Abstract

In this paper, I examine Ibn `Arabī's claim that everything in the universe is alive and demonstrate the rationality behind his claim based on recent scientific discoveries. I then compare his view to that of Karl Popper who argues that consciousness emerged out of lifeless matter. In accordance to my interpretation of Ibn `Arabī's cosmology, I argue that consciousness has been perpetual in existence; for every entity has a degree of awareness. I also compare Ibn `Arabī's three aspects of reality, that is being (or holistic consciousness), its attributes and its actions to Popper's three worlds theory. Ibn `Arabī proposed that mind and body connect through the intermediate imaginal realm of sensory entities. In this paper, I compare his views to that of idealism, realism and radical skepticism and demonstrate how his view reconcils realism and idealism. Based on his cosmological view, To Ibn `Arabī, the main goal of knowledge is to know consciousness' attributes by employing reason, sensation and imagination. In this sense, he shares some aspects with critical rationalism which also argues for the use of empirical experience, reason and imagination. Ibn `Arabī's also agrees with Popper that knowledge is infinite and is necessarily to bring beauty to the world. Nonetheless, Ibn `Arabī's does not assign debate and refutation the essential role in acquiring knowledge as Popper does and he assigns a bigger role for imagination than the role assigned to it by Popper. To Ibn `Arabī, one needs to focus on knowing his own consciousness by purifying one's awareness rather than focusing on refuting other people's views. When one knows one's self, he manifests more beauty. Such beauty naturally attracts others to follow the path of purifying the self from justified beliefs based on past experiences. The result is gaining a sagacious awareness that is ready to receive the knowledge that is continuously being bestowed by the holistic consciousness.

Introduction

The Effusion of Consciousness

Interpretation of Ibn `Arabī's Cosmology

"*What you consider to be inanimate is in fact alive.*[1]"

Ibn `Arabī

Theo Jansen (1948) is a Dutch artist who produced a generation of skeleton-like creatures, made of plastic tubes which he calls *Strandbeest*. Jansen made his *Strandbeest* able to adapt to their sandy environment on the beach of south Holland and survive the effects of wind and water. He equipped his *Strandbeest* with primitive stomach, nose, muscles and a primitive brain.[2] Some of Jansen's creatures when they detect storms they stick themselves deeper in the sand before the storm hits. Some of them could distinguish between soft and hard sand and make a correct choice that eases their walking.

With every new line of production, Jansen refines his old generation of *Strandbeest* and adds more sophisticated sense-ability to evolve a newer creature that can adapt better, act more rationally to protect itself and survive as long as possible. His most recent generation of *Strandbeest* can travel from Kijkduin to Scheveningen and stop there, knowing they have arrived at their destination. He is currently working on evolving their senses so that they can master migration, in a similar yet simpler way as birds and fish do so that they can return back to their original location in the right time when they sense an environmental change. Jansen's dream is to create a completely independent artificial animal.

When we see Jansen's *Strandbeest* walking on the coast, they seem as if they are living conscious creatures and to some extent they are; for they are the embodiments of Jansen's consciousness; with its rationality; at a very minute and discrete level. The more evolved a *Strandbeest* is, the more rationally it behaves; for it is the embodiment of a higher degree of

[1] William C. Chittick, The Wisdom of Animals, The Muhayiddin Ibn `Arabī Society, Volume 46, 2009

[2] Lakshmi Sandhana, *Playing God*, NY ART Magazine, Jul 5, 2006

Jansen's consciousness. For example, some *Strandbeest* have tongues which allow them to make a decision. When the water tube that sucks air sucks water instead, the *Strandbeest* knows that there is high tide and reacts by running out of the sea. In this example, the *Strandbeest* can make what we call "a rational choice to protect itself." Thus, we can argue that there is a rational purpose behind Jansen's creation: It is to give his creation an ability to survive by understanding the reality that surrounds it. In this sense, each *Strandbeest* has a level of the protective quality that Jansen consciously invested into it.

Let us now turn our attention to nature and examine what we call "inanimate entities" to see whether they, like Jansen's *Strandbeest*, could possibly be embodiments of rational consciousness. We can begin by testing if the so called inanimate entities meet the criteria by which the scientists define life. Then, we can also examine if they exhibit a level of sense-ability, and whether they are equipped with protective mechanisms that helps them maintain life. If they do, they would be embodiment of consciousness and we can consider Ibn `Arabī's claim that all entities are alive to be true. If we reach this conclusion it would mean that there is rational consciousness permeating all existents in different degrees, and that can lead us to understand Ibn `Arabī's cosmology and his theory of knowledge which depends on his cosmological view.

Scientists argue that all living entities should have structure, and should be able to maintain a constant state during their life by maintaining balanced energy level. They should also exhibit growth and be able to move, respond to stimuli, adapt to their environment, and reproduce[3]. We may also add that they should exhibit rational behavior to protect themselves.

Do the so called inanimate entities have structure? Yes, everything has a structure: galaxies, stars, planets, atoms, and even electrons have structures. In fact, we can argue if atoms have structure then every form in the universe has a structure since atoms are the basic building block of matter[4]. Because everything has a structure, we are able to define and distinguish different entities from each other. If the so inanimate entities had no structure, there would be no identifiable or distinguishable objects at all and we would not be able to distinguish a star from a planet or iron from gold.

[3] Koshland, Jr., Daniel, "The Seven Pillars of Life", *Science* 295 (5563): 2215–2216, March 22, 2002. (http://en.wikipedia.org/wiki/Life)

[4] In the macro-level we have material forms that have structures with atoms as its basic building blocks

Do the so called inanimate entities maintain a constant state? Every star spends about 90% of its existence fusing hydrogen into helium, maintaining a constant state until it reaches its peak of luminosity[5]. Then it starts to decay into a white dwarf or explode into a supernova or be swallowed by a black hole[6] [i.e. it dies and its form disintegrates into something else]. Planets, exemplified by our earth, have energy level and can maintain a constant state for a long period of time, even longer than animate entities. The adult mayfly can maintain its constant state, or life, no more than five minutes[7] but it is still considered alive and meets the criterion of constancy, even though in comparison to the earth or planets and stars, its life span seems insignificant.

The electron maintains an energy level that allows it to rotate around the positively-charged heavy proton without being annihilated by it. Since all animate entities maintain a constant state until they are overpowered, the overpowering of the so called inanimate entities should not mean they are lifeless. If such entities could not maintain a constant state for a life span, we would not have been able to distinguish objects from each other. Thus, they meet the life-criteria of maintaining a constant state during their life.

Do the so called inanimate entities grow? A star forms from a proto-star and grows in size until it either becomes a white dwarf (dies early) or reaches its peak [then dies]. In either case, the star gradually grows. Similarly, planets grow in size by consuming planetesimals until they reach their stable state[8]. Our earth grew in size and it was not the same earth we know today. According to quantum physics, we can consider that the electron grows in size from a non-particle or wave of possibilities to a particle that has mass when measured or observed. Thus, all the so called inanimate entities grow.

All these entities need energy to exist. They absorb matter to generate energy and they emit energy to maintain a balanced energy level during the peak of their life span in a similar

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[5] Roberto Mura, Observing the sky from 30°S, Wikibooks, 2010

[6] Stars, Science News, Nasa Science, Astrophysics
(http://science.nasa.gov/astrophysics/focus-areas/how-do-stars-form-and-evolve/)

[7] David Malakoff**,** Alien Empire: Mayflies, PBC, 1996
(http://www.pbs.org/wnet/nature/episodes/alien-empire/mayflies/3413/)

[8] Discovering Planets Beyond: How do Planets Form, Nasa and Space Telescope Science Institute (STScI)
(http://hubblesite.org/hubble_discoveries/discovering_planets_beyond/how-do-planets-form)

way to how animate entities generate energy through metabolism, and yet they do so using different mechanisms.

Can the so call inanimate entities reproduce? The fact that there are many stars and many planets means that they reproduce, even though their reproduction does not occur with the same mechanism by which many animate entities on earth reproduce. In fact, the mechanisms of the animate entities' reproduction differ from species to species. For example, plants reproduce with a different mechanism from that of animals. Similarly, stars are reproduced by a different mechanism: by the explosion of supernovas[9] which also results in the reproduction of planets. In addition, some animate individuals are infertile yet they are still considered conscious and alive. Thus, even if there are no more earths like our earth, it would not mean that it is not alive but it could mean it is not fertile. Nonetheless, earths that seem similar to our earth have recently been detected.

The offspring of the animate beings are similar but not identical to the parents. Similarly, stars differ from each other yet they have similar characteristics and so do planets. This is how we are able to identify them as stars and planets.

Minerals are naturally reproduced by crystallization of magma or crystallization of materials dissolved in water as atoms unite and arrange in specific way. Gems, like diamond are naturally reproduced by the effect of heat and pressure upon graphite[10]. In all of the above examples of reproduction we can trace some aspects of a sexual process such as union, outburst, heat and pressure. In conclusion, there is reproduction activity in all species of entities.

Do the so called inanimate entities move? Some animate entities walk on two legs, some walk on four legs, some crawl, some fly, some swim and some, like plants, just direct themselves towards the sun or the wind moves them. The so called inanimate entities such as stars and planets rotate and this is their method of motion. In fact, there is nothing that is not moving in the universe, even things that seem steady to us. Electrons, the basic constituent of all matter, rotate

[9] Discovering Planets Beyond: How do Planets Form, Nasa and Space Telescope Science Institute (STScI) (http://hubblesite.org/hubble_discoveries/discovering_planets_beyond/how-do-planets-form)

[10] UCSB ScienceLine (http://scienceline.ucsb.edu/getkey.php?key=302)

around nuclei and jump from one orbit to another in their clouds. This means that matter in general is in constant micro-movement but we cannot observe its motion in the macro scope of our vision's range.

Do the so called inanimate entities respond to stimuli and adapt to their environment? First, let us start with our own earth: We observe how the earth's magnetic field prevents most of the energized particles that are produced by the sun flares from reaching the earth's surface[11]. This protects the earth and all that belongs to it from annihilation. It seems that not only does the earth have the ability to sense energized particles coming from the solar flares, but it also has the ability to respond to what it senses. It can repulse and filter the particles before they reach its surface and cause harm to its energy level, its temperature, and to everything that belongs to it, including us. If the earth had no ability to sense and respond to stimuli it would be totally indifferent to the solar flares. By being equipped with a magnetic field and an atmosphere, the earth has a sense-ability that allows it to respond; and its response is rational because it protects its existence and all of what it contains.

It could be argued that the earth's response may not be considered rational because it has no other choice or it is a mere reaction but I would argue that having free will to choose from a multiple of available choices is not in itself a sign of rationality. In fact, it could result in making irrational decisions because some of the available options may not be the best choices for the free-will entity. The earth's one appropriate action seems to be the most rational for survival.

In studying the chronology of the earth's formation, we learn that "the earth's atmosphere was formed first by the volcanic release of gases and water vapor. This allowed the atmospheric "greenhouse gases" to start taking effect and keep the oceans from freezing while the sun was still forming."[12] When the sun became hot, the earth's magnetic field was formed to protect it exactly when it was needed. This process shows continuous adaptation to the environment.

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[11] Gordon D. Holman, Space Weather: What impact do solar flares have on human activities?, NASA Official Website (http://hesperia.gsfc.nasa.gov/sftheory/spaceweather.htm)

[12] Guinan, E. F.; Ribas, I. "Our Changing Sun: The Role of Solar Nuclear Evolution and Magnetic Activity on Earth's Atmosphere and Climate", p.85, San Francisco, Astronomical Society of the Pacific, 2002 (http://en.wikipedia.org/wiki/Earth)

Any active or live entity in space has a magnetic field that acts in a way similar to the earth by detecting and repulsing or consuming intruding objects[13] unless an object overpowers it. This is similar to the animate entities' behaviors that also repulse intruders and protect themselves until they are overcome by something. Thus, the detecting ability (or sense perception), the survival ability, and the conscious protective quality appear in all existents.

If we turn to the microscopic level, we know that electrons have enough energy and momentum to protect them from being attracted by the positively charged heavier protons in the atom. In addition, the electron responds to different stimuli differently. If the electron encounters a photon it absorbs it and gains more energy which is released later. If it encounters a negative charge it repulses it. Such is a constant pattern of behavior. Thus, the electron responds to stimuli and reacts differently to each one because it recognizes what it encounters. If it does not respond to stimuli it would be indifferent to various stimuli or it would react to the same stimulus differently each time it encounters it because it would not be able to distinguish it from another stimulus.

Moreover, it seems that all of these reactions to stimuli have a purpose: to strengthen and prolong the life span of the electron. The ability to cognize the different particles and to behave accordingly in particular ways to each particle shows that the electron is a conscious entity; for its behavior is similar to that of an animate entity who is able to cognize light, a prey and a predator, distinguish them from each other and act accordingly unless it encounters something that would eventually overcome it.

The eyelashes of the human being protect the eye from atmospheric debris with a complex mechanism. The cat's whiskers have a similar mechanism that prevents dust particles from reaching the cat's eyes. The thorns on the stem of a raspberry plant, serve as a mechanical defense against its predators or intruders. The earth's magnetic field protects the earth from solar debris, a harmful intruder. As we can see, the protective mechanism evolved and varied in its

[13] A. Lanza, Searching for star-planet magnetic interaction in CoRoT observations, Cornel University Library, 2011 (http://arxiv.org/abs/1109.5049)

mechanisms, yet the quality of protection remains true in all entities and it proves the existence of conscious rationality permeating in all of them.

In conclusion, all the so called inanimate entities respond to stimuli and are not indifferent to their environment but they adapt to their environment. They behave in particular ways because they do not have freedom of choice. Yet, this does not mean that their behaviors have no rationality; for it seems to protect them and help them survive. If there were no rationality behind their actions, there would not be anything we can identify at all because there would be no constant characteristics that enable us to identify the species since they would not have been protected to survive for any possible life span that can make them identifiable. Since we can identify a star, a planet, a mineral, or an atom when we observe them, it means there are embodiments of rational protective consciousness. Like Jansen's *Strandbeast*, all so called inanimate entities seem to have degrees of consciousness or to be alive. There is rationality behind their actions and that rationality has a purpose: to protect them during their life span.

Not only can we deduce that these entities are embodiments of rational protective consciousness but we can also find more common qualities for the consciousness that permeates in all of them such as the ability to detect other entities or the sense of "sight". All entities seem to have a sense of sight even though what they see and how they see vary.

The anole lizard can see with its eyes closed[14]. The hawk's vision is eight times as sharp as our own so it can see from great distances better than we do[15]. Insects can see tiny details we cannot see[16]. Sub-mammalian creatures see the world as a flat two-dimensional world. For squirrels and prairie dogs the world is blue and yellow; for they cannot see green and red[17]. Every animate entity sees differently and sees by a different mechanism and their sense of seeing enables them to protect themselves. The earth, the planets and the stars see through their magnetic field what we cannot see by our naked eyes because it is beyond our range of sight. The electron sees a photon, a proton and other electrons in its range of sight.

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[14] Sandra Sinclair, How Animals See: Other Visions of Our World, Croom Helm Ltd., England, 1985

[15] Ibid

[16] Ibid

[17] Ibid, p.120

What all of these entities actually see is no more than patterns of lights that they detect in a similar mechanical way to that of Jansen's *Strandbeest's* ability to detect water drops which allows it to know there is high tide. The *Strandbeest* is programmed that when it senses such clue; namely the drop of water, there is danger. Since danger is an immaterial concept, Jansen had to let the drop of water embody the meaning of danger for that particular *Strandbeest*. Similarly, even though the prairie dog's sense of sight receives the light in the yellow spectrum and I receive the light green from the light's spectrum – the patterns of light that we all see are only clues that mean something else for the consciousness that permeates our bodies. In other words, the physical clues we receive by our senses are embodiments for abstract meanings such as beauty, dread, love, might, and many other countless meanings.

Wächtershäuser has argued that visual perception can be traced back to the photosynthesis in plants as they learned to adapt and turn towards sunlight to gain energy and survive[18]. Why cannot we trace vision back to the earth since it is able to sense the energized particles of solar flares and react in response to what it sees to absorb only the right level of energy appropriate for it?

The earth's action is a similar to that of the plant that also absorbs light in just the right spectrum and releases oxygen to maintain an energy level necessary for its survival. In both cases the action is rationally needed to protect the entity for as long as it is possible for it. The only difference is that some plants are able to direct themselves towards the light but the earth does not need to be equipped with such ability; the sunlight reaches it easily and abundantly without a need to turn in search for it or we may consider its rotation around the sun directing it towards its source of energy. In other words, the process of light absorption evolved for the plants by adding the locomotive ability when it was needed. Nonetheless, by observing how the earth can sense the highly energized particles of the solar flares, we can consider that sense a "visual perception".

Wächtershäuser argues, "An active locomotion could have emerged. This cell locomotion must at first have been random. But later, in a most decisive moment in evolution, this random

18 Gerard Radnitzky, Epistemology, Rationality, and the Sociology of Knowledge, Günter Wächtershäuser, Chapter V: Light and Life: On the Nutritional Origin of Sensory Perception, p.123, Open Court Publishing Company, 1993

and inefficient locomotion may have turned into controlled locomotion by coupling with already existent nutrient receptor in the cell wall." Wächtershäuser is asking us to accept that randomness and inefficiency can magically turn to be deliberate and efficient. I conjecture that the tendency of seeking a source of energy to maintain existence, namely light, can be traced back to the earth and even further to the Dark Era of our early universe before the Era of Recombination when electrons were continuously absorbing the photons they encounter. Electrons still have this tendency today whenever they encounter a photon. Thus, not only can we trace our visual sensory perception to the electron or to the early stage of the universe but to the consciousness that permeates unto the universe with all of its existents. In addition, since the tendency of absorbing energy is to survive, it shows that such permeating consciousness is rational.

Our visual perception is very different and more complex than that of the plants and of the earth yet the core simple aspect of detecting and absorbing light in a particular range for protection [i.e. for survival] is similar. Our visual perception is one of the tools that aid us to protect ourselves and survive. Planets and stars also have their magnetic fields which could be considered their visual sense like the earth's visual sense. If every entity has a visual sense we can deduce that "seeing" is a perpetual quality of the rational consciousness that permeates within all of them.

From this we can conclude that Ibn `Arabī's view that everything is alive is rational. To falsify his conjecture, one has to prove that entities' behave unconsciously and has no rationality and no purpose but then one has to give an alternative explanation of why entities behave in the way they do.

If we keep regressing to the past, we could see that every living entity came from another living entity. For example, I, as a conscious being, came from two parents who are live beings and we can regress further and argue that we came from a live earth until we regress to the moment of the big bang or to the very initial stage of the universe and argue that we came from a singularity that is alive. According to the big bang theory, all matter was unified in a singularity and that singularity must have been the embodiment of holistic live consciousness since all existents that came from it are alive. Ibn `Arabī calls the holistic live consciousness "the reality

of realities" (*haqīqatul al-haqā'iq*) or "absolute existence" (*al-wūjud al-muṭlaq*) which infuses different degrees of consciousness within all material forms.

It is important to mention that when consciousness permeates it does not annihilate, diminish or change but remains intact. For example, when Jansen permeated a level of his consciousness into the *Strandbeest* his consciousness remained intact. Similarly, when my parents as living entities produced me they did not lose consciousness. Thus, even though the holistic consciousness permeates consciousness into every form, its essence remains intact and aware of itself and of the differentiated consciousness it effuses into the material forms, giving it its discrete degrees of awareness.

Sine all entities have discrete degrees of awareness, their awareness is not comparable to the awareness of the holistic consciousness yet they represent its diverse discrete modes of permeation. Thus, Ibn `Arabī distinguishes between the existents "*al-mawjūdāt*" [entities or realities] and "absolute existence" (*al-wujūd*) or "the reality of all realities" or God. That is to say that everything existent (*mawjūd*) has a possible (*mumkin*) degree of existence (*wujūd*) that depends on the absolute existence, the cause of all causes. He argues that the whole cosmos exists between the state of impossibility, which to him is absolute nothingness (*`adam*), and the essential existence (*al-wujūd al-wājib*) that is the holistic consciousness[19].

The more complex the material forms were evolved, and the higher the brain evolved, such as in human beings the more the entity started to behave with a sense of freedom and independence to decide between different available choices as they encounter other entities. This made them act irrationally at times due to their lack of knowledge.

If Jansen can equip his *Stranbeest* to correct its course when it detects it made a wrong choice and save that knowledge in its memory his *Stranbeest* can, with time, learn from mistakes. Similarly, if such ability is embedded into the discrete awareness that permeates into freewill creatures they can learn from their mistakes as they exercise freewill and face consequences that plats the role of informing them of the wrong choices they make. The human being is equipped with that ability. He seems to act freely and face the consequences of his

[19] William Chitick, Ibn `Arabī 's Metaphysical Imagination: The Sufi Path of Knowledge, p. 80, State University of New York Press, Albany, 1989

actions. According to Ibn `Arabī's cosmological view, such consequences are designed by the holistic consciousness in order to protect and educate the human being.

Karl Popper, a naturalist philosopher, holds a different cosmological view to that of Ibn `Arabī. In a lecture delivered at Darwin College, Cambridge, on November 8, 1977, Popper argued, "I conjecture that life, and later also mind, have evolved or emerged in a universe that was, up to a certain time, lifeless and mindless. Life, or living matter, somehow emerged from nonliving matter; and it does not seem completely impossible that we shall one day know how this happened.[20]" In other words, Popper says that consciousness somehow magically popped out of lifeless matter by a series of accidental combinations of some chemical ingredients and conditions. According to this view, the formation of earth was a lucky accident. This in turn tells us that the formation of Milky Way galaxy was another lucky accident. This means the whole universe is an accident. According to the infinite monkey theorem, the probability of this to have occurred is very minute.

I argue that consciousness did not magically pop up but it is the absolute existent which permeates into all material forms, giving rise to discrete levels of awareness to every entity. In measure theory, that which is "almost everywhere" has the probability of one[21]. Since consciousness can be seen in all entities, the probability of its existence is one. In other words, its existence is certain.

When scientists tried to create synthetic cells in a lab, they used their consciousness to do so. This proves that higher consciousness had to precede and permeate into any new form of lesser consciousness. In other words, the cell, a lesser form of consciousness cannot attempt to create us, a higher conscious entity, in a lab. A cell in the lab of nature could not have magically and with several lucky chances created a higher conscious being, that is us. According to Ibn

[20] [20] Karl Popper, Natural Selection and the Emergence of Mind, Lecture delivered at Darwin College, Cambridge, November 8, 1977 (http://www.informationphilosopher.com/solutions/philosophers/popper/natural_selection_and_the_emergence_of_mind.5.en.html)

[21] Stroock, D. W. , Probability theory: an analytic view, p 186 Cambridge university press, 2011 (http://en.wikipedia.org/wiki/Almost_surely)

`Arabī, the highest conscious being, that is the holistic consciousness, preceded and permeated discrete degrees of consciousness into all material forms, including human beings.

Popper argues, "In its most daring and sweeping form, the theory of natural selection would assert that all organisms, and especially all those highly complex organs whose existence might be interpreted as evidence of design and, in addition, all forms of animal behavior, have evolved as the result of natural selection; that is, as the result of chance-like inheritable variations, of which the useless ones are weeded out, so that only the useful ones remain.[22]"

To Ibn `Arabī, the choices that serve survival are not the result of chance-like trial and error process that allowed the natural selection to favor them but these choices are rationally and holistically designed. The protective and rational behavior can be observed in all entities: in the electron, in the earth, in stars and in planets as I have explained earlier so it did not evolve by chance-like but rather it has always been manifesting using variant mechanisms.

[22] Karl Popper, Natural Selection, op. cit.

Chapter (1)

Ibn `Arabī 's Three Aspects of Reality

"*There is nothing in Being/existence (wujūd) but the Divine Presence, which is His Essence, His attributes, and His acts*.[23]"

Ibn 'Arabī

As explained in the introduction, Ibn `Arabī argues that the physical world is the embodiment of the holistic consciousness in which it emanates its attributes - such as the living, the seeing, the protective and the rational attributes - into every entity giving it its degree of discrete awareness. Thus, in reality there is the holistic consciousness, its attributes and its actions. The action of the holistic consciousness is the materialization of the physical world as embodiment of its attributes. As purely intelligible, the attributes' produces forms that express their meanings as Jansen makes the drop of water embody intelligible meaning to his *Strandbeest* to give discrete awareness of the meaning.

Ibn `Arabī elaborates that all entities in the universe, including the human beings, exist within the holistic consciousness' "fixed vision" as sensory objects of knowledge. Such fixed vision does not mean that we do not have freewill but according to him, it means that our freedom is governed by the "Scales" or standards set by the fixed holistic vision. Jansen's *Stranbeest* have mental existence in Jansen's consciousness and it is allowed to freely act yet according to the program set by Jansen to protect it and give it awareness of the meanings in his mind.

To further understand the relationship between freewill within the framework of the immutable holistic vision, we can first contemplate the physical world and how our universe operates: Our universe has physical constants such as the speed of light, the gravitational constant, Planck's constant, etc. If these constants changed we would have a totally different universe from what we have today. Yet, in spite of such constants the universe still seems to be in continuous flux that is governed by these physical constants. Ibn `Arabī refers to these

[23] Ibn `Arabī, *al-Futûhât al-Makkiyyah*, 1911 edition, 2:114.14, Sanford Encyclopedia of Philosophy, Ibn `Arabī (http://plato.stanford.edu/entries/ibn-arabi/)

constants as “Scales.” For example, we have the freedom to move on earth, but we are governed by the gravitational constant of the earth. Similarly, the realm of our “choices” has its “constants” or “Ethical Scales”, such as the scales of justice, compassion and rationality, that govern these choices; and these scales are innate within us.

A metaphor for this relationship between freewill and the scales of the holistic consciousness is the equation of finding the circumference of a circle: the circumference = π (a constant) x r (the radius). In this equation, π remains immutable. Let us assume that the diameter of the circle can be in flux. If the diameter changes the circumference will change, which means the circle will either contract or expand. Nonetheless, in either case, the circle will remain a perfect circle regardless of the change in its size. If it keeps expanding it dissolves into infinity, and if it keeps contracting it also dissolves into infinity. In either case, the circle goes towards infinity. In other words, the circle is a possible existent within absolute infinity that allows for any possible contraction or expansion of the circle to exist, yet maintains its perfection. The difference between the contraction and the expansion is in the quality of shrinking or enlarging which the circle encounters.

In this analogy the circle remains a fixed entity; for it remains a perfect circle regardless of the shrinkage and the growth. The “π” symbolizes a “fixed constant or scale” by which the circumference is calculated, while the radius symbolizes the free choice or the flux that demands either the contraction or the enlargement of the circle. Using this metaphor, we can argue that the circle is predestinated to be a perfect circle; but it is given the choice to grow, shrink or remain the same size.

Similarly, the human being experiences contracting and expanding inner states that maintain his perfection in accordance to the holistic fixed vision. In other words, the ideal human being always remains a fixed entity or an object of knowledge within the holistic being to which the human being has to conform to. By effusing either the attributes of severities, resulting in the experience of inner contraction, or the attributes of gentilities, resulting in the experience of expansion, the holistic consciousness perfects the human being to conform to the beautiful fixed *entelechy*.

According to this view, the human being has the free choice but his choice would demand either the effusion of the attributes of severity or the effusion of the attributes of agreeability as a feedback for his inner choice [or more accurate: to his motive]. Thus, by experiencing the attributes of severity and the attributes of agreeability, we may learn and grow in inner knowledge of our innate reality which in turn leads to knowledge of the holistic consciousness or the reality of realities which we resemble.

Ibn `Arabī used the metaphor of the circle to describe this cycle of initial descending from the holistic consciousness and returning back to it. The differentiated or discrete consciousness was initially permeated by the holistic consciousness, and it returns to that initial state of purity and perfection, taking different routes of inner expansion and contraction. He spoke of "the descending arc" (*al-qaws al-nuzūlī*), and "the ascending arc" (*al-qaws al- ṣu'ūdī*). Together they form the "complete cycle" of initiation (*mabda'*) and appointment (*mi`ād*). What Ibn `Arabī means by the "descending arc" is the descent from the holistic to the discrete. On the other hand, what he means by the "ascending arc" is the ascent of the discrete to conform to the holistic fixed vision or to its *entelechy*. In each moment, the cycle of descent and ascent occurs so that the entity's inner perfection is maintained. For example, when a person lies or cheats he immediately feels a sense of guilt and shame within. Guilt and shame are the contracting states which are the symptoms of the effusion of the attributes of severity that purify and restore the inward perfection and beauty of the human being in the ideal state. If the liar realizes this knowledge and grasps the meaning of his sensation he can pursue forgiveness and rectify his action which would result in the effusion of the attributes of agreeability such as the attributes of compassion and forgiveness that expands his beauty and perfection. Thus, good actions expand our knowledge of our reality and the holistic reality while evil actions, if we do not learn from it, shrink or stop our growth of knowledge but it can eventually lead us to understand.

Such momentarily effusion of the attributes of severity and agreeability based on what one's choices demand can be fathomed by quantum mechanics, which states that if particles are entangled knowledge can transfer simultaneously between them: If matter is the embodiment of consciousness, and if all material forms were entangled in the initial state of singularity knowledge can transfer simultaneously between the holistic consciousness and every discrete consciousness.

In my view, Ibn `Arabī's theory of "fixed entities" (*al-a`yān ath-thābitah*) within the holistic consciousness as objects of knowledge solves the problem of freewill and predestination; even though he did not really explain it thoroughly. It is my understanding that his view resolves that conflict by maintaining God's attributes ever active, ever intervening, ever knowing, and ever effusing, yet allowing the human being freewill which demands the infusions of certain attributes of God into the human being in order to make him conform to the beautiful *fixed entelechy* intended for him. Using quantum physics terminology, the holistic consciousness always collapses the wave of possibility to a particular or discrete infusion which the entity appropriates to maintain its inward beauty and perfection.

As the object of knowledge or vision within the holistic consciousness, freewill entities are "fixed" (*thābitah*) and perfect, but in themselves they experience a continuous flux due to the choices they make as they exercise their freewill which demands the emanation of the attributes of severity or agreeability. The entities are "fixed" within the holistic being because the holistic consciousness has a fixed ideal or vision for them to continuously conform to. They are "entities" (*a`yān*) [which can also be translated as designations] because they are continuous vessels or embodiments of discrete designations of attributes.

Ibn `Arabī explains that because the attributes are ever active and do not cease to be active, the "fixed entities" are required accessories[24] (*lawāzim*) of consciousness. Thus they are *imaginals* not imagined. Ibn `Arabī argues that the fixed entities "have never smelt a whiff of existence.[25]" This refers to their *imaginal* mode of existing as potentials within the holistic consciousness. If they are *imaginals*, the physical materialization should be considered even more *imaginal*, since it is only a temporarily phenomenon, a dense appearance of the subtle *imaginal* fixed entity that allows the flux to occur to release the expressions of the active attributes.

[24] William Chittick chose to translate the words "*lawāzim*" as concomitants. I prefer to use "required accessories"; for the phrase better captures what Ibn `Arabī means. Concomitants may imply association and as a Muslim Ibn `Arabī would not suggest that God would have associates but he wanted to explain that the "fixed entities" are accessories created expressions required for the divine active attributes

[25] William Chittick, The Divine Roots of Human Love, the Journal of the Muhyiddin Ibn 'Arabi Society, Volume 17, 1995 (http://www.ibnarabisociety.org/articles/divinerootsoflove.html)

To elaborate on why Henry Corbin chose to use the term "*imaginal*" rather than "imagined", I would like to refer to this fact: Before I was born, or before I appeared in the physical sense, the universe was impregnated with me. This means that I existed as a possibility, a real potential, and so I was *imaginal* not imagined. In other words, I was not an "impossible potential" and so I was not imagined, in a sense of being a fantasy impossible to exist. I was rather a "real possible potential" that has always been in the holistic universe, or more accurately, in the holistic consciousness that has permanence over the holistic material universe.

Today, with the knowledge we have of genetic heredity, a skillful artist who has such knowledge can predict and illustrate the image of unborn infant of a particular couple; and the more accurate his knowledge is, the more the image would actually resemble the unborn infant[26]. Similarly, I conjecture that my image was known as a potential within the holistic consciousness' knowledge. It always exists within the holistic consciousness as a shadow (*khayāl*) of me, and also as an object of God's knowledge of himself and the discrete mode of infusion he is casting. Thus, the shadow is identical with me now but it also resembles, yet is not comparable to, the holistic consciousness itself since it is a discrete "quanta" of its attributes.

It is important to understand that Ibn `Arabī's "fixed entities" are not equivalent to Plato's Ideas or Forms. Plato's Ideas are "universal archetypes," but Ibn `Arabī's fixed entities are individual discrete *imaginal* ideals of every possible entity that manifested or has not been manifested in all possible physical universes.

We can compare Ibn `Arabī's "fixed entities" to Leibniz's monads. Like Leibniz who argued that the body "is not a substance, but a phenomenon resulting from simple substances" (G II 275/AG 181)[27] Ibn `Arabī posed that material forms are phenomena stemming from the *imaginal* who have a higher degree of reality or substance than the material realm, since they are fixed and perfect accessories to the holistic consciousness. To Ibn `Arabī, the *Imaginal Realm* is

[26] This argument has first appeared in: Amany Shalaby, Ibn al-`Arabī's Epistemology Interacting with an Alive Universe, Islamic College of Advanced Studies, London, 2014

[27] Gottfried Wilhelm Leibniz, Sanford Encyclopedia of Philosophy, *First published Sat Dec 22, 2007; substantive revision Wed Jul 24, 2013 (http://plato.stanford.edu/entries/leibniz/)*

sensory. His *Imaginal Realm* can also be compared to the line of energies or strings from which particles manifest as the String Theory suggests.

As Jansen had a mental image in his mind of his *Strandbeest* before he created it according to his fixed vision, all material forms have similar perfect images, potentialities or *entelechies* within the holistic consciousness to which the material forms conform. These images are sensory because they are not absolute nothingness, but they are *imaginals* because their existence is not the absolute real existence like that of consciousness itself. Their existence depends on the existence of consciousness and cannot have existence without it, even though they are required willed accessories for consciousness to express its active attributes.

Thus according to Ibn `Arabī, the *Imaginal Realm (`ālam al-Khayāl*) is "The Purest Overflow" (*al-fayḍ al-aqdas*)[28] which contains the "*imaginal fixed entities"*, while the cosmos is the "Realm of Pure Overflow" (*af-fayḍ al-muqaddas*), which is the temporal realm of material existence. The "*imaginal fixed entities*" are the purest, but the materialized forms are also pure because they are always made to conform to the purest *imaginals* regardless of their flux which results from their exercise of the freewill granted to them.

When discussing the *Imaginal Realm*, Ibn `Arabī is not concerned with the images of our fantasy or memory or any induced imagery like what some psychologists induce. He proposes a fifth dimension where the four dimensions of space-time are curled inwardly into the holistic consciousness. Ibn `Arabī also calls the realm of the *imaginal* (*`alam al-khayal*) the realm of similitude or *(`alam al-mithal*) since it resembles the material world and resembles the attributes; for it is the attributes' outpouring of expressions. In this respect, such dimension contains all possibilities. Today String Theory suggests the existence of a fifth dimension which contains all possibilities for all entities in the universe. It is true that the theory can only prove the presence of such a dimension mathematically, but if we consider the testimony of those who have had

[28] See: Souad Hakim, Unity of Being in Ibn `Arabī – A Humanistic Perspective, The Journal of the Muhyiddin Ibn 'Arabi Society, Volume 36, 2004 (http://www.ibnarabisociety.org/articles/unityofbeing.html)

empirical encounters with that sensory realm and the explanations of the mystics, we may be consider it a validation for the existence of such realm.

The figure below shows a geometrical cube in fifth dimension. The faculty of imagination had allowed the mathematician who produced it to visualize it. Before the image was produced in the digital form, it was sensory within the mathematician's mind. It may help us realize that it is not impossible to have a sense of the fifth dimension or the *imaginal* realm.

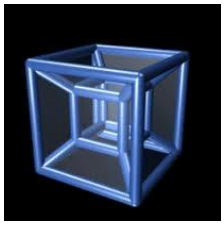

Fig. (1)[29]

By introducing the *Imaginal Realm* as the Intermediate Realm that links consciousness (whether holistic or discrete) to its material embodiment, Ibn `Arabī avoided René Descartes' problem of dualism since the *Imaginal* is neither pure essence [i.e. immaterial attribute] or pure matter [dense embodiment]; it has an in-between state of existence and non-existence that is more subtle than existence (consciousness awareness of itself) yet substantial than pure nothingness.

In his skepticism, Descartes argued, 'there is absolutely nothing in the world, no sky, no earth, no minds, and no bodies. Only I am. I exist, is necessarily true whenever it is put forward by me or conceived in my mind.[30]" Ibn `Arabī does not have Descartes' skepticism; for he assigns a degree of reality to the physical realm and to Descartes' *cogito*. To him the *cogito* is the differentiated discrete awareness permeated into the entity by the holistic consciousness and through which the entity becomes aware of itself and other entities. In this sense, he does not deny the existence of the physical reality.

[29] http://giphy.com/gifs/AvCPKNLbH6FoI
[30] Charles Landesman, An Introduction to Epistemology, p. 50

Ibn `Arabī would agree with Descartes about the cognition of the image in the brain by consciousness, but he would not deny the presence of a phenomenal external object. To him images are analogues to meanings that embody outpouring of the attributes of consciousness, both holistic and discrete. Thus to him, even if the brain forms a pictorial image, such image is cognized by consciousness that assigns to its meaning. From his cosmological view, we can see that Ibn `Arabī is an idealist in the sense that he gives consciousness permanence over matter, but still acknowledges the reality of physical existence, so he is not a radical skeptic and can be also considered a realist; for he does not deny the existence of an objective reality.

Ibn `Arabī would not agree with Hume that the self is a bundle of experiences; for to him the self is a differentiated reality driven from the holistic reality of realities with a "bundle of attributes" releasing unto it. Nonetheless, like Hume, he acknowledges the empirical experience and to him it is one of the tools of acquiring knowledge. He calls empirical experiences "states" (*aḥwāl*). He argues that we should learn to practice exile (*ghurbah*) from the influence of our states or empirical experiences. He conjectured, "They [i.e. the realizers of the truth] say, 'halting with the state is a bane upon its possessor'. They see that exile from the state is the utmost felicity and that the state is the greatest veil over man. It is the place of God's deception [alternative translation: God's cunning] (*makr*)[31]], and through it man is led on step by step (*istidrāj*). No intelligent person remains in places where there is a possibility of deception [cunning]. On the contrary, he should only halt in a place where he is upon insight.[32]"

What Ibn `Arabī is telling us here is that we should not let any experience cause us to form a pattern of behavior, a habit, an unchanging understanding, a fear, a prejudice or a bias. Experiences are meant to cause us to develop some inner qualities and gain knowledge of ourselves, and thereby gain knowledge of the holistic reality through knowing the attributes, not as theoretical potentials but through actualization. Usually we tend to form patterns of behavior and hold onto old understanding or fear based on past experiences; so some attributes may remain dormant within us, waiting to be unveiled. When we do not let go of past experiences, we risk losing the chance of realizing these beautiful attributes hidden dormant within us and we

[31] God is cunning, not in a deceptive way, but in the way He coaxes us towards our own beauty or perfection by which we attain felicity. Since we are in continuous flux, we would be deceiving ourselves if we would halt our knowing of the attributes. So we should continue to empty ourselves to receive new insights

[32] William Chitick, Ibn `Arabī 's Metaphysical Imagination: The Sufi Path of Knowledge, op. cit.: p. 167

experience contracting states. When we hold onto the bundle of our past experiences and form habits in our responses to an ever changing world, we hinder the increase or the evolution of our knowledge of our reality within the reality of realities. Ibn `Arabī urges us to strive for an open state of continuous readiness to acquire more knowledge and not to let any experience halt us. We should rather maintain anticipating mode looking for new insight that a new situation or experience seeks to unveil within us.

Ibn `Arabī's view is similar to Spinoza's view that the material entities are modes which express infinite attributes. For Ibn `Arabī the physical universe itself is "God but not God". In other words, it is not the holistic consciousness but it is its activity or the disclosures of its active attributes. Ibn `Arabī and Spinoza agree that reality is perfection.

We can consider Ibn `Arabī's view as "neutral monism," since he argues that both the mental and the physical world emanate from one source which to him is consciousness. To him, the universal substance is consciousness, while its attributes emanate in the *Imaginal Realm* (for the holistic consciousness) or mentally (for the discrete consciousness) before they materialize in phenomenon entities (for the holistic consciousness) or external interactions (for the discrete consciousness). In this sense Ibn `Arabī is not a solipsist since he acknowledges the physical reality and its multiplicity. He is definitely not a physicalist because he believes that the physical realm is only a phenomenon resembling a higher degree of eternal existence. He is not a dualist for he sees that consciousness and body are connected through the *Imaginal Realm* or the field that is not purely material or purely immaterial meanings and attributes but is a field where images embody meanings that can possibly materialize.

Ibn `Arabī's "fixed entities" are not similar to Kant's notion of concepts abstracted from sensibility in the mental ontological realm for Ibn `Arabī's "fixed entities" have discrete sensory substantial presence rather than being universal concepts. Nonetheless, to him every entity has a unique bundle of attributes that can be abstracted by observing its behavior. He acknowledges Kant's "*phenomena,*" and to him Kant's "*noumena*" is no more than consciousness itself that can only be known through the activities of its attributes in the phenomenal realm, but cannot be fully fathomed or seen in itself since it is infinite.

Ibn `Arabī's Three Worlds and Popper's Three Worlds

Popper proposed the theory of three worlds: World 1 is the material world with all of its objects and events, including us. To him, this is the real world. World 2: is the subjective realm of mental activities. World 3: is the realm of our collective theories, myths, art works, scientific theories, etc. and it is the world of objective knowledge. World 2 is the intermediate realm that connects the collective theories of World 3 to the realm of reality of World 1. World 2 has the ability to change World 3 after it is tested in World 1 and errors appear, while World 3 also affects World 1 via World 2.

Popper gave the mental realm an intermediate role that links the purely intelligible concepts to the purely material world to avoid the problem of dualism. Thus, like Ibn `Arabī, Popper acknowledges both the mental reality and the material reality and affirms their connectivity. Nonetheless, there is a subtle difference between the two approaches: To Popper, the meta-realm [i.e. World 3] is made by us as a collective evolving history of our theories, and can be tested and changed according to its effects and validity that are experienced in World 1. To Ibn `Arabī, the collective is not made by us. It is rather the holistic history of the whole universe; and it is not we who test it, but we are rather been tried by it in order to learn to willingly conform to it. To Popper the physical world is real, to Ibn `Arabī, it is a temporary phenomenon that has a degree of reality but it is not the truly real but rather a trace or activity of it. To him, the truly real is the holistic consciousness.

To Popper, the mind emerged magically out of matter with lucky series of coincidences that led to the formation of earth and then to life on it. To Ibn `Arabī, matter is a required accessory to consciousness; for it is its embodiment or vessel used for the release of the ever active attributes of consciousness which have permanence over matter. Thus, consciousness has never ceased to exist in the universe and everything in the universe is alive and conscious in spite of the appearing and disappearing for multiplicity of material forms.

As I mentioned in the introduction, in labs we use consciousness to produce a simple form of human being's cell or more accurately, to manipulate something already existent to produce something else, which shows that consciousness has permanence over material forms,

and this prove Ibn `Arabī's claim that consciousness has permanence over matter. Quantum mechanics proves that consciousness has permanence over matter; for only when an electron is observed does it appear as a particle. Otherwise, it behaves as a wave. Such wave is a fixed potential existing within the holistic being.

Both Popper and Ibn `Arabī believe that acquiring of knowledge is an evolutionary process. Popper argues that we can only approach reality but we can never fathom it. Ibn `Arabī affirms that we cannot fully fathom the essence of consciousness, whether holistic or discrete, which to him is reality yet we can know and serve its active attributes.

Popper's perspective is concerned with our differentiated awareness, while Ibn `Arabī focuses on both the discrete and the holistic and on the relationship between them. Popper's goal of acquiring knowledge is to come closer to the truth, and to him reality is the physical world. Thus, truth to him is gathering information about the physical forms. Nonetheless, he is also concerned with understanding the nature of consciousness in order to understand the human psyche and to help him become more rational and bring more beauty to the world.

Ibn `Arabī is primarily concerned with consciousness and its attributes as a way of knowing its nature. His goal of acquiring knowledge is to gain knowledge of the self's authentic attributes rather than gathering information about the external physical world. He sees the world as perfect and beautiful in its inner level but we, due to our ignorance of the holistic vision, lack such realization. Nonetheless, to make our external actions as beautiful as our *Imaginal Entelechies* and experience the felicity of agreeability with the holistic and so experience expansion, Ibn `Arabī calls for following the inner and outer Holistic Scales and urges us to connect with the holistic consciousness.

The Holistic Scales are demonstrated to us inwardly or mentally and outwardly or physically. The Outward Scales embody the meanings of the Inward Scales. To Ibn `Arabī, we are not the ones who are testing, but we are the ones who are tested. We have to be attentive to the Scales to attain felicity. Just as touching the fire burns and hurts, touching a "mental fire" such as listening to our irrational thoughts, deceiving ourselves, lying, harboring evil, violating the law of unity, hurting others etc. would also harm us inwardly. Thus, the inner and outer

feedback, or the mental and the physical feedback, that we receive from our actions and interactions should inform us with the results of our test and guide us to change our course of actions when we err; for the feedback is designated by the Holistic Scales to maintain our beauty, perfection and wellness. The Holistic Scales are fixed and we need to change to conform to the holistic scales if we seek felicity.

This is slightly similar to Popper's view that we learn from our mistakes which he explained in his proposed three stages of the emergence consciousness with a significant difference between both views. Popper argue, "As a possible first stage there may evolve something that acts like a centralized warning, that is, like irritation or discomfort or pain, inducing the organism to stop an inadequate movement and to adopt some alternative behavior in its stead before it is too late, before too much damage has been done. The absence of a warning like pain will lead in many cases to destruction. Thus natural selection will favor those individuals that shrink back when they receive a signal indicating an inadequate movement; which means, anticipating the inherent danger of the movement. I suggest that pain may evolve as such a signal; and perhaps also fear.[33]"

As explained earlier Ibn `Arabī argues that everything is alive and conscious. Thus, the love of existence and desire to survive are exhibited in earth, in stars and in electrons. In other words, they are inherent conscious tendencies from the very beginning of the universe. What is peculiar about the human being is that he has freewill which allows him irrational or wrong choices that result in the experience of an inner shrinkage [in knowledge of the reality]. Other entities that do not have multiple of choices are saved from wrong doing and irrational possibilities.

Popper elaborates, "As a second stage, we may consider that natural selection will favor those organisms that try out, by some method or other, the possible movements that might be adopted before they are executed. In this way, real trial-and-error behavior may be replaced, or preceded, by imagined or vicarious trial-and-error behavior. The imagining may perhaps initially

[33] Karl Popper, Natural Selection, op. cit.

consist of incipient efferent nervous signals, serving as a kind of model, or symbolic representation of the actual behavior, and of its possible results.[34]"

The similarity between Ibn `Arabī 's theory and that of Popper is that both thinkers assert that we can learn from our trials and error and that committing an error results in distress, discomfort or suffering. Nonetheless, Ibn `Arabī would not think that such ability had evolved but that it was inherent within us by the holistic consciousness to make us conform to the Holistic Scales which show favor to those who make the rational good choices by effusing the attributes of agreeability experienced as expansion in knowledge of the reality that can grant felicity.

Ibn `Arabī calls the holistic scales, including the physical ones "secondary causes". Thus, he does not deny the forces in the natural world as Berkeley does; for he considers them one set of the Scales that we need to understand, respect and conform to. Likewise, we need to understand the inward Scales. Nonetheless, he would consider all the physical qualities as "secondary qualities" just as the forces are "secondary causes;" for they are signs of the holistic consciousness' attributes. In this sense, they have inner or corresponding meanings.

Just as we need to understand the Natural Scale, Ibn `Arabī urges us to understand the Scale of Reason and the Scale of Courtesy. To him, The Scale of Courtesy means "bringing together" or unifying. "It is said of man that "God created him only for gathering together.[35]" In other words, we need to respect the unity that underlines the diversity. As for the Scale of Reason, it is what enables us to understand the intelligible discrete concepts but we would not be rightly guided to have sound rationality unless such discrete knowledge is guided by holistic knowledge. In the next chapter, I shall further discuss Ibn `Arabī's view of reason and its two different epistemic modes: the intuitive and the reflective.

However, the important point here is that the Scales are coaxing us to knowledge by revealing or unveiling the truly real through its attributes of severity and agreeability, and by transforming us into full representations of the holistic reality itself. Such transformation is a

[34] Karl Popper, Natural Selection, op. cit.

[35] William Chitick, Ibn `Arabī 's Metaphysical Imagination, op. cit.: p. 175

unique process for each of us, and its ease or difficulty has to do with our inner choices and our attentiveness to the Holistic Scales of contraction and expansion. We should notice that the emphasis is on the inner choice or "motive" regardless of the outer condition.

In his commentary on the Qur'anic verse "He set up the Scale.[36]" Ibn `Arabī says, "Exceed not the Scale by overdoing or underdoing for the sake of loss, but set up the weighing with justice.[37]" He argues, "He who desires the path of knowledge and felicity should not let the Scale of the Law drop from his hand for a single instant.[38]" He equates dropping the law with ignoring the secondary causes. If fire burns, because the physical scales in our universe are set and kept that way, we should not drop that scale and put our bare hands in the fire. Similarly, if lying causes us to feel ashamed inside and causes harm both inwardly and outwardly, then we should not let go of that inner scale that informs us that lying is not in our nature and does not conform to reality. Going against our nature and reality would not make us happy, but would cause us to experience inner contraction rather than experiencing growth which is associated with joy. Nonetheless, both the contraction and the expansion can help us acquire knowledge of the reality of our consciousness and its attributes, which leads to knowing the holistic consciousness and its attributes through the scales it sets.

Ibn `Arabī argues that [the knower] "gives each thing its due." He also asserts, "The distinguished feature of the gnostics is that they verify that which distinguishes the realities.[39]" Ibn `Arabī is telling us here is to be vigilant of the subtle inner signs we receive from the holistic scales. This can be applied in science, in social interactions, in politics and even in art. He argues that one of the important tools that can help us to achieve such vigilance is the Scale of the "Prescribed Laws" given by the different prophets. He affirms, "Know that there is no art (*ṣan`ah*), level (*martabah*), state (*ḥāl*), or station (*maqām*) which does not have a scale ruling over it in both knowledge and practice." By immersing ourselves in the spiritual practices and by avoiding what the Law asked us to avoid we can become more vigilant of our reality.

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[36] Qur'an, 21:47

[37] William Chitick, Ibn `Arabī 's Metaphysical Imagination, op.cit. p. 173

[38] Ibid.

[39] Ibid. p. 174

If we compare Ibn `Arabī 's view of the Scales to Popper's view of testing our collective theories we can see how Popper thinks that we can rationally figure out our errors and rationally correct them by experiencing the outer effect of applying our theories in the physical realm. Ibn `Arabī thinks that our errors are internally corrected by the states of contractions and expansions regardless of the external results. For example, I may speak truth to power and may outwardly experience hardship and defeat and the results of my action may not immediately be as I wish but inwardly I experience expansion and I gain knowledge of the authentic attributes of myself and of the holistic being. Ibn `Arabī supplements the Scale of Reason with the Scale of Courtesy and Prescribed Law which guide us to live up to the holistic view rather than relying on our limited and discrete view.

Popper criticizes the philosophy of mysticism and rejects it. On the other hand, Ibn `Arabī, as a genuine mystic, acknowledges the role of rationality and would see the irrational critic as one who is on his way towards realizing reality at his own pace, using his own route, as a work of divine art in action. Thus, rather than debating him he would point him to clearly look within to attain knowledge of his reality and so of the holistic being.

To approach the truth Ibn `Arabī proposes focusing on one's inner work instead of vigorously debating each other as Popper proposes. By focusing on ourselves, we see that everything is perfectly conforming inwardly to the holistic vision, and we see the holistic beauty of the attributes of severity and agreeability in action. This can bring to us a sense of fulfillment, contentment; and compassion towards others. When others witness our state, they may naturally be attracted to do the same inner work, to attain the same realization, without the need to resort to vigorous debates of who is more rational [i.e. better] than others. In addition, being aware that states [i.e. experiences] are continuously changing should prevent us from viewing ourselves as better than others since we cannot grant that if the free choice we may make in the next moment would grant us a state of contraction or expansion.

Chapter (2)

On knower, Knowledge and the Modes of Knowing,

In Ibn `Arabī's Theory of Knowledge

Knowledge Is Infinite:

Ibn `Arabī believes that the object of knowledge is consciousness and that the only way to know consciousness is by knowing its attributes; since the attributes have infinite possibilities of expression, knowledge is infinite. Ibn `Arabī expresses this view in his saying, "the thirst of the seeker of knowledge never ceases. He never experiences quenching because his preparedness (*isti`dād*) seeks to gain a knowledge. Once this knowledge has been gained, it gives to him the preparedness for a new knowledge, whether engendered or divine. What he gains lets him know that there is something demanded by the new preparedness – which has been occasioned by the knowledge acquired through the first preparedness – so he becomes thirsty to gain this [new] knowledge.[40]"

Whether we seek to know the discrete entity in itself or its meaning as an expression of the holistic, knowledge remains infinite not only because entities are countless, but also because all existents are in continuous flux. Thus, if we come to know a state of an entity, such as a growing plant, we need to be aware of the changes of its state in the next moment. Acquiring knowledge of its existing state can prepare us to receive knowledge of its next state. Knowledge of a growing plant does not only involve its external states. In Ibn `Arabī's view, it should also involve its inner state or the divine attributes that it embodies and knowledge of our relationship to these attributes which gives us meanings.

Ibn `Arabī elaborates, "God never ceases creating within us ad infinitum, so the knowledge extends ad infinitum[41]" This means that every moment and situation poses for us an opportunity to gain new knowledge about ourselves, and therefore about the holistic consciousness. Finding the inward attribute, whether of severity or agreeability, permeating

[40] William Chittick, Ibn al-`Arabī's Metaphysics of Imagination, op. cit.: p.153

[41] Ibid

within us, prepares us to receive the new expression of another attribute that demands to be released outwardly through us.

In this way, there is no end to knowledge, and Ibn `Arabī argues that anyone who claims to have full knowledge is manifesting a state of ignorance. He says, "No one believes in quenching except he who is ignorant of what is created within himself constantly and continuously.[42]" In this sense, the highest epistemic mode is that of realizing one's incapacity to comprehend an end to knowledge, since consciousness is ever unfolding. Thus, Ibn `Arabī often quotes Abu Bakr, one of Prophet Muhammad's Companions, saying, "The incapacity to attain comprehension is itself comprehension.[43]" This view is shared by Karl Popper who says, "Our knowledge can be only finite, while our ignorance must necessarily be infinite.[44]"

The Fluctuation of Knowledge:

Ibn `Arabī conjectures, "In each moment (*waqt*) every servant must be the possessor of nearness to one divine name and the possessor of distance from another name which at that moment has no ruling property over him.[45]" What Ibn `Arabī means by "the names" are the divine attributes of the holistic consciousness. They are called "names" because they are not added qualities to the holistic consciousness, but they are the very essence that defines the holistic consciousness. But to us, as finite entities, the attributes are added qualities, and so we cannot be named by them, but we can be called their "representatives" (*khulafā'*) or servants. The holistic consciousness seeks to reveal itself to us by all of its names with their infinite expressions. Thus, our knowledge fluctuates in accordance to the circumstances we encounter. Ibn `Arabī expresses this when he says, "The names make it fluctuate.[46]" For example, one moment may require us to show the attribute of giving, while another moment may demand of us to manifest the attribute of withholding.

[42] Willimam Chittick, Ibn al-`Arabī's Metaphysics of Imagination, op. cit.: p.153-154

[43] Ibid. p.155

[44] Karl Popper, Conjectures and Refutations: The Growth of Scientific Knowledge, op. cit.: p.83

[45] Willimam Chittick, Ibn al-`Arabī's Metaphysics of Imagination, op. cit.: p.151

[46] Ibid. p.152

Nonetheless, this fluctuation between the different names that seek to be expressed through us does not mean that the knower loses the previous knowledge he gained. On the contrary, his knowledge continuously increases and deepens, as Ibn `Arabī elaborates, "You may gain a knowledge which you did not have, though that which you possess will not leave you. This establishes "flight." But you are warned that the name which is with you must not continue to determine your property. So you flee to the place of increase. Thus "flight" is a property that accompanies the servant.[47]" Ibn `Arabī urges us to free ourselves from all states or past empirical experiences and be ready to receive a new insight of a new attribute that was dormant within us, and seek to manifest and to embrace deeper meanings of an attribute we are already familiar with within ourselves.

To Ibn `Arabī, what distinguishes the status of a knower from the status of an ignorant person is one's ability to witness the names and become the representative or servant of the particular names that demand to be released outwardly through him at a particular time and circumstance. Ibn `Arabī explains, "The names rule over the creatures. The heart of him who witnesses them prostrates itself, but the heart of him who does not witness them does not prostrate itself; he is the one who makes claims (*mudda`i*) by saying "I".[48]" What he means is that, once one claims a specific identity or defines himself with a bundle of specific unchanging attributes, he stops learning, growing, and transforming, and he experiences inner contraction or shrinkage of knowledge. Thus, as Ibn `Arabī argues, the true knower is the one who remains without identity. He does not claim that he is born this or that way and he is not going to change, but he rather declares his readiness to change and embrace new qualities or to deepen his understanding of the qualities he is familiar with. This is a liberating approach to life where one does not imprison himself into a rigid mold, but he rather remains flexible, open and vigilant to what the moment demands of him.

The holistic consciousness created us to become aware of its presence. As limited creatures, the only way for us to know the infinite is through creating a finite resemblance of it. The cosmos is the finite resemblance of the holistic consciousness, and the human being resembles both the holistic consciousness and the cosmos. Thus, as Ibn `Arabī pointed out,

[47] Ibid. p.157
[48] William Chittick, Ibn al-`Arabī's Metaphysics of Imagination, op. cit.: p.152

whether the human being looks within or without, he sees the resemblance of the infinite, and so he can recognize its presence. By knowing one's self, one knows the cosmos and the holistic consciousness through witnessing the resembling attributes. As Ibn `Arabī puts it, "The unseen is infinite. Hence there must be constant creation, and the knowledge of the created knower must be finite in every state and time and receptive toward a knowledge which he does not have, a temporarily originated knowledge whose object is God or a created thing which provides evidence of God.[49]"

According to Ibn `Arabī, there are two aspects of the cosmos as well as of ourselves: "The cosmos is two worlds: the unseen and the visible. The second world is perceived by sight, while the world of the unseen is perceived by insight.[50]" In other words, we need our five senses to function in the world and perceive the external phenomena which are the signs or traces of the holistic consciousness; and we also need the inner faculties to find and express the inner attributes of ourselves. I shall elaborate later on Ibn `Arabī's view of the inner senses or faculties, but for now it suffices to mention that by our inner faculties we gain insight of ourselves and accordingly, of what we need to do in the outer world.

Ibn `Arabī's call to free ourselves from holding onto the states (*aḥwāl)* [i.e. the empirical experiences] can solve the problem of induction. Since, according to him, the goal of knowledge is to know the attributes of consciousness, our focus should be on the now and what is present to us, not on any previous hypothetical premises or speculations. For example, when I have an encounter with a white swan, I do not have to focus on making claims such as "all swans are white." which would be falsified when at the next moment I have an encounter with a black swan. What I rather need to focus on at the moment of the encounter is: what attributes this swan is exhibiting which I can embrace or find within myself. I should also focus on the question: how should I interact with the swan, in accordance with the Scales of Reason and Courtesy? The Scale is consistent in its demand, but the interaction may vary and demand of me a different response. For example, if the swan were in danger, the Law [i.e. Scale] would demand of me to offer help in the way I could. If the swan were attacking me, the Law would still hold true, but my action would differ because the Law would demand of me to defend my life or be courteous

[49] Ibid., p.157

[50] Ibid., p.223

to myself. Thus, the Scales would always hold true and constant, but the circumstances may differ and the attribute that the Law demands of me at different circumstances may differ.

Karl Popper proposed vigorous conjecture as a solution for the problem of induction by assuming starting points. According to Ibn `Arabī this would not be the most recommended way to solve the problem of induction. On the other hand, Ibn `Arabī proposes following the Scales and freeing one's self from previous experiences so one does not have a specific starting point other than the Scales. The Scales, such as the Scale of justice or compassion, are starting premises, but they should not be molded into justified beliefs based on old experiences. He argues that vigorous spiritual practices such us taking time for retreat, meditation, prayers, fasting and the practice of *dhikr* (becoming conscious of and connecting with the holistic) can remind us with the Scales, free us from the states, and bring us to an awareness of the moment, the always now.

In Islamic mysticism [i.e. Sufism], the practice of *dhikr*, like in many other religions, involves repeating particular mantras with focus and mindfulness. This resembles what a scientist does in a lab, repeating an experiment with vigorous accuracy as much as he can to obtain reliable results. Thus, many Sufi mystics consider *dhikr* to be a science that has a therapeutic effect on the human's psyche and mind.

On The Knower and How He knows:

Ibn `Arabī writes, "God possesses a light called 'light of existence.[51]" which is deployed over all existent things. When these two lights come together, unseen things are unveiled as they are in themselves and as they occur in existence.[52]" What `Arabī means by "light" is "awareness" or "consciousness". This is because awareness defines existence and the awareness of every discrete entity drives from the holistic consciousness. Because the permeating consciousness in all entities is homogeneous, entities can know each other when they encounter each other, because they all share in consciousness [existence/life] even though to different degrees. Because consciousness cannot be seen, it is known by its activity which is the material embodiment. Thus, when I see a cat, I am seeing an embodiment of a discrete consciousness that has a bundle

[51] William Chittick, Ibn al-`Arabī's Metaphysics of Imagination, op. cit.: p. 223

[52] Ibid. p. 223

of discrete expressions of the attributes. Ibn `Arabī elaborates, "The root of all knowledge derives from knowledge of the divine things, since everything other than God derives from God.[53]"

Ibn `Arabī argues that knowledge is permeated through "designation (*ta`ayun*) and differentiation (*tafṣīl*) while the servant knows it only in an undifferentiated mode *(ijmāl*).[54]" For example, when I encounter an apple, I first perceive it as a whole, even though it has many discrete inner and outer properties and meanings. After such holistic mode of knowing, I can start to know the detailed properties. Thus, the task of attaining deep knowledge is to differentiate or to find the underlying attributes which the apple embodies. This is even true in the physical sense; for when we study an apple in depth we need to know the discrete physical attributes of the apple. But when we perceive the apple, we perceive it as a whole finite entity.

Ibn `Arabī explains how the knower knows a thing, "Each engendered thing gives them [i.e. the knowers] knowledge of the divine relationship from which it became manifest.[55]" The basic senses give us information of the presence of another entity when we encounter one, but it is the inner faculties that inform us of the attributes of that entity that derive from the holistic consciousness. We are able to know these attributes because we have them within us and because they exist in all entities around us.

Ibn `Arabī uses an elaborate metaphor to help us understand the relationship between the cosmos and the holistic consciousness. He writes, "Look at the form that manifests to the eye in a polished surface and verify your vision. You will find that the form has come between you and your perception of the polished surface, which is its locus of disclosure. So you will never see the surface. The Real is the locus of disclosure for the forms of the possible things. Hence, the cosmos sees only the cosmos in the Real.[56]" Because consciousness in its essence is invisible we cannot see it, but we can observe its activity or the traces which disclose to us its attributes and make us aware of its presence. The cosmos is the activity of the holistic consciousness, and by

[53] William Chittick, Ibn al-`Arabī's Metaphysics of Imagination, op. cit.: p. 151

[54] Ibid., p. 154

[55] Ibid., p. 157

[56] Ibid., p. 215

observing the cosmos, it is as if we see the holistic consciousness itself, because the activity occurs within the invisible holistic consciousness.

Ibn `Arabī does not propose a supernatural entity sitting up in the sky watching the universe down below; for to him, the physical world is the embodiment of consciousness. In this sense, matter and consciousness are not separated; matter is the accessory of consciousness. In a sense, by seeing matter we see consciousness.

To him, the knower is the heart. In the Arabic language, the word heart is *qalb*. It is a derivative of the root verb *qalaba* which means "to turn." The heart is the turning attention of consciousness. In our daily life, our consciousness turns its attention or focus from one object of knowledge to another inwardly and outwardly. To Ibn `Arabī, the external encounter is meant to help us reflect on the inner encounter. Our interaction with other entities creates a conduit for relational attributes to manifest. In other words, our relationship with the external world helps us find the attributes within us.

Knowledge and Salvation:

Ibn `Arabī argues, "Existence is light, while nonexistence is darkness, so evil is nonexistence, while we are in existence, so we are in good.[57]" According to him, the evil we see is a sign of our ignorance, for in reality there is no evil. This is because everything evil is inwardly immediately returning to the state of perfection through the effusion of the attributes of severity upon its possessor. In a way, goodness is continuously being restored, so evil has no real existence, even if it outwardly appears to exist. Ibn `Arabī conjectures that when we truly know existence, we shall witness the good therein, and we will consciously and willingly participate in being it's the agent of its outward goodness and attain felicity.

He elaborates, "Hence you come to know that knowledge is the cause of deliverance. If a person should become wretched on the way – in the end (*ma`ād*) [or in the appointed time] he will reach deliverance. So how noble is the rank of knowledge![58]" The "appointed time" is the ultimate time when the person finally realizes and knows the truth of the goodness of existence.

[57] William Chittick, Ibn al-`Arabī's Metaphysics of Imagination, op. cit.: p. 226

[58] Ibid., p. 151

Nonetheless, we should strive to acquire knowledge to ease and secure the way of our salvation as we choose the route of felicity rather than severity. Ibn `Arabī expresses this is his saying, "The flight is from ignorance to knowledge.[59]" It is important to mention here that Ibn `Arabī shares Karl Popper's view that knowledge emancipates and liberates the knower.

The Inner Faculties of Knowing:

Ibn `Arabī identifies three faculties of knowing: reason, sensation and imagination. He adds another mode to reason which he calls "the reflective mode." He sets a guideline of how to use the inner faculties, "Each faculty in man has a playing field in which it roams and beyond which it should not step. If it goes beyond its field, it falls into error and makes mistakes, and is described as having deviated from its straight way. For example, visual unveiling (*kashf*) may discover things where rational argument stumbles, because the arguments have left their proper domain. The rational faculties which are described as misguided have been led astray only by their own reflective process, and their reflective process has gone astray by moving about in that which is not their own abode.[60]" Thus, we need to identify the fields and the appropriate faculty that should deal with each of them.

Ibn `Arabī argues that the reflective mode should not be employed where reality is so obviously revealed to us leaving no room for reflection. If I employ the reflective faculty to deny an empirical state I am actually experiencing, I would be making a grave error. For example, if I pause to reflect and doubt that my finger is burning in fire, I would cause myself great harm. This is also applicable in the realm of meanings. If I deny an insight or truth posed to me through inner sensation, I would be harming myself. Thus, the reflective quality should not be employed to accept or deny empirical experiences.

Similarly, if one experiences "witnessing" (*mushāhadah*) as explained in the previous chapter, the sensory aspect of the experience is undeniable, so the reflective faculty would be of

[59] Ibid., p. 169

no use, considering that the knowledge gained during the experience is rational and grasped intuitively.

The first inner faculty that Ibn `Arabī mentions is "reason." He argues, "Reason's first mode of gaining knowledge is through unveiling. It is an incontrovertible knowledge' which means "finds in himself.[61]" Here, he points to our immediate knowledge such as when we encounter an entity and know for certain it is present.

The second inner faculty Ibn `Arabī mentions is "sensation" or empirical states (*aḥwāl*). Of it he says, "No man of reason can define the states, nor can any proof be adduced for knowing them, naturally enough. Take for example knowledge of the sweetness of honey, the bitterness of aloe, the pleasure of sexual intercourse, love, ecstasy, yearning, and similar knowledge. It is impossible for anyone to know any of these sciences without being qualified by them and tasting them.[62]" What he means is that we may not fully understand or rationalize the way we feel, but we just know that we feel. We do not know why honey tastes sweet, even if we explain how certain chemicals stimulate our taste buds and send signals to our brains, for electric signals do not fully explain sweetness. In addition, we do not need to use the faculty of reflection to taste the sweetness of honey. Nonetheless, we know honey is sweet and its sweetness is an intelligible quality that is pleasurable to us.

The third inner faculty that Ibn `Arabī mentions is "imagination." He says, "The third knowledge is the science of the mysterious (*asrār*). It is knowledge which is beyond the stage of reason. It is knowledge through the blowing (*nafth*).[63]" *Nafth* can also be translated as inflation. Imagination can be inflated into the *imaginal Realm* by the holistic consciousness, as explained in the previous chapter. The holistic consciousness can reveal knowledge of the mysteries or the hidden meanings veiled by the physical forms through the *imaginals*.

Reason:

[62] William Chittick, Ibn al-`Arabī's Metaphysics of Imagination, op. cit.: p. 169

[63] William Chittick, Ibn al-`Arabī's Metaphysics of Imagination, op. cit.: p. 169

Ibn `Arabī asserts, "Reason is a plain creature (*khalq sādhij*).[64]" To him, reason has two modes: intuition and reflection. He elaborates, "Reason perceives its objects in two modes. One kind of perception is incontrovertible, as in the case of other things which we perceive. Another kind is not incontrovertibly; in order to gain knowledge, it needs six instruments, including the five senses which we just mentioned and the reflective faculty (*al-quwwat al-mufakkirah*).[65]"

He raises intuition to the degree of senses. To him, intuition is not subject to mistakes, but reflection is. This is because intuition is immediate by the mere presence of the object of knowledge when we perceive in a holistic mode as I explained earlier; however reflection takes place after the immediate holistic knowledge occurs and is based on one's inductions, justified beliefs, past experiences, and bias. He says, "There are six things which perceive: hearing, sight, smell, touch, taste, and reason. Each of them – except reason – perceives things incontrovertibly (*ḍarūrī*). They are never mistaken in the things which normally become related to them. A group of rational thinkers have erred on this point by attributing error to sensation. That is not the case; the error belongs only to that which passes judgment.[66]" This is true. For example, if I see a person coming from a distance, I may think he is so and so, and as he approaches I discover he is someone else. In this example, my error was not in seeing that there is a person, coming but in judging that he is so and so. Thus, senses perceive and their perception is real, but it is our reflective faculty that may err in judging what we perceive.

On the other hand, reason in its intuitive mode does not err. For example, I could be seeing a person for the first time ever in my life, but I would always immediately know he is a human being without failure. This immediate intuitive knowledge is rational knowledge, but it does not seem to depend on any reflective thought process that I am aware of. My mistaken guess that the person coming is so and so depends on my reflective thought about who is coming.

Because reason at times depends on reflection, it is subject to error and is considered lower than imagination in its authenticity. Imagination depends on the data received by the senses. In other modes of perception, it depends on one's desires and emotions. In this respect, imagination is not subject to error. Even when we fantasize, our fantasy depends on an actual

[64] Ibid., p. 163

[65] Ibid., p. 160

[66] Ibid., p. 160

desire or emotion we feel, so what our imagination is doing is creating an embodiment for a real desire or feeling we are experiencing. When we see dreams, which also employ our faculty of imagination, we may err in interpreting them through our reflective mode, but the actual content never fails to embody our real emotions, desires, and they are sensory and so undeniable.

Thus, imagination is a higher faculty than reason in its authenticity, and so it is qualified better than reason for receiving holistic knowledge. Ibn `Arabī affirms, "Knowledge that is actualized through reflective consideration (*an-nazar al-fikrī*) is never safe from obfuscation and bewilderment or from rejection of that which leads to it.[67]" On reflection, Ibn `Arabī says, "It is a state which offers no preservation from error. Hence it is a station of danger (*khaṭar*). He who possesses it does not know if he is mistaken or correct, since reflection accepts either.[68]" Nonetheless, Ibn `Arabī does not deny that reason with its two modes is a useful tool for acquiring knowledge, but he asks us to be aware of its fallibility when used in its reflective mode.

Imagination:

Ibn `Arabī explains, "God made the faculty of imagination the locus which brings together everything given by the sensory faculties. He gave to it another faculty called "form-giver" (*al-muṣawwira*). As a result, nothing is actualized within the faculty of imagination unless it is given by the senses or the form-giving faculty. The material with which the form-giver works is the impressions of the senses (*maḥsūsāt*). Hence it composes forms which have no existence in entity, though all the parts exist in the sensory realm.[69]"

If we reflect, we can see that our imagination can be employed by both reason and sensation. When employed by reason, it helps us with discrete problem solving by making assumptions, forming theories, and finding rational concepts. When employed by sensation, it helps us release discrete emotions and desires. Ibn `Arabī argues that there is another function of the faculty of imagination - to acquire holistic knowledge - which is rational in nature and the experience is empirically sensory. In a sense, genuine spiritual experience integrates all the

[67] William Chittick, Ibn al-`Arabī's Metaphysics of Imagination, op. cit.: p. 149

[68] Ibid., p. 165

[69] Ibid., p. 163

faculties of the human being in holistic mode, while in the discrete mode the faculties seem to act separately. For example, when I fantasize to release my desire to love, I induce an image of a beloved to release that desire within the object of my fantasy. This is an example of how imagination is employed by sensation to release a discrete authentic or real desire. On the other hand, to reflect on how can I construct a building, I may employ my imagination while thinking rationally of the best design to circulate air, give the best view, and how the building may serve the needs of those who will inhabit it. This is an example of how reason, with its reflective ability, can employ imagination for discrete problem solving.

Such ability to unify in combination with its creative ability and authenticity qualify imagination to be the platform for divine messages, or holistic knowledge which it receives through visual witnessing (*mushāhadah*). In addition, since imagination has no restriction, it is free from inductions, dogmas, social norms, and political authority. Thus, it is an excellent platform for divine creativity. According to him, by immersing one's self in spiritual exercises to connect with the holistic consciousness, the devotee might be granted access to holistic knowledge, and the medium of such reception is the faculty of imagination.

Usually, in our fantasy or reasoning process we are in charge of the inner dialogue between us and the image or between images and themselves, and we are in control of our thoughts in the rational dialogue we create. However in the empirical encounter with the holistic consciousness (which people call spiritual experience), the "*imaginals*" are employed by the divine speech and the perceiver becomes a witness. In other words, the "*imaginal*" is in control of the experience and the flow of the incoming speech is in the form of uncontrollable thoughts and the flow of the images is not intended, or induced or controlled by the perceiver. This is why such experiences are described to be beyond the ordinary wildest imagination. Ibn `Arabī calls this perceptible experience or epistemic mode "witnessing" (*mashāhadah)*. When imagination is employed by the holistic consciousness, the perceived knowledge is rational and the experience is sensory.

To Ibn `Arabī, the faculty of imagination is the threshold between the holistic and the discrete in which both the human and the divine can meet. When the faculty of imagination is

employed by the holistic consciousness, the "*imaginals*" are deployed as a medium for divine speech. What differentiates such experiences from fantasy, memory, and creative reasoning is that it is not induced by the perceiver but it is induced by the holistic which sends the *imaginals* as messengers.

Sensations:

As mentioned before, outer and inner sensations allow us to have empirical experiences which connect us directly to the outpouring of the attributes of consciousness and its inner and outer activities. As explained earlier, to Ibn `Arabī, the knowledge we acquire from sensations is authentic knowledge, and mistakes emerges from our reflective mode as we try to interpret them or when we deny them.

Ibn `Arabī's Nineteen Methodologies of Acquiring Knowledge[70]

According to Ibn 'Arabī, the nineteen methods of acquiring knowledge or modes of knowing[71] that employ reason, sensation, imagination and action are:

1) Descriptive observations: This can employ sensing and reason.

2) Unveiling (*kashf*): I shall discuss this concept in the next chapter.

3) Making analogies [including paradoxes]: This can employ reason in its reflective mode as well as imagination.

4) Being attentive to indications: This can employ reason with its two modes, sensation and imagination.

[70] Ibn `Arabī, *al-Futūḥāt al-Makiyyah* (The Makkan Breakthroughs), Part II, Chapter Twenty Two: On Knowing The Descending of Modes and the Orders of Cosmic Knowledge, p. 166-167, translated by Amany Shalaby

[71] I have not translated the whole chapter or page but I have included here a summary of the headlines of the modes

5) Seeking the initial and consecutive states: This may employ reason with its two modes and imagination.

6) Abstracting: This may employ reason with its two modes and imagination.

7) Debating, eliciting, and formulating: this may employ reason in its second mode.

8) Making proximities through looking at common signifiers: This may employ reason with its two modes and imagination.

9) Speculation and Estimation: This may employ reason with its two modes and imagination.

10) Categorizing: This may employ reason with its two modes and imagination.

11) Tasting [i.e. direct empirical experience]: This may employ sensing and imagination.

12) Witnessing: This may employ sensing and imagination.

13) Relating the formed to the former [i.e. causes and effects]: This may employ reason with its two modes.

14) Knowing by Presence *(`al-`ilm al- ḥudūrī*): This may employ reason with its first mode, sensation and imagination.

15) Knowing by Extinction: This may employ sensation.

16) Synthesizing and Fusion: This may employ reason with its two modes and imagination.

17) Localizing: This may employ reason with its two modes and imagination.

18) Perpetual Enquiring: This may employ reason, sensation, imagination and action.

19) Serving The Demand: This may employ reason, sensation, imagination and actions.

Ibn `Arabī divides the knowers in accordance to their modes of knowing. Taking his whole epistemology into consideration, we should understand that what he meant by such categorization is that at any given moment there is a group of people employing one or more of these methods in their pursuit of knowledge. In other words, there are groups of people qualified (*ahl*) by these modes, but people may fluctuate between the modes.

By admitting the nineteen modes as methodologies for acquiring knowledge Ibn `Arabī offers us epistemological pluralism. His whole theory of knowledge makes it clear that he rejects relativism, dogmatism, justification, and skepticism. He reconciles realism and idealism as well as feelings and rationality and offers us a comprehensive theory of knowledge.

Chapter (3)

The Unveiling Of Reality

Comparative Approach to the Falling of Falsities

Between Popper and Ibn ‘Arabī

"The way of gaining knowledge is divided between reflection (*fikr*) and bestowal (*wahb*).[72]"

Ibn `Arabī

In 1991, Simon Campbell and David Roberts, two researchers working at the pharmaceutical company Pfizer, developed a drug to treat a heart condition. When tested on patients, the drug failed to treat the heart condition; but many patients reported the treatment caused them to experience erections. Pfizer decided to test the drug for the treatment of erectile dysfunction disorder. The result was positive and the drug, which is now known by the name Viagra, was approved and took its place in the pharmaceutical market[73].

This is a very good example to explain the notion of unveiling; for reality unveiled itself to the researchers and falsified their initial hypothetical scientific pursuit and replaced it with a new rational discovery. Their unveiled sudden discovery withstood the test of falsification, and this opened the way for the scientific community to accept their finding.

What Ibn `Arabī calls "unveiling" (*kashf*) of divine "bestowal" (*wahb*), other thinkers call "serendipity." On knowledge acquired by unveiling, Ibn `Arabī says, "It is an incontrovertible knowledge which is actualized through unveiling and which man finds in himself. He receives no obfuscations along with it and is not able to repel it. He knows no proof for it by which it is supported except what he finds in himself.[74]" He further elaborates: "Sound knowledge is not given by reflection or by what the rational thinkers establish by means of their reflective powers.

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[72] William C. Chittic, Ibn `Arabī 's Metaphysics of Imagination, op. cit.: p. 169

[73] Pamela Cyran, Chris Gaylord, The 20 most fascinating accidental inventions, The Christian Science Monitor, Boston, MA, issue number 1500, 2012
(http://www.csmonitor.com/Innovation/2012/1005/The-20-most-fascinating-accidental-inventions)

[74] William C. Chittic, Ibn `Arabī 's Metaphysics of Imagination, op. cit.: p. 169

Sound knowledge is only that which God throws into the heart of the knower. It is a divine light for which God singles out any of His servants whom He wills.[75]"

When we pursue knowledge through the scientific reflective mode we may succeed in such pursuit or we may not. Many scientific pursuits are built upon reflective or speculated hypothesis. Testing may reveal the error of their hypothesis or affirms its premises. But when the holistic consciousness [or the truly real] reveals knowledge by unveiling that knowledge will always withstand the test. Thus, unveiled knowledge enjoys a level of certainty.

Another known example of unveiling took place in 1928: Since 1922, Fleming was searching for antibacterial agents. His focus was on studying a substance found in tears that showed an antibacterial property. Nonetheless, he failed to isolate the active anti-bacterial substance. In 1928, while researching the properties of staphylococci he observed that in a contaminated culture plate the staphylococci had disappeared in the immediate area around the mold. Fleming succeeded to isolate an antibacterial extract from that mold which he named "penicillin[76]."

After many years, Ernst Chain and Howard Florey proved that penicillin is safe to use when they tried it on mice. Later, Chain succeeded to produce it in large amounts at the time when it was urgently needed to treat wounded soldiers during World War I. Only then was penicillin finally approved by the scientific community. Nonetheless, as Fran Slowiczek remarked: Serendipity played another role for penicillin to gain approval; for Chain and Howard had tried it on mice not on guinea pigs. Had they tried it on guinea pigs first they would have found it toxic and "penicillin" would have been deemed rationally unsafe and would not have gained approval.

It is important to notice that at Fleming's time, those who used critical conjecture rejected his finding and deemed it a mere coincidence because for them it seemed irrational that mold could contain a therapeutic element. It is also important to mention that Fleming did not have to criticize a previous scientific theory about whether mold had a therapeutic component or not to replace that with a new theory about mold. We can argue that the unveiling of the therapeutic

[75] Ibid., p. 170
[76] Martin F. Rosenman, Serendipity and Scientific Discovery, Journal of Creative Behavior, 1988, 22, 132-138 (http://www.morehouse.edu/academics/psychology/pdf/mrosenmann/Serendipity-And-Scientific-Discovery.pdf)

effect in penicillin had falsified a previously justified belief about mold which was that mold is only harmful. Fleming did not have to refute any historical theory to cause an evolution in knowledge. Yet, knowledge developed by Fleming's sudden awareness, due to his sagacity which enabled him to witness what was unveiled before his very eyes. Without such awareness or sagacity the healing property of penicillin would continue to be hidden within mold. The link between Fleming's efforts and sagacity and the unveiling incident refutes the argument of "chance" and affirms the argument of bestowal.

Karl Popper had argued that, "inductive inferences have observations as premises and theories as conclusions.[77]" This could be true in cases when we start with speculation or conjecture, but when we start with empirical sensory experience as premises, conclusions are not theories but are incontrovertible knowledge. For example, when we experience a burning sensation of fire we know that fire burns our skin and this cannot be denied for it is self-evident. I do not think Popper or any critical rationalist would deny that but when it comes to inner sensation of the realm of intelligible meanings they tend to deny that knowledge could be certain.

On the other hand, Ibn `Arabī affirms that holistic reality may reveal sensory intelligible meanings through unveiling in a similar way that it reveals physical sensations which results in certainty of knowing. Inner unveiling of meanings can occur through inner sensation, witnessing (mushahdah) through the faculty of imagination, sudden insight, and intuitive direct knowledge by being in the presence of the object of knowledge. Similar to the two physical examples of unveiling I mentioned earlier, the unveiled knowledge of meanings is certain. In fact, a deep contemplation of the two mentioned examples shows that the unveiling revealed meanings not only an empirical observation – namely the healing quality hidden in a substance. Nonetheless, the certainty of unveiled knowledge should be understood within the context of Ibn `Arabī's notion of the infinity and fluctuation of knowledge and his call to continuously free ourselves from justified beliefs based on past experiences. Thus certain knowledge at a particular moment does not mean that in the next moment it would still hold true even though it was true in the previous moment.

[77] Nicholas Dykes, Debunking Popper: A Critique of Karl Popper's Critical Rationalism, Libertarian Alliance, 2003 (http://www.libertarian.co.uk/lapubs/philn/philn065.htm)

What Ibn `Arabī proposes is that momentary knowledge of unveiling such as an encounter with a white swan, one's finger being burnt by fire, or having a sudden insight of meaning from the holistic consciousness, is not to be denied; for it gives us certainty of what we are encountering at that moment. Nonetheless, knowing that the holistic being continuously pours out new expressions as explained in the previous chapter, we can still hold an open attitude towards learning and observe changes as they take place.

This attitude is different from Popper's attitude: We cannot reasonably aim at certainty. Once we realize that human knowledge is fallible, we realize also that we can never be completely certain that we have not made a mistake[78]. He also conjectures, "Since we can never know anything for sure, it is simply not worth searching for certainty; but it is well worth searching for truth[79]." In the examples given, we had certainty of the effects of Viagra and penicillin and we cannot say we are certain and not certain at the same time and we cannot say that the truth has no authority at that time or that their therapeutic quality remains conjectural. Nonetheless we should be aware, like Ibn `Arabī , that this therapeutic quality may change at the next moment due to the effusions of the holistic reality's new attributes. Nonetheless, such new change would not necessarily falsify our previous knowledge but would just open us to receive the new knowledge.

Popper urges us, "If we thus admit that there is no authority beyond the reach of criticism to be found within the whole province of our knowledge, however far we may have penetrated into the unknown, then we can retain, without risk of dogmatism, the idea that truth itself is beyond all human authority.[80]" Ibn `Arabī would agree that truth is beyond all human authority but he would not agree that there is "no authority beyond the reach of criticism" for unveiled knowledge has an authority upon us which is the authority of the reality revealing itself.

[78] Karl Popper, In Search of a Better World: Lectures and Essays, p.4 (http://books.google.com/books/about/In_Search_of_a_Better_World.html?id=L33XSZE77OkC)

[79] Ibid

[80] Karl Popper, In Search of a Better World: Lectures and Essays, op. cit.: p. 51

Popper argues, "We may admit that our groping is often inspired, but we must be on our guard against the belief, however deeply felt, that our inspiration carries any authority, divine or otherwise.[81]" On the other hand, Ibn `Arabī asks us to believe in the authority of reality's unveiling when it occurs but to keep an open mind at the same time that reality may change its effusion in the next moment. In my view, this balance between the certain and the changeable is the right attitude; for we cannot deny what we experience now but we cannot speculate about the future based on that certain knowledge of the present. This should humble us yet keep us functional.

Ibn `Arabī's view is different from a dogmatic rigid view regarding knowledge. In this sense, claiming authority or certainty when knowledge is received through unveiling while keeping an open mind ready to accept a change when it occurs would not create a despotic attitude in the knower; for he realizes that authority belongs only to the truly real [or the holistic consciousness] not him. In this way, the knower is aware of the possibility of error when he uses his reflective faculty if he does not receive unveiled knowledge. He is also aware of the continuous effusions of the holistic consciousness' attributes which results in the flux we witness in the material world. Thus, he does not hold on or depend upon any material cause or on any discrete mode of manifestation of reality.

In his paper, "Serendipity and Scientific Discovery," Martin Rosenman writes, "Comroe (1977) mentioned 33 biochemical experiments in which serendipity played a crucial role.[82]" "Kevin Dunbar and his colleges estimated that serendipity plays a role in 30% to 50% of all scientific discoveries.[83]" Packes (1958) argued, "To perceive the unexpected result or to discern promising clues from among the multitude of irrelevant odd things that happen almost every day

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81 Karl Popper, Conjectures and Refutations: The Growth of Scientific Knowledge, p. 39, Psychology Press, 2002 (http://books.google.com/books/about/Conjectures_and_Refutations.html?id=IENmxiVBaSoC)

82 Martin Rosenman, Serendipity and Scientific Discovery, Journal of Creative Behavior, 1988, 22, 132-138.
(http://www.morehouse.edu/academics/psychology/pdf/mrosenmann/Serendipity-And-Scientific-Discovery.pdf)

83 Dunbar, K., & Fugelsang, J., Causal thinking in science: How scientists and students interpret the unexpected, in M. E. Gorman, R. D. Tweney, D. Gooding & A. Kincannon (Eds.), Scientific and Technical Thinking (pp. 57–79), Lawrence Erlbaum Associates, Mahwah, NJ, 2005
(http://en.wikipedia.org/wiki/Role_of_chance_in_scientific_discoveries)

in an active laboratory is perhaps the very essence of the art of research.[84]" According to M. K. Stoskopf, serendipity is "the foundation for important intellectual leaps of understanding.[85]"

Rosenman mentioned some of the known discoveries where serendipity played a role such as the discoveries of heparin, Dramamine, x-rays, the pancreas role in diabetes, the anesthetic effect of ether and nitrous oxide, the electric current, the connection between electricity and magnetism, the detection of cosmic microwave background radiation. Other known discoveries in which serendipity played a significant role are: the discovery of Saccharin, the cooking ability of microwaves and pacemakers. These facts and observations call to mind Ibn Arabī's observation that, "The way of gaining knowledge is divided between reflection (*fikr*) and bestowal (*wahb*).[86]"

Our knowledge of these discoveries shows a level of certainty. Otherwise, we would not be using these discoveries to achieve the purpose we know they would achieve. Nonetheless, we have to be aware that due to the flux in all entities this knowledge may change tomorrow. For example, bacteria might develop resistance to penicillin but this would not mean that our previous knowledge of the therapeutic quality of penicillin was false. It simply means that it is time to let it go and embrace the new effusion of reality.

Thus, rationality is not the only way to acquire knowledge; for unveiling continues to play major role in knowing both in the physical realm and in the inner realm of intelligible meanings. This means that I may receive unveiled knowledge about the meaning of justice at a particular moment and circumstances and my knowledge would be certain but this knowledge may change when the circumstances and time change without negating or falsifying my previous knowledge.

In spite of the flux some universal concepts remain true. For example, the universal concepts of healing remains true regardless of the different fluctuating ways it may manifest in

[84] Martin F. Rosenman, Serendipity and Scientific Discovery, Journal of Creative Behavior, 1988, 22, 132-138 (http://www.morehouse.edu/academics/psychology/pdf/mrosenmann/Serendipity-And-Scientific-Discovery.pdf)

[85] Stoskopf MK, Observation and cogitation: how serendipity provides the building blocks of scientific discovery, US National Library of Medicine and National Institutes of Health, 2005 (http://www.ncbi.nlm.nih.gov/pubmed/16179740)

[86] William C. Chittic, Ibn `Arabī 's Metaphysics of Imagination, op. cit. : p. 169

new discrete ways while other discrete ways may disappear such as when an anti-biotic healing effect disappear due to the resistance developed against it by bacteria. Thus, the only reality we can have a justified belief about is that holistic consciousness has a healing attribute but we cannot hold on or rely on any discrete material healing property forever.

The open attitude of a genuine mystic towards knowledge calls us to have "an open society" that is open for change and for admitting errors yet having a certain belief when knowledge is unveiled. The genuine mystic calls us to give authority not to a person nor to matter but to the holistic being by realizing the finitude of our rationality.

Popper too argues that "Our knowledge can be only finite, while our ignorance must necessarily be infinite.[87]" and so he asks us to make, "Bold ideas, unjustified anticipations, and speculative thought[88]" because according to him, "they are our only means for interpreting nature: our only organon, our only instrument, for grasping her. And we must hazard them to win our prize.[89]" This means he denies the role of bestowal or unveiling, relying only on the reflective power which assumes or imagines a hypothesis. On the other hand, Ibn `Arabī asks us to rely less on speculations, hypotheses, and unjustified anticipations and to try to exert effort to sharpen our awareness to become more sagacious and ready to be observant not heedless when unveiling takes place either in the sensory physical ream or in a subtle sensory realm of meanings [or attributes].

What we call "serendipity" and Ibn `Arabī calls "unveiling" does not only take place in scientific laboratories. If we reflect, we can find it in all other fields, times and places. Today, professionals in marketing, such as Allen Bonde (partner and principal analyst, Digital Clarity

[87] Karl Popper, Conjectures and Refutations: The Growth of Scientific Knowledge, p. 38, Psychology Press, 2002 (http://books.google.com/books/about/Conjectures_and_Refutations.html?id=IENmxiVBaSoC)

[88] Ibid.

[89] Ibid.

Group), urges companies to adopt a strategy for designed serendipity[90]. In other words, she advises companies on how to increase their chances or exposure to encounter an unveiling of the hidden potential of success. As Louis Pasteur put it, "In the field of observation chance favors only the prepared mind[91]."

Fleming was actively seeking a healing property, namely through a substance in tears, and the healing attribute was revealed through penicillin. Similarly, Campbell and Roberts were seeking a healing property which was revealed in another discrete way. Thus, it seems if we focus on finding something with sincerity we may at times find it but at many other times we may find something else unexpectedly. By exerting our utmost effort, we increase our exposure, our readiness to observe the hidden gifts that reality seeks to reveal to us. Whether we find what we are looking for or find something else it is reality that unveils itself to us but we may think we are the ones who are unveiling it. If we have that power to unveil reality, our efforts would not turn futile as sometimes happens.

When Ibn `Arabī speaks of unveiling he refers to receiving the hidden gifts, including hidden meanings if that was one's pursuit. He would not disagree that the seeker for hidden meanings, especially in religious scripture which deals with the philosophical view of the world, should also exert his utmost effort to expose himself to divine bestowals rather than dogmatically hold onto rigid understandings or faith.

According to him, the pursuit of exposing one's self to unveiling can be achieved by immersing one's self in vigorous spiritual practices such as how a scientist, an economist, or an artist immerse themselves into their practice within their chosen field. Thus, those who claim that religious or mystical claims cannot be tested are mistaken; for the mystic tests it in his laboratory which could be his prayer area or his retreat place or meditative state. Although no practitioner in any field can induce or guarantee the "bestowal" as a result of his practice, his practice increases his chance and prepares him to be sagacious not heedless, when the unveiling of meanings occurs.

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[90] Allen Bonde, How To Build Brand Love via Designed Serendipity, Forbes Magazine, 2012 (http://www.forbes.com/sites/onmarketing/2013/12/03/how-to-build-brand-love-via-designed-serendipity/)

[91] Martin F. Rosenman, Serendipity and Scientific Discovery, Journal of Creative Behavior, 1988, 22, 132-138 (http://www.morehouse.edu/academics/psychology/pdf/mrosenmann/Serendipity-And-Scientific-Discovery.pdf)

Ibn `Arabī explains how one can expose himself to such holistic connection and knowledge, "when the heart is safe from reflective consideration, then, according to both the Law and reason, it is "unlettered" and receptive toward the divine opening in the most perfect manner and without delay.[92]" He elaborates, "Nothing walks in the cosmos without walking as a messenger (*rasūl*) with a message. This is a high knowledge. Even the worms, in their movements, are rushing with a message to those who can understand it.[93]" When we open to the holistic we can receive the holistic messages carried by any entity we encounter.

Popper argues, "We can only learn by trial and error, by making mistakes and improvements; we can never rely on inspiration, although inspirations may be most valuable as long as they can be checked by experience.[94]" Ibn `Arabī agrees that we can learn from our mistakes but he also acknowledges the importance of insight. It is not clear what Popper means by checking inspiration by experience since receiving inspiration is an experience. His statement implies that he confuses inspiration with ordinary reflective thought. When Fleming observed the disappearance of bacteria in the area surrounding the mold he had an inspiring insight that mold must have a healing ingredient. Similarly, when a genuine mystic receives an inspiration of meaning or action he relies on direct inspiring experience not on speculation.

The holistic consciousness allows us to acquire knowledge by different tools while withholding certain gifts, hiding them to make its presence known through its bestowals. Otherwise, we would deny the presence of the holistic consciousness and believe in the material causes. It is important to mention that to Ibn `Arabī, all knowledge is bestowed by the holistic consciousness. The difference between knowledge acquired by "unveiling" and knowledge acquired through other methodologies is that the "unveiling" brings our attention to the fact that knowledge is originally given through bestowal not through the material causes.

By thinking that the unveiling of knowledge is mere accident, the conjecturer seems willing to believe in magical luck adopting the magic he attributes to mysticism and criticizes it

[92] William Chitick, Ibn `Arabī 's Metaphysical Imagination: The Sufi Path of Knowledge, p. 236, State University of New York, Albany, 1989

[93] William Chitick, Ibn `Arabī 's Metaphysical Imagination, op. cit.: p. 236

[94] Karl Popper, The Open Society and Its Enemies, op. cit.: p. 156

for. On the other hand, the genuine mystic does not admit the presence of magical luck, but believes that sagacity draws the bestowal of gifts from the holistic existence.

In a way, Ibn `Arabī 's approach is similar to that of Hegel: Both of them ask us to go beyond the finite; for within the infinite we become real and the infinite is verified within us but when we stay with the finite we lose sense of our reality and the holistic reality. In other words, if we rely only on our finite nature, we are creating an illusion; for we are not fully independent of the holistic or the infinite. On the other hand, the holistic infinite demands to manifest itself through us. As Hegel puts it, "Personality implies that as this person: I am completely determined on every side and so finite, yet nonetheless I am simply and solely self-relation, and therefore in finitude I know myself as something infinite, – universal, and free.[95]"

To understand what Hegel and Ibn `Arabī are pointing out let us examine a concept or quality, like healing, which has infinite possibilities but the only way we could know it is for it to become finite and verified when we relate it to ourselves. Otherwise, the healing quality of the holistic consciousness remains hidden or veiled from our knowledge.

Like Hegel, Ibn `Arabī believed in the anthropology of the perfect spirit, the discrete open vessel, that can receive infinite possibilities of holistic knowledge. To him, such a vessel is "the perfect human being" (*al-insān al-kāmil*) who can gain sagacious readiness to be aware of the infinite possibilities, and can serve as the threshold between the holistic realm and the discrete realm. Ibn `Arabī expresses this in his saying, "Everything other than man is a creation, but man is both a creation and the Real. In reality, perfect man is the Real through whom creation takes place, which is to say that the cosmos was created because of him. This is because the final goal is that which is sought by the creation that preceded it. What preceded the final goal was created only so that the entity of the final goal might become manifest. Were it not for what became manifest in fact, none of that would have preceded it. Hence the final goal is that

[95]The Marxists Archives, Georg W. Hegel, The Philosophy of Right, Oxford University Press, 1967 (https://www.marxists.org/reference/archive/hegel/help/quotes.htm)

for the sake of which the preceding causes of manifestation were created. And that final goal is the perfect human being.[96]"

This view bears similarity to Hegel's view of the anthropology of the Spirit or Idea but to Ibn `Arabī it is not that God desires self-awareness through the evolutionary progress but it is that God seeks to verify or actualize his knowledge through discrete modes that serve as a mirror in which he sees himself.

To Hegel, reality unveils itself in contradiction and negation, though this only appears in the external realm. Ibn `Arabī expresses the same notion in explaining the meaning of the unity of being (*tawḥīd*). The apparent opposites or contradictions are only a relational manifestation when discrete modes are compared or relate to one another but in reality opposites are negated and only the absolute existence remains. Ibn `Arabī expresses this in his saying, "Evil is opposite of good and nothing emerges from good but good; evil is only nonexistence of good. Hence, all good is existence, while evil is nonexistence, since it is the manifestation of that which has no reality.[97]"

To understand this concept we may relate to the example of extracting penicillin from mold. Mold might appear ugly, harmful or evil but the fact that it has a component, namely penicillin that could heal the human being might make manifest a hidden goodness or beauty therein. Thus, our judgment of its evil or ugliness and its good or beauty relies on its discrete relationship to us. But, in the holistic picture it is sheer goodness; for it is used for good function or purpose; regardless of our liking or disliking its function in its discrete relation to us. The unveiling of its therapeutic property negates its evil or ugliness and reveals its beauty and goodness. But in another relational discrete case, its ugliness or evil may negate its beauty or goodness. In reality, both opposites negate each other and reality is always good. Only one who is granted knowledge from the holistic consciousness can transcend contradictions and negation and witness the unity of being. In other words, the attributes of divine severity have hidden beauty and the attributes of divine beauty have hidden severity. In this sense, the Essence of

[96] William C. Chittick, The Anthropology of Compassion, The Journal of the Muhyiddin Ibn 'Arabi Society, Volume 48, 2010
(http://www.ibnarabisociety.org/articles/anthropology-of-compassion.html)

[97] William C. Chittic, Ibn `Arabī 's Metaphysics of Imagination, op. cit.: p. 290

severity and beauty or ultimate reality is holistically one. This notion is similar to the yen and yang concept in Chinese philosophy.

Contrary to this harmonizing view, Karl Popper as critical rationalist sees everything in black and white. He sees opposites: rational verse irrational, love verse hate, reason verse mysticism. He argues, "But I hold that he who teaches that not reason but love should rule opens the way for those who rule by hate.[98]" Nonetheless, according to his logic one may argue that he who teaches that reason not love should rule opens the door for those who rule by irrationality. He sees reason and love as opposites but one can argue that it is his love for reason that prompts him to call for the rule of reason. Thus, his call is not free of love and passion and he contradicts himself.

Popper argues, "Love as such certainly does not promote impartiality. And it cannot do away with conflict either.[99]"To prove his point he gives the example of two friends who wants to go out together: "Tom likes the theatre and Dick likes dancing.[100]" Then, he makes an argument that love would not solve their conflict; for each of them would insist to fulfil the other's desire out of love for him and this would create a new conflict. Popper makes a mere speculation, a guess that a new conflict would take place with no solution in sight and then he claims that it is the fault of love.

In fact, when love rules it opens the door for many possible solutions such as agreeing to go once to the theatre and once to dancing or agreeing to go to a new place or that one of them would give in to the other's choice or that both would agree to happily remain at home as long as they are together enjoying their love the place becomes irrelevant. On the other hand, when reason rules through vigorous debate about which is the more rational choice to make going to dancing or going to the theatre one can see no end to the conflicting reflective thoughts that may take place, deepening the conflict between the two which could eventually lead to violence and intolerance as each conjecturer sees his view more rational and tries to refute the view of the other.

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[98] Karl Popper, The Open Society and Its Enemies, op. cit.: p. 441

[99] Ibid.

[100] Ibid.

Ibn `Arabī proposes that love for the holistic being can enable us to see the inner beauty, trust in its process which can free us from the illusion of disunity and the temporarily suffering that results in the relational external appearance. He says, "The whole cosmos is one human being that is the beloved. The individuals of the cosmos are the bodily parts of that human being.[101]" To him, such realization is the evolution that each of us is predestined to attain. He sees love as the creative energy, "The lover loves to bring the nonexistent thing into existence.[102]" In this sense, love can create new solutions for conflicts considering the wellbeing of the whole body of the cosmos.

[101] William C. Chittick, The Divine Roots of Human Love, the Journal of the Muhyiddin Ibn 'Arabi Society, Volume 17, 1995.

[102] William C. Chittick, The Divine Roots of Human Love, op. cit.

Conclusion

"The cosmos is letters inscribed and vowels led upon the outspread parchment of existence (wujūd), and this writing continues on it everlastingly, indefinitely." Ibn `Arabī

According to the Standard Model of particle physics, elementary [or fundamental] particles are the main constitutions of matter. Elementary particles include fermions (quarks, leptons, antiquarks, and antileptons), and bosons (gauge bosons and Higgs boson). There are six quarks, six antiquarks, six leptons, six antileptons and four gauge bosons[103]. These make up twenty eight fundamental particles in addition to Higgs boson. All material forms in the universe are made up of these fundamental particles.

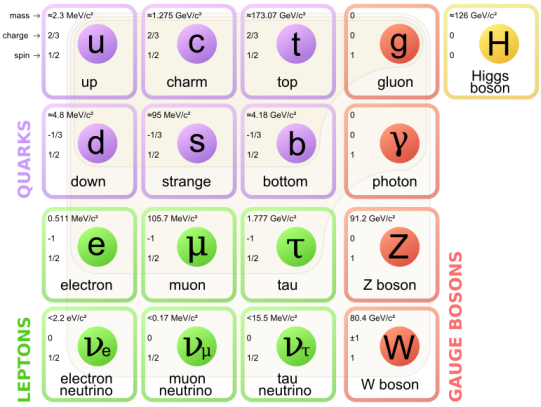

Fig. (2): Standard Model of Particle Physics[104]

The string theory suggests that, "the point-like elementary particles arise from excitations of strings which can be described as a line of energy.[105]" According to the theory, strings can oscillate in many ways. "Each oscillation mode gives rise to a different species of particle. Splitting and recombination of strings correspond to particle emission and absorption, giving rise to the interactions between particles[106]."

[103] (http://en.wikipedia.org/wiki/Standard_Model)

[104] Ibid.

[105] Ibid

[106] Ibid.

Ibn `Arabī proposed something similar and comparable to the standard model of elementary particles and string theory. He proposed that the universe is made of the twenty-eight letters[107]. Based on his interpretation of verses in the Qur'an, which state that God created the universe with the divine command "be," Ibn `Arabī argues that the universe is God's live speech made of fundamentally twenty-eight letters which, when combined, form words and sentences. In my interpretation that the words correspond to entities and the sentences correspond to species whose interactions are governed by divine scales like grammatical rules govern sentences.

Ibn `Arabī elaborates, "The name Alive is an essential name of the Real – glory be to Him! Therefore, nothing can emerge from Him but living things. So, all the cosmos is alive." That is to say that the holistic being is alive and everything that it imagines is sensory and live. The material world is the trace of the active holistic consciousness.

William Chittick elaborates, **"**Ibn 'Arabī explains God's words on the analogy of our own words, which are also inexhaustible, at least potentially. We bring the words out from our awareness, just as God brings His words out from His infinite knowledge. We articulate words in our breath just as God articulates words in His all-Merciful Breath. Our words disappear as quickly as we utter them, just as God's words are evanescent.[108]"

The Real is the holistic consciousness and its speech, which includes all existent entities. It is made of its modes of excitations of the ever-active attributes [or energies] that demand release. The splitting and recombination of these excited modes result in the emissions and absorptions of the elementary particles like a breath exhaling and inhaling. Ibn `Arabī describes that breath as "The Breath of the Merciful" (*nafas ar-Raḥmān*). This is because the exhaling or the mode of manifesting is the merciful release of the outpouring attributes into embodiments that express them. The inhaling is the unifying return within the essence of consciousness before releasing the new expressions demanded by the attributes.

As our breath is a sign of our life, the breath of the holistic being is a sign of its life, and it keeps the cosmos in a continuous flux of existence. Breathing implies an inflation and

[107] The Arabic Alphabet has twenty eight letters, in addition to the letter "*hamzah*"
[108] Ibn `Arabī, *al-Futūhāt al-Makiyyah* (The Makkan Revelations), vol. 3, p. 324, line 20 in William Chittick, The Wisdom of Animals, J*ournal of the Muhyiddin Ibn 'Arabi Society*, Volume 46, 2009 (http://www.ibnarabisociety.org/articles/wisdom-of-animals.html)

deflation. The material universe is an outward inflated accessory to the holistic consciousness' activity. It instantly deflates inwardly into the unicity of its essence before the new expression or speech is released again. But like speech, that is an outward inflation of our breath which instantly disappears, the universe's mode of existence continuously disappears into the unifying essence and reappears anew with the new flux that the excited modes demand to be expressed to keep its beauty and perfection. The mode of perfection is permanent, and the flux appears only in the material realm. In other words, the attributes work in union within the very essence of the holistic consciousness, and are poured into multiplicity as beautiful, perfect, materialized expressions. Thus, we do not step in the same river twice; for its water flows. Similarly, we can say that we do not step in the same universe twice since the old universe is gone as changes flow momentarily. In Ibn `Arabī's words, "The sigh of compassion flows through the things of the world like the waters of a river, and is unceasingly renewed.[109]" Nonetheless, the flux stems from a single holistic essence.

Ibn `Arabī argues that all letters are created from the letter Alif, which is a straight line. When Alif is twisted and curved it forms the other letters. To him, the letter Alif corresponds to the divine essence that is the perfect alignment and harmony of all attributes. This corresponds to what string theory calls the string or the line of energy [or possibilities] or excitation from which particles form. According to him, the whole cosmos is like a book which contains divine speech.

In the physical sense, the forms in the universe are made of elementary particles that arrange and combine to produce diverse forms just as our letters combine to form words and our words arrange to form sentences. This similarity between speech and form is not a coincidence; for the human being is the culmination of the anthropology of the forms within which the divine speech manifests and materializes in sound. In other words, we were given the ability to discover the embodiments of the divine speech and are able not only to name them but to also utter their names audibly. Moreover, we are able to know the meanings which the forms embody. In this sense, the outer material world and the inner world of meanings mirror each other.

[109] Henry Corbin, Creative Imagination in the Sufism of Ibn `Arabī, op. cit.: p. 271

To Ibn `Arabī, the human being who has realized the truth is like, "a pupil to the eye,[110]" through which the Real [i.e. the holistic consciousness] sees itself like in a mirror and transforms His speech in audible words. The mystic is the one who is able to witness this similarity between the inner and outer or the visible and the invisible realms.

Linguist researchers argued that audible sounds correspond to meanings. The link between sound, forms and their meaning shows the link between elementary particles and letters; for even scientists had assigned the elementary particles letters as shown in the standard model above. Indeed, these letters are not Arabic letters per say, but nonetheless, they have the same sounds like Arabic letters which makes the whole perspective valid: that we as human beings have given audible sounds to name the material letters [particles] of the universe. A mystic philosopher like ibn `Arabī had also given them meaning which links the purely material to the purely intelligible. Ibn `Arabī says, "The personal Lord speaks only in symbols; his eloquence is all in enigmas.[111]" In a sense, the mystic decodes the enigmas by reaching out to the holistic consciousness who unveils the link between the material and the intelligible to his sagacious mind.

Since the universe is like a book that contains the speech of ultimate reality, we can use the analogy of a man-made book to summarize Ibn `Arabī's theory of knowledge. Ibn `Arabī tells us that we can define different modes or levels of knowledge we may acquire from this book: First, there is the level of acquiring external knowledge about the book such as: its shape, its color, its weight, the number of chapters it contains, the number of words it has, the fonts it is printed in, the type of ink, etc. On this level we rely on our sense perception to acquire such external knowledge. We can also call it a level of acquaintance in the sense that this knowledge is not full knowledge of the book because there is a lot more to know about it, regarding the internal content of the book which we need to read, and the meanings we need to extract and understand from our reading. Nonetheless, at this level of acquiring acquaintance with the external from of the book, we can become familiar with the book's physical form.

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[110] William C. Chittick, The Divine Roots of Human Love, the Journal of the Muhyiddin Ibn 'Arabi Society, Volume 17, 1995.

[111] Henry Corbin, Creative Imagination in the Sufism of Ibn `Arabī, op. cit.: p. 279

The second level of knowing the book begins when we open it and read its inner contents and try to understand the meanings it contains. On this level we may use our rational faculty and observe our inner and outer sensations as we test the meanings we gleaned. We can reflect and form theories or ideas about the meanings. Conjecture with others can be helpful and we can also learn from our mistakes. This level can actually lead us to some provisional truths or to errors. We can call this level "theorizing" which is based on speculation that needs affirmation or refutation by testing, reflection, and conjecture. The faculties we use for acquiring this knowledge are our inner faculties: the reflective faculties of reason, sensation and imagination.

The third level of knowing the book occurs when we have a direct encounter through insight, or unveiling of the meanings as bestowed by the author within the book. Unveiling leaves no doubt about the meaning and cannot be denied, because it is rational and empirically experienced or inwardly sensed. We can call this a level of "validation," for the meanings we acquire would be valid. We can start to witness the meanings in our lives. The knowledge gained on this level is certain, but it does not mean it is closed-ended; for the continuous flux demands of us to seek new knowledge without invalidating the previous knowledge we gained from unveiling.

The fourth level of knowing the book involves the pragmatic utilization of the knowledge we acquire from the book. We can use the external knowledge to handle the book in the appropriate way that conforms to its external properties such as its weight, its color, etc. Similarly, we can utilize the meanings we acquire through unveiling and witnessing to benefit ourselves and others.

Thus we can summarize Ibn `Arabī's cosmology and epistemology in a few words: According to him, we may define four aspects to knowledge: external, internal, holistic, and pragmatic corresponding to sensation, reason, integration of the inner and outer through the faculty of imagination and manifesting expressions through outward action. According to Ibn `Arabī, to reach the third level of acquiring knowledge of attributes and meanings, one has to exert his utmost effort through spiritual/mental exercises that are recommended by experts or scientists on the way of acquiring meanings. Sincere, focused efforts can augment our intuitive ability to sagaciously observe when the bestowal of unveiling of meanings takes place.

In this way, we can know consciousness through knowing its attributes and actions. Thus, when we speak of "knowing," we need to define which aspect of knowledge we seek to address in order to examine its specific characteristic, purpose, scope and appropriate method or faculty.

On acquiring external knowledge, we need to rely on our senses and reason (intuition). On the level of acquiring internal knowledge, we need to rely on inner sensation and reflection, but we need to be aware that our reflection could lead us to right conclusions or wrong conclusions. We also need to be aware to continuously free ourselves from past inner empirical experiences and states without losing the provisional truths which we might have acquired until they change.

On the third level of gaining meanings, we should exert our utmost effort to augment our sagacity or our awareness, so that we may be able to receive the bestowal of knowledge when it is represented to us through insight, unveiling or witnessing. During witnessing, our faculty of imagination is employed; and we witness divine speech through *imaginal* forms in which images carry messages and embody meanings, and where the outer and inner or the material and the intelligible are linked and unified. During witnessing and unveiling, all of our faculties [reason, sensation and imagination] are integrated and we gain holistic knowledge. On the pragmatic level, we rely on the knowledge we gained from the other three levels and act accordingly, respecting the inner and outer Scales.

As we compare Ibn `Arabī's cosmology to some recent scientific theories, his proposal for the existence of the *Imaginal Realm* can be linked to String Theory which suggests that the three-dimensional physical reality that we observe with our senses is like a holographic movie, a mere shadow or projection of another dimension of reality. That other dimension of reality, to Ibn Arabī, is the *Imaginal Realm*. It can be considered as the curled fifth dimension of sensory intelligible real potentials or discrete *imaginal* embodiments of the excited modes of the holistic consciousness' release of its active attributes.

Ibn `Arabī suggests that the goal of acquiring knowledge is to know one's self through knowing one's qualities. By knowing one's self [or consciousness], one can know the holistic consciousness; for we inherit our qualities from the holistic consciousness' qualities such as the qualities of seeing, rationality, protection, justice, beauty, goodness, etc. By finding the qualities,

we realize the purpose of existence which is to become an authentic representative or agent of the holistic consciousness, through which more infinite expressions of the beautiful divine attributes can outwardly manifest.

According to Ibn `Arabī, to know one's self one needs to purify the self from the illusion of being independent from the holistic being, and to purify the self from its ignorance. By purifying the self, attaining knowledge of the attributes, and becoming agents of the holistic being, we can deliver ourselves from the suffering that the multiplicity of forms cause in relation to each other, and we can feel fulfilled. In other words, we can enjoy being harmonious with the cosmos and enjoy felicity by becoming actualized potentials in which the divine holistic knowledge of beauty and perfection is fully verified.

I have outlined Ibn `Arabī's cosmology and epistemology in this paper, but it is impossible to include a thoroughly detailed discussion of his work in this limited space due to the volume of work he contributed. Ibn `Arabī was a prolific writer who contributed 800 books. His magnum opus alone, "*al-futūḥāt al-Makkiyyah*," is composed of more than 1000 pages. His knowledge was rich and deep, and to understand all aspects of his philosophy requires more than one paper. I do hope that by interpreting Ibn `Arabī in the light of recent scientific discoveries and theories, I have succeeded in shedding new light on his philosophical mysticism and his theory of knowledge.

Karl Popper criticized philosophical mysticism without making any distinction between genuine mysticism and pseudo-mysticism [i.e. religious dogmas]. For example, Popper conjectures, "What I have tried to show is that the choice with which we are confronted is between a faith in reason and in human individuals and a faith in the mystical faculties of man by which he is united to a collective; and that this choice is at the same time a choice between an attitude that recognizes the unity of mankind and an attitude that divides men into friends and foes, into masters and slaves.[112]"

One has to wonder which is more divisive: Popper's call to practice critical rationalism which divides the conjecturers into rational and irrational, or Ibn `Arabī's genuine mysticism that sees all people equal as representatives of the holistic consciousness? As a mystic, Ibn `Arabī,

[112] Karl Popper, The Open Society and Its Enemies, op. cit.: p. 450

witnesses the “inner perfection” in spite of people’s outer actions. For example, he witnesses the inner insecurity of an arrogant person, and sees his suffering as a perfecting tool that seeks to rectify his outer actions if he is able to realize it. In this sense, everyone is continuously being inwardly purified, beautified and perfected, even the most irrational person. In this respect, everyone is in process to attain knowledge and eventually attain felicity even after one passes away. Recently, scientists have empirically observed separating a particle from its quantum property. The experiment is known as the 'Quantum Cheshire Cat.[113]’ The name was driven from the story of Alex in Wander Land in which the cat’s grin [i.e. property] got separated from the cat and remained after the cat disappeared. The 'cat' is used as a metaphor of the subatomic particle, and its 'grin' is a metaphor for the particle’s quantum property. If the quantum property can be separated from the particle the paradox of Schrödinger's cat can be solved. The cat, as a discrete consciousness with bundle of attributes, remains alive in its quantum state of properties as it separates from its material forms made of particles. Many religions proposed that there is life after death. Such life could be in the quantum realm where the person’s consciousness with bundle of attributes remains separated from the material form and the person continuous his journey towards knowledge and felicity.

Ibn `Arabī argues that a focus on and understanding of one’s self can beautify one’s behavior and actions. This in itself may change others, as they witness and experience the beauty of the person whose consciousness has been further illuminated without the need to debate. If one understands himself he would see how he is equal to everyone else and he will have real empathy for others. The mystic sees that all paths can sooner or later lead to knowledge of the truly real. He writes:

“My heart can take on
any form:
a meadow for gazelles,
a cloister for monks,

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[113] James Morgan, 'Quantum Cheshire Cat' Becomes Reality, BBC News: Science and Technology, 2014 (http://www.bbc.com/news/science-environment-28543990)

For the idols, sacred ground,
Ka'ba for the circling pilgrim,
the tablets of the Torah,
the scrolls of the Qur'án

I profess the religion of love;
wherever its caravan turns along the way,

That is the belief,
the faith I keep.[114]"

Definitely, what Ibn `Arabī says here does not divide humanity into friends and foes. His view is not mere "romanticism" as Popper might have argued. His writings on Christianity at a time after the First Crusade (1096–1099) and the Second Crusade (1145–1149), and after he was driven out of his home country (Spain) as a result of these wars, demonstrates that his acceptance of other paths and other people was genuine and sincere[115].

What Ibn `Arabī sees is that, even though people might outwardly make wrong or irrational choices, inwardly they have to face the consequences of their choices. This is inherently programmed to restore their perfection, and should eventually guide them to rectify their actions and their knowledge of reality. This is different from the relativist's approach that sees truth as subjective, for to him there is an objective truth to which we are all guided.

Ibn `Arabī does not call for an impossible utopia; for to him reality itself, which is consciousness, can is leading us to heavens in the inner realm. Some people may have more difficulty understanding this than others or take a longer path to attain such realization. Nonetheless, eventually everyone would come to full realization of reality. In this sense,

[114] Michael Sells, Ibn 'Arabī's Gentle Now: Doves of the Thornberry and Moringa Thicket (*ālā yā hamāmāti l-arākati wa l-bāni*), the Journal of the Muhyiddin Ibn 'Arabi Society, Vol. X, 1991 (http://www.ibnarabisociety.org/articles/poemtarjuman11.html#marvel)

[115] See: Souad Hakim, The spirit and the son of the spirit: A reading of Jesus according to Ibn 'Arabi, the Journal of the Muhyiddin Ibn 'Arabi Society, Volume XXXI, 2002, pp. 1-29 (http://www.ibnarabisociety.org/articles/spirit.html)

realization is created by reality itself, not by any external religious authority. Thus, genuine philosophical mysticism does not lead to despotic tendencies in the political or social realm.

Popper claims that mysticism is utopian. He conjectures that a utopian attempt "is likely to lead to a dictatorship.[116]" He is mistaken in his claim. On the contrary it is the never- ending debate which he calls for that is likely to lead to dictatorship, especially if we follow his recommended methodology which, he states clearly. He says, "It is easier to reach a reasonable agreement about existing evils and the means of combating them than it is about an ideal good and the means of its realization." Such a scenario creates a friend versus foe phenomenon. Each conjecturer may claim the others' action to be evil in accordance with what he thinks is a rational reason to condemn it. Since, as Popper himself asserts, our rational ability is not perfect, most likely we would mistakenly accuse each other of evil which often would lead to physical violence. Ibn `Arabī suggests a focus on finding the evil or illusions and ignorance within oneself by turning inwardly rather than pointing his finger outwardly at others.

Popper contradicts himself when he criticizes the call for good because, according to him, it assumes evil, but at the same time he calls us to name evil without leaving any room for assumptions about it. Ibn `Arabī cites the Qur'ánic story of Prophet Mosses and al-Khiḍr, a gnostic who received direct holistic knowledge from God: The story shows that our judgment of evil as based on outer observations can be mistaken. For example, Mosses observes al-Khiḍr making a little damage to a boat that belonged to a poor family. Mosses rushes in condemning the action because outwardly it appeared to be evil and cause harm. Later, al-Khiḍr explains that, according to the knowledge he received, it was the only wise option to save the boat, and thereby to save the poor family who relied on it for their provision, from a tyrant ruler who was about to confiscate every boat in good shape in the area.

As a genuine mystic, Ibn `Arabī invites us to focus on one's self more than on others; for the more I gain knowledge of myself, the more I can add more beauty to the world, and because beauty attracts, people would naturally be attracted to me and my ways without the need to debate, fight or belittle. Rationality is naturally an aspect of beauty; and genuine mystics are usually rational, and that is why they attract people. At the same time, a genuine mystic would be

[116] Karl Popper, The Open Society and Its Enemies, op. cit.: p. 149.

open and willing to accept others' genuine rational perspectives because of his realization of their divine origin.

I understand that Popper calls for respect not violence, but as he himself asserts, a theory is always more perfect than its application. Critical rationalism can be misapplied as much as mysticism can be misapplied. Nonetheless, mysticism should not be totally dismissed just because some people imperfectly misuse its theoretical ideal; for some mystics realize that ideal to a great extent.

Popper further criticizes mysticism, saying "It dreams of the collective and the union of the elect since it dares not face the hard and practical tasks which those must face who realize that every individual is an end in himself.[117]" Popper could be criticizing pseudo-mysticism; but this criticism does not apply to genuine mysticism like that of Ibn `Arabī, because he asserts that each individual is a representation of God. To him, each individual is inwardly perfect and beautiful, and so he is an end in himself and is on his path towards a definite union with God or with the Real. In other words, that union is not reserved for an elite society but it is accessible to all even though only few might have arrived to that union in Arabī's view at the time he lived. In addition, genuine mysticism requires genuine vigorous practice just as critical rationalism requires vigorous refection and debate. Genuine mysticism does not require asceticism and the abandonment of one's duties towards one's family, society and humanity. On the contrary, it calls for realizing the divine names (which are forever active) through being active in the world as its representative.

Popper also conjectures, "Aestheticism and radicalism must lead us to jettison reason, and to replace it by a desperate hope for political miracles. This irrational attitude, which springs from an intoxication with dreams of a beautiful world, is what I call Romanticism. It may seek its heavenly city in the past or in the future. It may preach "back to nature" or "forward to a world of love and beauty," but its appeal is always to our emotions rather than to reason. Even

[117] Karl Popper, The Open Society and Its Enemies, op. cit.: p. 450

with the best intentions of making heaven on earth, it only succeeds in making it a hell – that hell which man alone prepares for his fellow-men.[118]"

Again, Popper confuses pseudo-mysticism with genuine mysticism and claims it to be radicalism. I would conjecture that a world void of aestheticism and relying only on debate and falsification would be like hell void of beauty and empathy. I conjecture that Popper calls for the utopia of approaching ideal rationalism.

In my view, to accept, respect and integrate all aspects and activities of human beings is heaven. There is nothing in nature that is useless. Animals act rationally to protect themselves, find provision, mate, and function. Aestheticism is peculiar to the human being, and it is what distinguishes him from animals. It cannot be considered useless, radical or romantic even though some applications of it could be. Animals and other entities cannot paint, cannot write a play or a poem, and cannot play musical instruments. If we neglect our aestheticism, we are neglecting the greatest distinct aspect of ourselves.

Moreover, if we reflect on the history of humanity, we can see that in times of despotic tyrants, artists across the world wrote direct and metaphorical stories to expose the tyranny. They inspired revolutions and caused a positive real change in the world. There are artists who appeal to people's emotions to bring out the best within people and to change social ills and irrational habitual traditions in their societies. Philosophy with its critical conjecture cannot achieve this. It is the practice of the elite and specialists and is not accessible for ordinary people.

There are mystics like Ibn `Arabī who wrote beautiful poetry that speaks of deep knowledge which inspires thousands of people seeking knowledge of the mysteries of reality. When one hears a sad song, one feels it regardless of whether he understands its language or not. Thus art can cause people to feel empathy for each other, and that can lead to peace. Nonetheless, art like any other human's endeavor can be misguided and misused.

Moreover, art can inspire even science. In the ancient fiction story of `Ali Baba and the Forty Thieves we read about a door that opens with a password. Today, scientists have invented gates that open with passwords. Recently, scientists attempted to create a cap that resembles

[118] Ibid., p. 157

Harry Potter's cap that can make one appear invisible. This can be used for self-defense. It seems that art is visionary, and it can even inspire and challenge scientists. Art is one of the greatest tools to bring about a positive change in a beautiful and peaceful way more than what is possible through conjecture and philosophical debates. Thus, conjecture is not the only or the ideal methodology for eliminating evil, for bringing good, and for establishing peace, as Popper suggests. We can even look at Holy Scriptures as a work of art that opens the doors of divine mysteries within oneself to manifest more beauty.

Popper argues, "I do not know of any war waged for a 'scientific' aim, and inspired by scientists.[119]" This does not mean that science cannot participate in harming others or scientists never participate in immoral actions in their research. Some scientists have committed harm for the sake of scientific discoveries such as their immoral experiments on black Americans for the syphilis study at Tuskegee for which President Bill Clinton apologized on behalf of America. In addition, scientists may involve in faking research results to maintain their grants or to promote a product which can bring them financial gain. Science may not be the cause of wars but it can make wars crueler. An example of this is the invention of the atomic, chemical and biological weapons. Moreover, inventing more products as a result of scientific discoveries may cause wars as each country seeks to open markets for its new products or for resources to keep the progress of its scientific research and products or to steal other countries scientific discoveries. Thus, scientists are not immune or less involved than others in immoral activities and science like any human pursuit can be misguided. In fact, Popper's claim may lead scientists to have a despotic and authoritative attitude towards others.

I have particularly compared Ibn `Arabī's theory of knowledge to critical rationalism, and I have shown that his theory shares some similarities with Karl Popper's critical rationalism, such as his belief in the infinity of knowledge, his integration of reason, empirical experience and imagination as methodologies of knowing. I have also pointed out some differences between the two, such as extending the role of imagination in Ibn `Arabī's theory of knowledge far more than the rule assigned to it by Karl Popper. In addition, I pointed out the differences between Popper's Three Worlds and Ibn `Arabī's three aspects of reality. Furthermore, I focused on how Ibn `Arabī, through acknowledging debate and conjecture as a way of knowing, does not see it as

[119] Karl Popper, The Open Society and Its Enemies, op. cit.: p. 448

the main or ideal tool of knowing. He sees unveiling as an equal, or even more certain, way of knowing. I have also pointed out Ibn `Arabī's goal of knowing, which is to know consciousness through knowing its attributes as they manifest inwardly and outwardly. Both Karl Popper and Ibn `Arabī believe that: the more one's knowledge increases the more he can bring beauty to the world.

I conclude that Ibn `Arabī's philosophical mysticism is not a religious dogma. As Ibn `Arabī puts it, "He who knows himself knows his Lord. This Lord is not the impersonal self, nor is it the God of dogmatic definitions, self-subsisting without relation to me, without being experienced by me. He is the he who knows himself through my-self, that is, in the knowledge that I have of him, because it is the knowledge that he has of me.[120]"

[120] Henry Corbin, Creative Imagination, op. cit.: p. 95

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