based on (photocopy of) the old edition of Bulaq, published in 1911, in four volumes each about 600-700 pages of 35 lines, as it will be also listed in the Bibliography. You should notice, however, that newer type-scripted editions maybe different although some of them are also four volumes.

All references to the Holy Quran shall be indicated also in the

text; after each verse quoted or meaning indicated in the text we shall add a reference like that [Quran, xx:yy] where xx refers to the number of Sura (chapter) and yy is the number of Aya (verse).

In addition to the Futuhat, we also used short form of references to many other books by Ibn al-Arabi, like: Ayyam al-Shaan, al-Tanazzulat al-Mawsiliyya and al-Durrat ul-Bayda, which will be also listed in the bibliography, together with a list of other useful books on or by Ibn al-Arabi. More information and articles can be found on the websites: ibnalarabi.com and smonad.com.

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Author:

Mohamed bin Ali Haj Yousef
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United Arab Emirates University
Al-Ain, United Arab Emirates

Introduction: Beauty and the Principle of Love

“Allah is Beautiful, and He loves beauty.”

Hadith by the Prophet Muhammad (peace be upon him), *Sahih Muslim* - 131

“As a result of the original divine manifestation, all kinds of motions are driven by Love and Passion. Who could possibly not instantly fall in love with this perfect and most beautiful harmony! Beauty is desirable for its own essence, and if the Exalted (Real) did not manifest in the form of beauty, the World would not have appeared out into existence.”

paraphrased from: Ibn al-Arabi, *Meccan Revelations: II.677.12*

“Because He loves beauty, Allah invented the World with ultimate perfection, and since He is the All-Beautiful, He loved none but His own Essence. But He also liked to see Himself reflected outwardly, so He created (the entities of) the World according to the form of His own Beauty, and He looked at them, and He loved these confined forms. Hence, the Magnificent made the absolute beauty—routing in the whole World—projected into confined beautiful patterns that may diverge in their relative degrees of brilliance and grace.”

paraphrased from: Ibn al-Arabi, *Meccan Revelations: IV.269.18*

According to the famous holy hadith of the Hidden Treasure, Ibn al-Arabi declares that the primary motivation for creating the World is divine “Love”. In this narration, Allah says that He was unknown (or hidden) Treasure, so He “loved” to become known, thus He created the creations, and revealed Himself to them, in order to grant them the opportunity of coming to know Him. Therefore, this divine Love is the predominant “mercy” that God allocated to *all* His creation, hence He is called the All-Merciful. This “all-encompassing mercy” [Quran, 7:156] is the first state of the presence

of God with regard to the World, to be created, thus it formed the “abstract space” in which the Cosmos will appear, and it is called the Primordial Cloud, as it was illustrated in Volume II (Figure IV.4).

Due to this prodigious and absolute mercy, Allah called Himself the all-Merciful and the ever-Merciful, two supreme Attributes of His most beautiful Names, and when He created the Throne which shall encompass the World, He established Himself on it by virtue of this particular aspect of His Name the all-Merciful, as He stated in the Quran: (The all-Merciful mounted on [or in another interpretation: established his authority over] the Throne) [Quran, 20:5]. With this divine manifestation in the name of the All-Merciful, the multiplicity of creation appeared in the Primordial Cloud according to His eternal foreknowledge. However, this multiplicity is “imaginary”, because the Essence of God is One and indivisible Unit, so the manifestations cannot be partial, and yet there is nothing that can possibly veil Him, since there is absolutely nothing, other than Himself. Therefore, to allow this temporary multiplicity of creation, God is perpetually alternating between the two mutually exclusive states, or Names, of the Manifest and the Nonmanifest, or the First and the Last [Quran, 57:3], though with regard to Himself He is always Manifest, or “Real”. This is the primordial source of “Relativity”, as well as “Quantization”, because we have now two contrasting references, or points of view: with regard to the Real Himself all “things”, or “entities”, are changeless and continuously existing, out of time, since He is always in the state of Being. Thus, these things are called “Constant Entities”, and they can be represented by a perfectly homogeneous space of infinite number of dimensions, since they include all possible simple things throughout the Age, as a Name of God, from eternity *a parte ante* to eternity *a parte post* [Futuhāt, IV.266.3]. However, with regard to each individual entity, or point in this ultimate space of divine foreknowledge, or information, other things come into existence in certain complex sequence that is quantized at various levels of space and time, which are emerging from one-dimensional discrete instances each of which can accommodate only one single entity, or form, which then combine at various levels to create the spatial dimensions that contain the apparent multiplicity, as we explained in Chapter V of Volume II.

Nevertheless, from the perspective of any individual entity of the (imaginary) multiplicity that is created by these perpetually recurring manifestations, some other entities appear to be continuous and real, because they always perceive them in the state of existence, while in reality they are sequentially alternating between this imaginary *existence* and the absolute Being of the Real. In other words, all the different entities of the apparent multiplicity of creation are mere (temporal) imagery forms of the same reality of divine manifestation. This original reality is called the Single Monad, which is facing the continuous manifestations of God, while every entity in existence is one of its temporal forms. The Single Monad is bringing these forms into existence, one at a time, by alternating between the Real Being (of God) and the imaginary existence of the World, as depicted in Figure IV.1 of Volume II, which is also replicated in Figure IV.2 in the final chapter, to stress the Principle of Love and the perpetual alternation between the point of the Real and the circumference of the World.

This perpetually recurring alternation of the indivisible Single Monad is the origin of the seven Cosmic Days, with their contrasting day-times and night-times (explained in Chapter IV of Volume I), and it is acutely prevailing in the symmetrical aspects of all levels of creation, as well as the ultimate symmetry of divine Attributes, that we shall discuss further in Chapter IV. This is indeed the origin of the duality nature of time itself, which then becomes “genuinely-complex”, with real and imaginary parts, and this also makes the final dimensions of space-time geometry fractal, as we shall describe in Chapter I. Actually, this supreme reality behind the apparent multiplicity is the source of all dualities in nature, including the wave-particle, mass-energy and space-time dualities, as well as the contrasting and mutually exclusive concepts of continuity and discreteness.

Despite these various phenomenological dualities, the essence of all things is only one indivisible unit, and that is the Single Monad. So it is not that particles are associated with waves, or any of the other traditional interpretation of Quantum Mechanics; but both are two aspects of the same ultimate reality of metaphysical oneness, that is taking the discrete and localized particle form in the outward normal level of time, and spreading in the continuous wave form in the inner levels that is creating space. Both space and time

themselves are two aspects of this same reality, whose perpetual recurrence is triggering the original complex-time, whose inner real levels are forming the complete dimensions of space, and its outer level is the imaginary and fractal dimension of the normal time that we encounter.

Furthermore, as the genuine fractality of our space-time implies, there must always be a symmetrical counterpart with corresponding dimensions that complement the fractal geometry, in order to make together a higher level of symmetry, which constitute the encompassing homogeneous space, with one higher complete integer dimensions. In the normal sense, since we appear to be living in this physical world, the complementary world is the psychical realm that we can apprehend in various abstract ways, though in reality it has the same atomic structure as the material world itself. These two physical and psychical domains together form the super-symmetry that we shall investigate in Chapter II.

The fundamental reason why gravity is resisting all attempts of quantization is because we are observing only one-half of the World, not realizing that the observer is its other complementary half, since space becomes three dimensional only with these two physical and psychical worlds, while separately each one of them has only two spatial dimensions evolving in time. Although it is essentially quantized, gravity is always perceived as a continuous phenomena because we are observing it from within the same level of its operation, and the reason why we are able to observe the quantum nature of electromagnetic phenomena is because they are two-dimensional waves, and we are observing them from the third dimension. This means that quantum gravity can only be observed from a fourth dimension, and that's why super symmetry appears to be essential to complete the Standard Model.

Moreover, because of the re-creation process that is taking place at every instance of the outer time that we encounter, which is the only way we could explain how the multiplicity of things is emerging from the ultimate oneness, entities in the outward level of existence, including both the physical and psychical realms, cannot execute motion by themselves, since they do not subsist in existence for more than the moment of the present time, before they are re-created again in the following instances. That's why we concluded in Volume II that there is no infinitesimal transmutation, but an

apparent change of position that causes the illusion of motion and continuity. This means that the cause of any physical as well as psychical activity must be extrinsic to these worlds, yet it is also intimately connected with every individual entity in them. The direct causes of all kinds of motion are called the spirits, because they are responsible for all dynamic activities that are described by life, or living, not only in the biological sense, but literally all kinds of motions on all the fundamental microscopic and the outward macroscopic levels.

In reality, however, the spirits are something we are quite familiar with in physics, because they are nothing but the force carriers, which are the energy particles that are called bosons. We shall see, however, that there are different kinds of spirits, that also include angels, since they may have different complex-time dimensions, but all of them would be strictly described by (c, c) , as normal-complex numbers $\mathbb{C}$, in contrast with the fermions which are split-complex numbers $\mathbb{H}$ described by (c, v) , or (v, c) for anti-matter particles.

Therefore, just as the physical and psychical worlds are the pairs of super symmetry, which is the symmetry between particles and anti-particles, both together as fermions mirror the four bosons, according to the hyper symmetry group. This symmetry is generated by the same mass-energy equivalence ($E = mc^2$), which we showed in the previous volume that it can only be derived based on the Duality of Time Theory and that this exact mathematical derivation will reveal the ultimate granular structure of space-time. Therefore, super symmetric particles, which are the fermions, obey Lorentz transformations, but in the granular hyperbolic geometry, whereas the hyper symmetric particles, which are the bosons, since they are waves propagating at the speed of light, are described by the non-Euclidean geometry, that can be studied according to the continuous space-time symmetries in General Relativity, or the diffeomorphism group which is the group of all continuous and differentiable mappings of the manifold to itself, but after taking into account the essential modification that we shall introduce to the Equivalence Principle.

Finally, we shall see in Chapter IV that only the Constant Entities, since they are simple spirits, are described by the **homogeneous Euclidean geometry** which governs the Ultimate Symmetry. Because he is created on the Image of God, man is looking at the

world from the level of his own absolute oneness that corresponds to one single mathematical point in the infinite Euclidean space of Ultimate Symmetry. Since the Constant Entities are never described collectively by real existence, the observer, being one of them and enjoying full real existence but only at this particular moment of observation, imagines them all as real when they are only potentially existing. For this reason, as observing spirits, we naturally perceive the world in terms of Euclidean space, when it is in fact described by split-complex numbers that are covered by the hyperbolic geometry, obeying Lorentz transformations, and that's why we cannot describe the world correctly without facing the ill-defined infinities and singularities. For this reason, as we shall discuss further in Chapter IV, the Duality of Time Theory will have profound implications on geometry and number theory, because complex numbers are now genuinely natural, while the reals are one of their extreme approximations that are realized only when moving at the speed of light.

On the other hand, it can be clearly noticed that the same general aspects of this creation scenario is found in almost all archaic cosmologies and ancient religions, particularly that the Cosmos started by splitting the unity of Heavens into seven Skies and seven Earths, and that creation originated from "water", in addition to the fundamental role of the four classical elements. This can be acutely linked with modern cosmology and physics theories which rely heavily on the geometrical structures of space-time and symmetry breaking, as well as the quantum nature of energy and fields. Unfortunately, ancient cosmologies are typically mythological and greatly metaphorical, relying extensively on figurative and symbolic characters, and lacking any details about the actual circumstances of creation sequence. Fortunately, however, these details are courteously incorporated in the Islamic accounts of creation, and particularly in Ibn al-Arabi's cosmology, that is established on the Single Monad Model.

However, in contrast with modern cosmology, which views the Cosmos as an independent order and ignores the existence God, Islamic cosmology is fundamentally theocentric, because the Cosmos in Islam is inseparable from the Quranic conception of God as the sole Creator and Maintainer of this order. Allah did not simply created the World and fixed the initial conditions of nature and let it evolve mechanistically according to certain laws, rather: He is

perpetually re-creating every single entity at every instant of time. Because Allah is creating the World on His Image, beauty and elegance are manifest in Nature on all microscopic and macroscopic levels, with many intersecting forms of hierarchical symmetries. Absolute symmetry, however, can only be attributed to the eternal and timeless God, since it cannot be conceived with changes and variations. This also means that a certain level of asymmetry is always needed for things to maintain existence, and this is achieved by breaking a higher level of symmetry; thus motion is commenced because the two pairs are always seeking to unite back to their original harmony. This is the Principle of Love that leads to the least action on which all physics theories are based.

1 Symmetry Between Modern Science and Ancient Knowledge

Because it is described by “order” or “harmony”, the word “Cosmos” was used by Pythagoras to refer to the World or Universe, in contrast with “Chaos”, which means “void” or “gap”. For the same reason, the word “cosmetic” is also used to describe the art of beautifying, or adornment and arrangement of appearance or complexion. All this is based on the various creation myths that can be found in Greek, Babylonian, Sumerian and other ancient civilizations, as well as some contemporary religious texts, which state that creation started when the “earth” and “sky” are separated from their primordial unity, leaving an empty gap between them, called Chaos, from which the Cosmos was developed.

Scientists do not, usually, take these primitive creation myths seriously, especially that they mostly end up explaining all the complexity of nature in terms of the four classical elements: Earth, Water, Air and Fire, as well as Aether which was completely ruled out after the advent of the Theory of Relativity, followed by Quantum Mechanics with its astounding success in explaining the structure of atoms. Modern science is proud of classifying over a hundred different elements, and explaining their various electrical and chemical properties in terms of the number of electrons orbiting around the nucleus which contains a matching number of protons and some other neutrons. Furthermore, after analyzing these elements, scientists found that they are composed of more fundamental particles, which were arranged in the end, according to the Standard Model,

into about twenty-eight elementary particles, that cannot be broken down to smaller elements, according to our best theoretical understanding and outstanding experimental capabilities.

However, in order to achieve this admirable comprehensive description of atomic and subatomic structures, physicists and mathematicians profited greatly from the indispensable concept of “symmetry”, which had to be “broken” in order to produce the observable matter. After confirming the existence of Higgs boson, physicists at CERN, and other high-energy labs, are still relentlessly searching for the super-symmetry needed to unify the four fundamental interactions, and possibly explain the problem of the evident asymmetry between matter and antimatter, that cannot be explained based on the current Standard Model. However, although super-symmetry is a quite attractive solution to many outstanding problems, none of the experiments at the Large Hadron Collider (LHC) found any new particles other than the Higgs boson, which was already considered as part of the Standard Model, and therefore no experimental evidence was ever found in support of the beautiful theory of super-symmetry.

Nonetheless, as we shall see in this book, the concept of symmetry breaking in general, and super-symmetry in particular, is nothing but the same ancient concept of the splitting of Heavens and Earth, because this is actually the splitting of spatial dimensions into two arrows of time as we described above. Accordingly, a thoughtful consideration reveals that the four classical elements, proposed by the Sumerians more than four millennia before the discovery of telescopes and microscopes, are closely corresponding to the four quantum fields which produce the four fundamental interactions, while the seven skies and earths correspond to the various quantum energy levels between vacuum and void. In fact, even in ancient philosophies these imaginative concepts denote abstract substances rather than any familiar objects such as material earth or water.

In the recent decades, however, after all the substantial developments in experimental and computational capabilities, without any significant progress in fundamental theories, it is becoming more appreciable to reconsider the ancient myths and reinterpret them according to the new findings, that have exposed further resilient discrepancies between the two leading theories of Relativity and Quantum Mechanics. For example, the concept of aether is being

revisited after it was proved in Quantum Field theories that vacuum cannot be empty, and physicists are now considering the existence of quintessence to explain Dark Energy and reconcile it with Einstein's biggest blunder of the Cosmological Constant. Also in correspondence with ancient myths, some novel cosmological models suggest that vacuum could be a kind of yet-unknown super-fluid, which would explain all the four fundamental interactions and provide mass generation mechanism that replaces or alters the Higgs mechanism that only partially solves the problem of mass, whereas its own huge mass is not explained in the Standard Model.

Therefore, when interpreted correctly, based on the Duality of Time Theory, as it has been established in Chapter VII of Volume II, the four classical elements are the four extreme states of complex-time: super-mass $(0,0)$, super-fluid $(c,0)$, super-gas $(0,c)$, and super-energy (c,c) , and the Single Monad is their "quint-essence". So the states of $(0,0)$ and (c,c) denote Earth and Fire (or Sky), respectively, while $(c,0)$ and $(0,c)$ are the Water and Air from which matter and antimatter are developed.

The theological notions of cosmology and cosmogony were surprisingly accurate by insisting on the existence of seven skies, and also seven earths, because these are indeed the main discrete levels of vacuum and void, which in the end form the spatial and temporal dimensions; six directions for space and one direction for time, which then oscillate into the various generations of fermions and bosons. Therefore, it can be noted straightforwardly that the fermions in our arrow of time are bosons in the orthogonal time direction, and vice versa. This means that super-symmetry is already included in the Standard Mode as we shall explain further in Chapter II, and without the need to introduce any super-space that is based on non-commuting geometry.

However, this does not mean that the ancients acquired any detailed understanding of the microscopic and macroscopic structures of the Universe anywhere near what we have in the present era, because they did not have the required experimental and analytical tools. Nevertheless, although intelligent humans can surely attain high levels in understanding most natural phenomena, if they maintain their ceaseless endeavors, and endure the required enormous efforts, but they can never comprehend the realities behind nature, as far as they remain confined in this phenomenological dimension

of the local world. In order to start realizing the reality, one needs to ascend beyond the confining dimensions (of space-time, for example) in order to understand how they operate, as it was nicely demonstrated by Plato in his Cave Allegory. We showed in Chapter I of Volume II that this requires activating the arcane talents of the heart, rather than simply relying on the mind.

Therefore, the primary metaphysical models and profound philosophical conceptions in most ancient civilizations are deeply ingrained in the various divine revelations and sagacious inspirations through the prophets and saints of their era. Philosophers, and other existing intellectuals, then analyzed the subsequent inscriptions or oral narrations containing this original knowledge and divine wisdom, and taught that to their students. As we have already showed in Chapter VII of Volume II, it seems that most of this divine knowledge is originated from Hermes Trismegistus who is the same prophet Enoch mentioned in the Biblical literature, and he is also mentioned in the Quran as prophet Idris whom Allah had him “elevated to a high place” [Quran, 19:56-57], which is the orb of the Sun, according to Ibn al-Arabi, who also mentioned several generations of Masters who inherited this esoteric knowledge from Hermes, but he only provided some of their general descriptions and how long they lived, without giving their actual names (see the Meccan Revelations, Volume I, page 157).

However, along this long and tedious course of teaching and learning, many fundamental concepts were greatly distorted and deviated from their original pristine form, due to the lack of proper methods of preservation and transformation; especially after translating the original texts to other languages and cultures, which may have prevailed after conquering the earlier civilizations. This happened, for example, in the fourth century BC, after Alexander III of Macedon conquered Babylonia and the Greek started translating their scientific records, which contained detailed observations with sophisticated mathematical and cosmological models, including the heliocentric model. This model was then initially adopted by Aristarchus of Samos, but it was later rejected in favor of Aristotle and Ptolemy whose geocentric model continued to the early modern age, until it was gradually superseded again by the heliocentric model attributed to Copernicus, who formulated it in the 16th century. However again, more than three centuries before that, some prominent Mus-

lim astronomers had already developed the same model and successfully predicted planetary and lunar positions, and published their results in many books which were eventually translated into Latin, as the main scientific language of medieval Europe. As it often happens with every subsequent translation, some crucial meanings are completely lost or deformed, along with the truthful attribution to the original scholars who developed these conceptions and philosophies.

Another example is what we have already noted in Chapter I of Volume II; that Ibn al-Arabi clearly explained that the Aristotelean notion of “fixed stars” is not correct, because these stars are actually moving with relative velocities, and he roughly estimated the proper velocity of some visible stars as one arc degree per 100 years, or 0.6 arc-seconds per year, which is quite consistent with the measurements taken only few decades ago. Yet another relevant example is Parmenides doctrine of oneness, or his dual view of reality: “the way of truth” and “the way of opinion”, which is the same theory of the Oneness of Being embraced by Ibn al-Arabi and other Muslim mystics, and from this fundamental reality the Duality of Time Theory was developed. As we explained in the previous volumes, Parmenides failed to convince other prominent philosophers, such as Socrates and Aristotle, so his student Zeno tried again by reformulating his teacher’s arguments in terms of what to become known as Zeno’s paradoxes, in which he demonstrated the deficiency of both the discrete and continuous concepts of space and time. After all these long centuries, and despite the evident success of modern mathematics and physics, those paradoxes have never been refuted. No wonder, therefore, why quantum gravity is still concealed, because it cannot be achieved without explaining Zeno’s Arrow paradox, away from using the current infinitesimal analysis that relies on unjustified assumptions (of the differentiability of space) and introduces misleading approximations, which can at best calculate the average velocity. This is exactly the fundamental reason behind the conflict between General Relativity and Quantum Mechanics, because the first relies on the average velocity that can be calculated from $v = dx/dt$, while the instantaneous (quantum) velocity is always zero, whether the object is accelerating or not!

These are just some concrete examples, but the great loss happened as a result of generally discrediting all sacred texts and deem-

ing them inconsistent or irrational when we could not interpret them appropriately. There is no doubt that this flawed negligence had a great detrimental effect, not only on physics and cosmology, but also on most other fields of science and philosophy. If a tiny portion of the enormous labor and capital that is regularly dedicated for developing scientific equipment, and theoretical investigation, is properly allocated for analyzing the original sacred texts and other principal conceptions in ancient philosophies, the Theory of Everything could have been achieved much faster. There have been some serious studies of ancient and religious texts, but they are normally conducted by scholars who have general interests in philosophy and do not have enough background and training in physics and mathematics, that enable them to extract possible innovative conceptions that may be relevant to the latest problems tackled by modern science.

Thanks to these texts, there is no doubt that we are now at the verge of a phenomenal paradigm shift. Probably because of the same fractal nature of time, it is particularly astounding that the very concept of symmetry, and chaos theory, is now joining together the two extremes of modern scientific theories and ancient mystical knowledge, where Quantum Mechanics meets with Alchemy, and the four classical elements are deeply connected with the four fundamental interactions of Quantum Field Theory. When modern science reached the dead end, the only way out is returning back to the original atomism of early philosophy, reinterpreted in terms of vacuum and void according to the Single Monad Model and Duality of Time Theory. Symmetry is actively governing not only the corporeal world, on various scales, but also in many intangible ways. Perhaps this is also one of the meanings of Ibn al-Arabi's assertion that time is not only cyclical, but also circular!

2 Symmetry Breaking in Ancient Creation Theories

At the beginning of Chapter I in Volume II, we gave a brief outline of some archaic cosmologies, so we only want to mention in this introduction the main creation theories that developed in various ancient civilizations, and we shall notice that most of them share the same original view of splitting between Heavens and Earth, and that there are seven skies and seven earths, with some other spheres and orbs. In most of these myths, however, these spheres are often

Conclusion

In the literal sense, ultimate or perfect symmetry may seem to be trivial, because it means that all possible transformations in such a symmetric system are invariant. The system we are talking about here is the whole Universe that we are watching and experiencing its immense and sometimes shattering changes every moment of time. Yet many great philosophers, such as Parmenides and Ibn al-Arabi, maintained their firm belief that reality is unchanging One and existence is timeless and uniform, while all apparent changes are mere illusions induced in or by our sensory faculties. Nevertheless, since we are living inside it, this illusion is as good as reality for us. Therefore, we still need to explain how the Universe is being formulated. Only when we are able to transcend beyond the current time chest, we shall discover that we were living a dream and we shall see the unchanging symmetry of the whole Universe.

The Single Monad Model and the resulting Duality of Time Theory provide the link between this apparent dynamic multiplicity of creation and the ultimate metaphysical oneness. In fact, the complex-time geometry concludes that we are imagining the reality because we are observing it from a genuinely imaginary time dimension. Since the ultimate reality is One, we cannot view it from outside, because there is none! Thus, as we quoted in the previous chapter, in the Book of Theophanies, Ibn al-Arabi ascribes to God as saying:

“Listen, O My beloved!
I am the conclusive entity of the World.
I am the center of the circle (of existence) and its circumference.
I am its simple point and its compound whole.
I am the Word descending between heaven and earth.
I have created perceptions for you only to perceive Me.
If you then perceive Me, you perceive yourself.
But don't ever crave to perceive Me through yourself!
It is through My Eyes that you see Me and see yourself.
But through your own eyes you can never see Me!”

He also says in the Meccan Revelations: “When my beloved is manifest, with whose eye I may see Him? With His Eye, not with mine, because: except Himself, none may ever see Him!” [Futuhât, I.305.15].

Because Allah is the All-Beautiful, and He loves beauty, He invented the World with ultimate perfection, exquisitely adjusted and finely tuned with many obvious and well-balanced aspects, but also mixed with other more concealed features that may reveal their everlasting splendors in diverse manners at different situations; thus forming infinite dynamic layers with many interacting levels of symmetries. Beauty is what makes the beholders wonder, and keep wondering, until they lose themselves in the compact details that keep expressing new magnificent structures when examined from other new perspectives. No wonder, therefore, that the final dynamic dimensions of space-time have intrinsic fractal geometry, characterized by everlasting variations of scale symmetries that repeat the original image at various levels of scaling, with some rotations or other geometrical transitions and translations.

The Creator of the Cosmos loved to see Himself reflected in His creation, thus He fashioned every individual entity in the World according to the original form of this divine Beauty, by projecting His absolute Image into more confined beautiful patterns that may diverge in their relative degrees of brilliance and grace. This is achieved by breaking every level of global symmetry into more local symmetries that resemble their origins but also deviate in many complex and dynamic manners according to the surrounding circumstances, sometimes also restoring back into their original symmetries at other suitable circumstances.

In order for this fractal geometry to be genuine, the inner dimensions of space itself should have also the same nature of time, which is the outer dimension in which the Universe is evolving, otherwise a fraction does not have any meaning unless its nominator and denominator have the same unit of measurement. In this way the geometry will be also genuinely complex, with real and imaginary dimensions that both must also have the same nature of time; so, in reality, we don't have space-time, but time-time or complex-time geometry with many nested levels. Otherwise, there is absolutely no other way that could make space-time granular and self-contained, without any other real geometrical or topological background in which

it can be quantized.

Because of its unique meaning, that implies recurrence and counting, time can only accommodate one thing at every single instance of its real flow, unlike space that deceptively seems to contain many different things simultaneously. For this reason, space is apparently continuous, while time is intrinsically discrete, because space is a complex geometrical structure of time. However, on closer examination, this imaginary view of the apparent continuity of space will become relative to the dimension in which the observer is situated. The original source of this illusion is because our normal time is genuinely imaginary, while the real time is flowing in the orthogonal dimensions of space. Although we can surely see multiple things distributed in space at the same instance of time, they never really share simultaneous existence, except as one whole entity, since we need at least three moments of time to even think of or imagine two different entities and any simple relation between them, such as having different color or size.

For example, a book is one entity, so we need only one instance of time to imagine one, a mere simple book, as a whole. However, once we open it, or think about its contents, we start to see or imagine the different pages, which we can then count, but also one by one, though each page can also contain many words and letters, which we can then also read or count, one by one again, ... and so on if we want to look at their other physical or abstract details, such as their meanings or even the dots of ink that they are made of, and their chemical structure of molecules and atoms, etc. Therefore, in all these daily perceptions, in the real flow of time, there is only one whole entity at every single instance, nothing more, but then they may combine in different ways to make some other compound entities that must exist as wholes in some higher dimension, and so on until we reach the outer time that we encounter. Inversely, in the innermost flow of time there is only one indivisible entity, the Single Monad, that makes up every other higher entities starting from the very dimensions of space and then condensing into various forms of matter and energy, such as elementary particles and atoms, but also all other incorporeal entities in the psychical and spiritual realms.

We have clearly and rigorously demonstrated how this genuinely-complex time-time geometry leads to the three principles of Special

and General Relativity all at once, while also allowing exact mathematical derivation of the mass-energy relation ($E = mc^2$) that cannot be otherwise derived without introducing some unjustified approximations. For the first time also, the equivalence principle of General Relativity is now derived mathematically without relying on any thought experiments that are based on induction rather than any rigorous derivation. We also showed that the Single Monad Model of the Cosmos is the only way that provides logical interpretation of quantum behavior, including the wave-particle duality, the uncertainty principle and the collapse of wave function. Many other major problems were also automatically resolved, including the homogeneity, non-locality, hierarchy, and matter-antimatter asymmetry.

However, this turned out to be only the beginning of the road, and again as the concept of symmetry played an essential role in formulating physics theories and predicting new mathematical models, it is becoming quite obvious in the Duality of Time Theory that symmetry and its breaking are the most primordial processes responsible for all the varieties of natural phenomena in and beyond the physical world, including the psychical, spiritual and divine.

In particular, these are the four fundamental nested levels of symmetry, and with every higher level, some new fundamental attributes are gained by the creation, such as consciousness, free will, ability and even divine creativity. In fact, this quadratic structure of the World is itself a reflection of the symmetry of divine Names of Allah, the Creator of the Cosmos and the Lord of all worlds. Ibn al-Arabi stresses that everything in the World has to be based on some specific divine Attributes [I.293.5], and that there are four fundamental Attributes that are necessary and sufficient for Allah to be described as God: Ability, Living, Knowing and Willing. Therefore, just as those four Attributes are considered to be the mothers of all other divine Attributes [I.469.25], they are associated with four fundamental levels of symmetry: Normal, Super, Hyper and Ultimate, in reverse order. Again, due to the same fractal geometry, these four levels are reflected on various fundamental aspects of Nature, such as the classical elements, the fundamental interactions, the four time cycles and the geographical directions.

When we look from outside, which is absolutely impossible, Ultimate Symmetry is trivial, because it means that all possible trans-

formations produce the same original configuration. In the full abstract sense, this is only possible for flat unbounded space with infinite number of dimensions, which is also equivalent to one abstract geometrical point in this space. With such a perfect symmetry, no change is conceivable at all, and therefore there is no time in this ultimate state of absolute oneness that has been briefly described by Parmenides in his single renowned work, a poem called “On Nature”, where he explained that existence is timeless and uniform, and reality is one and unchanging. However, Parmenides was not able to convince other prominent philosophers, such as Socrates and Aristotle, so his student Zeno tried again by reformulating the same argument in terms of what to become known as Zeno’s paradoxes that have never been resolved ever since, and we don’t have access to their original teachings, which may have been mostly oral. Remarkably, there is a profound correspondence between the metaphysical views of Parmenides and Ibn al-Arabi’s doctrine of the Oneness of Being that has been developed to the Single Monad Model of the Cosmos and Duality of Time Theory in the previous two volumes.

Nevertheless, although we do have access to the most important works of Ibn al-Arabi, spanning hundreds of books and tens of thousands of pages, even in their original forms, in his own hand writing, in addition to the various extensive interpretations offered by his direct followers and close students, but his outstanding philosophy has not been yet given the required attention, mainly because of the difficult symbolic language he habitually used, in addition to the fact that he intentionally scattered his controversial conceptions over his many works and in different contexts within his magnum opus, the Meccan Revelations, and other shorter books and treatises.

Although he did never use the term directly, the Oneness of Being is one of the most controversial doctrines which many later Muslim scholars attributed to Ibn al-Arabi, usually with various polemic meanings and interpretations. In the same context in western philosophy, Spinoza introduced the pantheistic concept of God and His relation with the World, in a way that may resemble Ibn al-Arabi’s view of the Oneness of Being, which lead some scholars to consider Ibn al-Arabi as pantheist who identify God with the world, although he often declares in many ways, according to the original Islamic creed, that the Essence of God can not be compared to anything. Unlike Spinoza and all other philosophers, Ibn al-Arabi relies on

intuitive knowledge, rather than reason that can not produce true knowledge of God.

Practically, therefore, it is not possible to describe the Ultimate Symmetry of the Essence of God, since He is absolutely Unique One, and can not be confined to dimensions or compared to any other entities, because there is none. What we can at best do is describing His outward manifestations, through which He is creating everything in the World. As Ibn al-Arabi declares, the Greatest Element the most realized in the unity of the Creator, so instead of speaking about the ultimate symmetry of the Real, as a divine Name, we speak about the symmetry of this real-through-whom-things-are-created. The Single Monad is like the circumference of the circle of the World, and the Greatest Element is like an abstract point at its center, so just as the point meets the circumference with its whole entity, so does this Greatest Element meet with its whole entity all the aspects of the Single Monad. There are $360^3 = 46,665,000$ subtle links between the Greatest Element and Single Monad, from which the three spatial dimensions are originated. Therefore, this Ultimate Symmetry is described by a perfect homogeneous Euclidean geometry, whose points are simple spirits called the Constant Entities that can be described as the most primordial moments of time.

When this level of Ultimate Symmetry is lowered, more compound spirits are created, by combing time moments and forming normal-complex spatial dimensions, which can be described by Riemannian manifolds, since space is no more homogeneous. This is the level of Hyper Symmetry, that is indeed the spiritual realm of light, though it can take various forms according to the number of spatial dimensions involved. These spirits are nothing but the bosons, which are the forces or the energy particles.

In the level of Super Symmetry, each of the four bosons is split into two fermions, and the reason why we have three different generations of fermions is due to the three dimensions of space, so in total we have $24 = 4 \times 3 \times 2 \times 1$ fermions that form all kinds of physical as well as psychical objects.

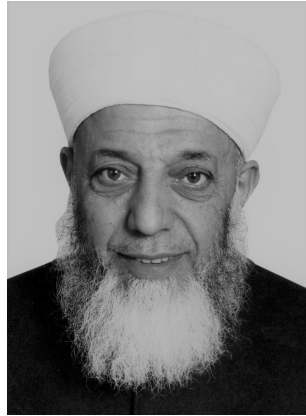
Finally, Normal Symmetry governs the compound structures that can be observed in the macroscopic world on the various levels of Nature, including molecules and crystals, rocks and mountains, botanic and animal life, planets and stars, and all other kinds of abstract and non-figurative symmetries.

Author Biography

Sheikh Ramadhan Subhi Deeb

Date of Birth: 27 - May - 1920

Naqshbandi Master at Sheikh Ahmad
Kuftaro Foundation in Damascus



Mohamed Haj Yousef

Date of Birth: 17 - June - 1967

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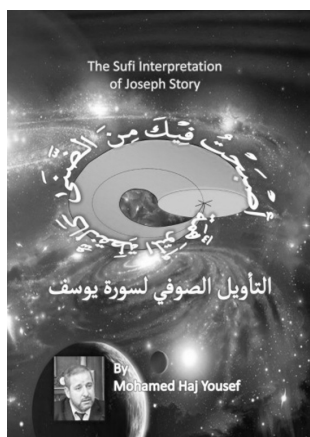
<http://twitter.com/mhajyousef>

Email: mhajyousef@hotmail.com

Mohamed Haj Yousef is a writer and researcher interested in physics, cosmology, philosophy and Islamic thought, especially with regard to mysticism and Ibn al-Arabi. He did his undergraduate studies in Syria where he earned the B.Sc. degree in Solid State Physics from the University of Aleppo in 1989 and a Postgraduate Diploma in Electronics from the same university in 1990. After that, he obtained the Master's degree in Microelectronic Engineering and Semiconductor Physics from the University of Cambridge in the UK in 1992. After a period of teaching, he resumed to get the PhD from the University of Exeter in UK in the year 2005, where he studied the concept of time in Ibn al-Arabi's cosmology and its implications on modern physics, which was published

in several books and eventually lead to the Duality of Time Theory. This research was supervised by Prof. James W. Morris, as it is continuously inspired by the spiritual guidance of Sheikh Ramadhan Subhi Deeb, the Naqshbandi master at Sheikh Ahmad Kuftaro Foundation in Damascus.

The author has also published numerous articles in Arabic and English that combines science, philosophy and Islamic thought. Most of these articles are accessible online at: <http://www.ibnalarabi.com>. He also published several books on the subject of time, and other related subjects in Islamic thought and Sufi mysticism, including:



The Sufi Interpretation of Joseph Story: (The Path of the Heart)

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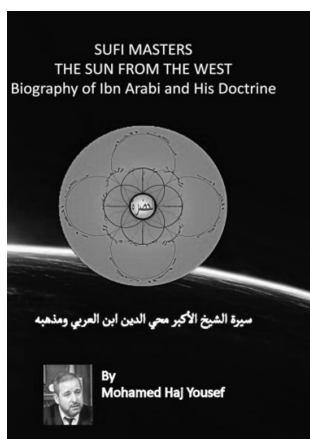
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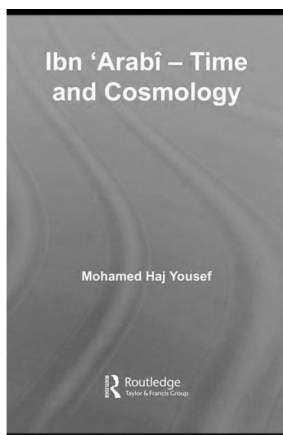
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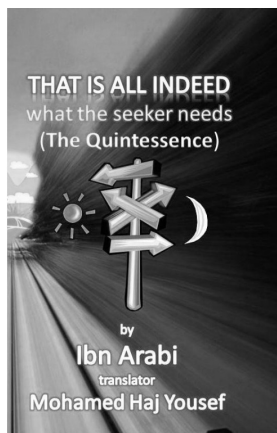
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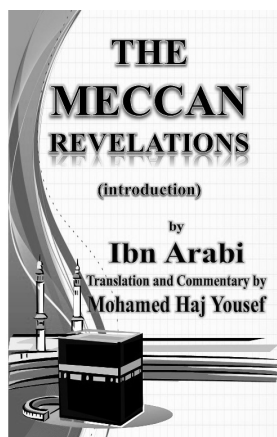
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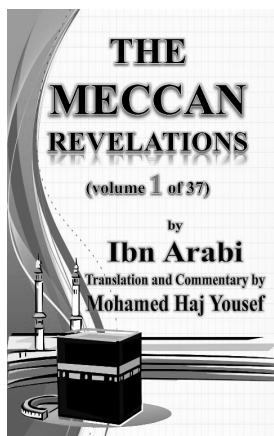
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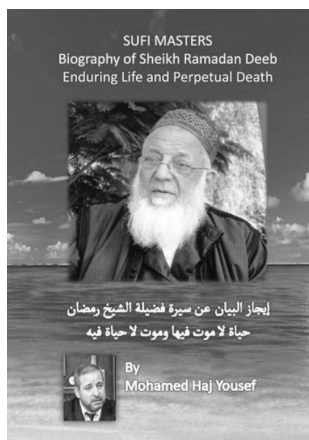
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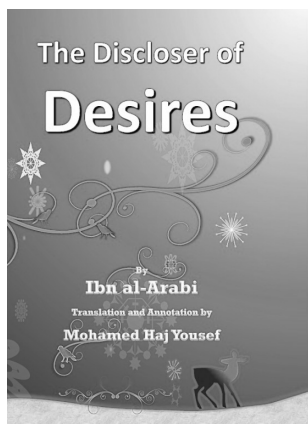
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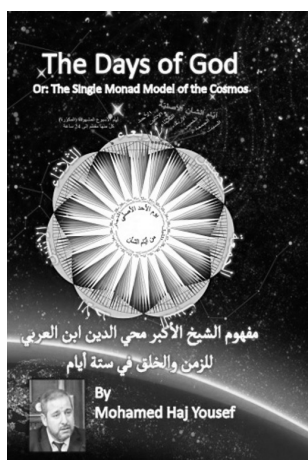
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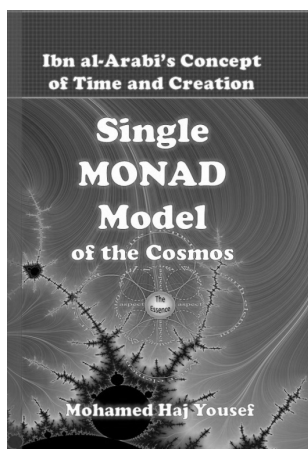
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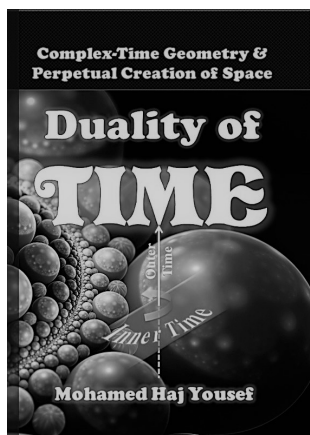
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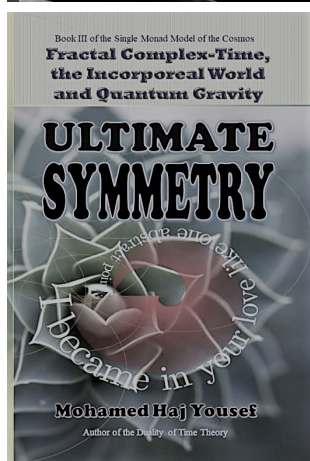
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