**A Review of Philosophy of *Arkān* (basic constituents)in the Formation of Universe and Life in Contemporary Era**

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**ABSTRACT**

The theory and concept of Unani system of medicine is based on logic and philosophy. Hence, its foundations were exclusively laid on observation and reasoning. So, the proper understanding, comprehension and discernment of Unani system of medicine are purely based on the understanding of traditional logic and philosophy. Now in this scientific era Unani fundamentals are also required to be comprehended in the light of contemporary sciences. The present paper is an effort towards the understanding of basic precursors of life and universe as stated in literature of Unani medicine in an acceptable and comprehensible way.

**KEYWORDS:** Arkan, Universe, life, transformation, contemporary science

**INTRODUCTION**

Unani system of medicine views the origin of matter from four basic substances called *Arkan*. They are *Nar, Hawa, Ma, Arz*. The essential requirement for a substance is matter with its characteristics form. It is due to the three important aspects of primordial matter (*Hyula*), form (*surat*) and *Surate nauvia* (specific configuration). Since, any matter manifests itself through its qualities (*Kaifiyat*), so each of the *Arkan* is of specific quality arising out of pair of two basic qualities. One pair is being the active one of hot and cold and the other pair the passive one of moistness and dryness.

The present study aims to interpret the *Arkan Arba’a* in the light of contemporary scientific facts.

Jurjani proposed that *Arkan* are the basic constituents for the origin, evolution and sustenance of life. 1 This concept is corroborated by the contemporary thought that the involvement of water and organic molecules are essential for the origin of life. Before the appearance of animate things on the earth, it was a sphere of gases and heat. On close reflection, it gets clear that pre biotic atmosphere (*Hawa*) comprised of gases, vapour (water), heat and solid organic and inorganic particles. With cooling, these things settled down and concentrated according to their density. Some of them became compact and heavy, occupied the central position in the firing and revolving gaseous mass. On further cooling, water vapour condensed around and some gases could not condense and hence, they occupied the place above water in space (*Hawa e Muheet*), surrounding the gaseous sphere was a sphere of heat. 2

Regarding physical properties of these *Arkan Arba* Unani philosophers said that the *Arz* (Earth) is a simple body, the natural position of which is below the other *Arkan* due to its heaviness. In nature, earth serves the purpose of making the objects firm and stable, and maintains their forms and figures. 3,4 Water is a simple body and its nature is *Barid Ratab* (cold and moist). Its position is below *Hawa* (air). It provides easy acceptance of any shape. 1,5,6 Moisture in water means dispersion, ability of gathering again, and can assume any kind of shape, but is incapable of retaining it. 3 *Nar* (fire) is a simple body that is elusive and light in nature and it is most elevated among all other *Arkan* due to its absolute lightness. 1,5,6,7,8 Air is less subtle than fire and provides lightness, porosity, thinness and the ability to rise upwards and expansion. 1,5,6

The above connotations of Unani philosophers in respect of physical properties and phases of *Arkan Arba* (four basic constituents) can be interpreted in the light of contemporary sciences that; the physical state of a matter, its physical condition, is determined by its physical properties. Two samples of a matter that have the similar physical properties are in the same state. 9

Ibn Sina (980-1037AD) observes that, movement of *Nar* (fire) is upward and *Arz* (earth) downward, logically these *Arkan* want to go above or below in the body. Hence, it is the ordered position in the interval that is sought. So, once there is the mixture, the simple body does harbor the power permeating the whole that occurs after the mixture, whereas, when taken alone, it does not possess the power. 10, 11, 12

James T. Robinson said about mixing of these four basic substances, mixing has been done by the change of position of these spheres, particularly the solar system, by these spherical mixing of basic substances there is formation of three natural kingdoms in universe i.e. animal, plant and mineral. 13

***ARKĀN* IN NEW PERSPECTIVE**

Various forms of *Arkan* are responsible for different kinds in origin; functions, activities and their existence also due to proper mixing of their described qualities i.e. hot and cold are responsible for activeness and while passiveness is due to moistness and dryness. 10,14

For the genesis of specific *Mizaj* of species, the appropriate contribution from *Arkan* is obtained. Yet there no animate has been observed without four *Arkan* and their *Kaifiyat* (qualities). We can recognize the dominancy of *Arkan* in every animate with the help of their specific structures / morphology, habitat, and dietary habits. For instance, if *Rukn Ma’a* is dominant in organisms then their skeleton will be soft, elastic and habitat will be aquatic. Likewise, the flying property of organisms is attributed to the dominance of *Rukn Hawa*. *Rukn Nar* is responsible for the existence of thermophiles and terrestrial life indicates the dominancy of *Rukn Arz*. If the habitat of these organisms is changed then they cannot survive because the *Mizaj* of organism and of habitat. We can infer here from the opinion of Unani philosophers regarding biodiversities.

By seeing the dietary habits of *Haiwanat* ( livings) one can deduce the presence and dominancy of particular *Rukn*, i.e. in lion, because of dominancy of *Rukn* *Nar*, takes *Ghiza e Harrah* (hot diets) like meat and blood. Unani philosophers stated that the *Mizaj* of human is *Motadil* (moderate) or *Qarib e Motadil* because of equal presence of *Arkan Arba’a*, so a human takes vegetarian or non vegetarian diets or both. 15

Among these *Arkan*, two are light, *Nar* (Fire) and *Hawa* (Air) 16 and two are heavy i.e. *Arz* (Earth) and *Ma’a* (Water). 16,17,18 Another explication of *Arkan Arba* in the context of their densities; Earth’s outermost layer, as is required by the characteristics of the shape of the Earth, and assuming that this outer material is about 4 or 5 times denser than water and that water is 1000 time heavier than air, then, if all the planetary material are expanded to the density of air, it would take up a space almost 1,400,000 times larger than Earth’s sphere. 19

Avicenna believed in an emanation system in which there is a First Being from whom the heavenly intelligences emanate unto the last one, the Active Intellect, which endows material bodies with their forms, that are the four basic constituents. Their forms are only pairs of the opposite qualities *Har-Barid* (hot–cold), *Ratab-Yabis* (moist–dry): for instance, *Ma’a* (water) is cold and moist. Ibn Bajja said that these qualities are vital powers, powers that can cause motion. From these simple constituents all natural beings are generated and they receive more and more elaborate forms. 14

By amalgamation of *Ma’a* (water) and *Arz* (minerals) from below by means of heat (sunlight) and air (carbon dioxide) from above, plants have relationship with the *Arz* (earth) and the sky. 20

The process of photosynthesis is also supporting the role of *Arkan Arba'a* (four basic constituents) i.e. *Nar, Hawa, Maá and Arz* in the origin and existence of life.

One inclines to consider that *Nabatat* (plants) grow out of the *Arz* (earth), but actually most of their substances come from the *Hawa* (air). The cellulose and the other *Namiyati Murakkabat* (organic compounds) formed by photosynthesis consists of carbon (C) and oxygen (O2) atoms, which *Nabatat* (plants) obtain from the air in the form of carbon dioxide directly; therefore the weight of a wooden piece comes almost completely from the *Hawa* (air). On burning, a piece of wood releases CO2 and heat. 20

Although all life is based on cellular structure, genetic information, and its duplication and development over time, these alone do not make life feasible. The structures and functions form a viable unit only in environmentthat can sustain it. Energy is essential for allprocesses of Life. The only ultimate energy source of life on Earth is the sunlight even for, say, an animal that uses a plant that takes the sunlight to grow by photosynthesis. 21 By this transformation process of energy, we can understand the concept of *Istehala* (transformation) of *Rukn Nar*.

Life also wants a solventto liquefy and transfer the entire chemicals. *Rukn Ma’a* (water), the solvent for the existence of life on *Arz* (earth), is also a basic component of living beings. *Ma’a* (water) is appearing to be awesomely the appropriate *Mohallil* (solvent) for all biochemical reactions. One molecule of water is made up of one oxygen (O) and two hydrogen (H) atoms, and bounded with covalent bonds. 22 The atom of oxygen exerts a more strong pull on the electrons than the hydrogen (H). The sharing of electrons between hydrogen and oxygen is therefore unequal; the electrons are more often in the vicinity of the oxygen atom than of the hydrogen. So, the oxygen is more electronegative–23 the whole molecule of *Ma’a* (water) gets an electric dipole (a polar molecule). This characteristic of water strongly affects the *Kimiyawi Khususiyat* (chemical properties) of *Ma’a* (water). The electric polarity of the *Ma’a* (water) molecules gets frail electric interactions, or hydrogen bonds*,* to form among different molecules, exhibits the integrated behavior of water, as a weak bond network, 21 this supports the concept of Unani scholars that water can accept any form and shape easily.

The strong hydrogen bonding gets the molecules pulling towards each other, and provides stickiness or viscosity to the liquid. Because of this sticky characteristic, a comparatively high temperature and plenty of heat energy are required to vaporize *Ma’a* (water) into gaseous form. So, *Ma’a* (water) stays in fluid form at a broad range of temperature. 21 The molecular pulling of *Ma’a* (water) towards each other also resists the rising of temperature, and therefore more heat/ energy is essential to move up the temperature of *Ma’a* (water). Similarly, more heat/energy is generated when water becomes cools; this characteristic makes it a great temperature thermostat, both inside the cells and in a large environment. *Ma’a* (Water) reacts with other charged molecules readily; this makes it a very efficient *Mohallil* (solvent) for all ionic compounds. Water also liquefies the polar compounds where the negative and positive charges are yet together on a molecule but separated (like water). 21

At other hand, water does not tend to dissolve non-polar molecules, such as hydrocarbon chains. Though it is very important biological feature, because, these are hydrophobic molecules and in water solution tend to combine with each other rather than with the water. 21 Lipids are very important groups of molecules, which are having a polar/charged group attached at one end of the molecule, making this as hydrophilic end, and on the other end a non-polar group makes this hydrophobic end. Such types of dual-property molecules are called as amphipathic, and they arrange themselves in water solution for bi-layered membranes formation. The hydrophobic and hydrophilic interactions also influence strongly the three-dimensional folding molecules, including proteins, and assist them to provide stability. Because of hydrogen bonding, evaporation and surface tension, behavior of water is very perfect in the environment. By capillary action it can move against gravity, for instance into the vascular systems of plants, making it able to rise into the high canopies of tall trees. *Ma’a* (Water) also moves in the capillary spaces of soil and rises spontaneously from water tables into the root zones of *Nabatat* (plants). 21 Hydrogen bonding also affects the density of water at different temperatures in very specific ways. As the temperature cools, the hydrogen bonds become tighter and shorter, so that at the temperature of +4*◦*C water molecules are most closely packed to each other. At this *Hararat* (temperature) water is most dense. As the *Hararat* (temperature) falls below this, the molecular configuration starts to convert toward looser six cornered hydrogen bonding typical of ice crystals, and thus the volume of the water starts to expand. The lower density ice forms on the surface of water at 0*◦*C, and the denser +4*◦*C water is left on the bottom of the water basin. Therefore, if the waters are deep enough, or the freeze is not too severe, the +4*◦*C water can remain in liquid form under the ice cover through cold periods, which allows life to survive in deep water, protected from the freezing under the ice. This is a significant and exceptional property of water. 21 Because of this special property of *Ma’a* (water)*,* Unani philosophers proposed that water is basic constituent for life. So instead of water all other liquid substances are not appropriate for life like ammonia, which might be a somewhat suitable alternative solvent for life, is heavier in solid form than in liquid, meaning that ammonia ponds would freeze directly down to the bottom and might easily stay permanently frozen. Due to the lack of hydrogen bonding, ammonia exists in liquid form only in a quite narrow temperature range, in much lower temperature than water (between *−*78 and *−*33*◦*C, at sea level). At these temperatures, all biochemical reactions would happen very slowly. In addition, ammonia is easily broken up by ultraviolet light, and its lighter component, hydrogen, escapes easily into space. Ultraviolet sunlight can break up also water, but this reaction is slower, and produces oxygen (O2) and ozone (O3), which block the ultraviolet radiation and thus prevent the further breakdown of water. Therefore water can exist in large quantities in the atmosphere of an earth-like planet, while ammonia cannot. 21

Water is also regulating the global temperature to maintain the equilibrium of ecosystem because it is having a very much specific heat capability and more heat of evaporation (40.65 kJ/mol or 2257 kJ/kg at the normal boiling point), due to excess of hydrogen among its molecules. By these strange attributes, climate of earth is within normal range. So, Josh Willis said the water in oceans take in heat thousand-fold greater than the atmospheric air. Since, it is proved with the above discussion that *Ma’a* comes to its temperament instantaneously once it is left after warmness. 24,25

Air is a simple body, the natural position of which is above water and below the fire. This is the explanation for its relative lightness. Its nature is hot and moist. It furnishes the subtleness to the things and makes the creations easier, frailer, and hollow. An object becomes equally squeezable, and may adopt and release any shape easily due to its moistness. 3,26,27,28 So it is confirmed that the dominancy of *Rukn Hawa* is observed in flying organisms which are having may attributes to *Hawa*.

By electricity, the *Hawa* (air) is separated into two lesser *Arkan*, i.e. *Ma’a* (water) and *Arz* (earth). At present, where the whole water and the whole earth have been precipitated from air, rain is certainly as rule only water condensed. 29

However, by counterargument the natural scientist must find the natural causes of role of *Arkan* in (ecosystem), with no need to assume any special arrangements for the phenomenon. Immanuel Kant observes correctly that these sea winds have to go through periodic motions, even if no human beings would have lived on the island, it is no property other than the flexibility of *Hawa* (air), and it is also necessary for the growth of *Nabatat* (plants). Over the land the sun’s heat upsets the equilibrium of *Hawa* (air) by rarefying out the *Hawa* (air), so allowing the cooler *Hawa-e-Bahri* (sea air) to go up from its position and takes its place. These benefits are generally advantageous to our planet *Arz* (earth) and life, though, no other arrangements are essential to make them except these same general properties of *Hawa* (air) and heat, which also had to occur on the *Arz* (Earth). 19

Fire is a simple body, the natural position of which is above all the elements. 30 Fire is hot and dry in nature. The purpose of its existence is to produce maturation, firmness, lightness and intermingling. It penetrates the aerial substance and breaks the sheer coldness of the two heavy cold elements *Arz* (Earth) and *Ma’a* (Water). 3,17,27,28

Everything is able to grow, attenuate, rectify, and blends with other things easily due to absolute weightlessness and penetrative power of *Nar* (fire) and makes the things expandable, exactly it is seen in Charles Law where the expansion is the fundamental thing due to heat energy. In Unani classical texts heat energy comes under the *Nar*. 31,32 Thus its elementariness forces to integrate into compounds and its dryness has drying, roughening and solidifying effects. 3,27

Evidence of dryness of fire as it burns the dry wood easier than wet because conversion of any *Rukn* is easier into having same quality than opposing ones. 26

Of course, heat alone may not provide energy accessible to organisms, but the heat can promote a physical setting that facilitates the derivation of metabolic energy from chemical or solar (or stellar) sources. 33

When one of a variety of energy flux passes through one of the varieties of mixtures gases (CO2, N2, CH4), the outcome is a vast variety of molecules with negative free energies of formation. For instance the types of energies flux are sparks, ultraviolet radiation and heat; and the initial composition of the atmosphere affect the composition of the mixture product. Many of the molecules thus can be formed by adding energy to the gas mixture. 34 Energy fluxes, such as lightening, ultra violet radiation and volcanic heat, convert the most stable small molecules, such as CO2, N2 andH2O into combination such as sugars and amino acids, which become the initial blocks for life. 34

In every case, what organisms must do to achieve these structures involves energy. The energy requirement exists because of biological polymers are surrounded by water, which tends to degrade them by hydrolysis. Organisms acquire this energy through the catalytic activity of enzymes, special proteins which the organisms manufacture from instruction coded in genes (DNA). Alternatively, this may be expressed to make the energy needed for synthesis of polymers. 34

A material body is composed of many atoms, and its total energy can be changed in two ways: we can add further atoms to enlarge the body, or we can excite the atoms already there. The analogue of energy in a general relativistic or cosmological situation is volume, and so, if geometry is quantized, we expect that quantum cosmology allows an atomic universe to grow in two different ways: by generating new spatial atoms or by exciting those already present. 35 Since, the concept of *Nar* is supported by this scientific evidence wherein it characteristically shows the lightness, expansion and vacuum.

A hot inanimate object, a rock, a block of iron, or even a cup of tea, cools according to Newton’s law of cooling, that the rate of cooling is proportional to the temperature difference between the object and its surroundings. Hence, an inanimate object cools fast at first and then progressively more slowly as its temperature approaches that of its surroundings. 36

The exact rate of cooling for any object depends on its composition and size; technically, it depends on a property known as its ‘heat capacity’, with objects of high heat capacity, effectively being hungry for heat, cools down slowly. Water has a high heat capacity, which is one reason why ice forms slowly on lakes in winter and why the oceans are a kind of thermal ballast and help to stabilize the temperature of the planet. In so far as a human body is mostly water, it cools quite slowly to the temperature of its surroundings with the precise rate depending on the extent of thermal contact with them. 36

Along with these qualities of *Nar* (fire), the heat energy is used to achieve the work in inanimate, but animates are isothermal and utilize the chemical energy for growth. In such cases, energy might be transferred from one place to another or transformed into different forms of energies which are called as law of conservation of energy. 37

Many physical and chemical properties depend on the energy associated with each of these modes of movement. For instance, a chemical bond may break down if a lot of energy becomes concentrated in it, like as vigorous vibration. 9

Transition of matter (chemical composition and physical state), the spontaneous conversion of one stage into another stage, happens at a characteristic of *Hararat* (temperature) for given pressure. 9 All the life activities depend on the coupling of the exothermic and endothermic reactions, for the oxidation of food drives other reactions forward. In biological cells, the energy released by the oxidation of foods is stored in Adenosine Tri Phosphate (ATP, 1). The essence of the action of ATP is its ability to lose its terminal phosphate group by hydrolysis and to form Adenosine Di Phosphate (ADP). 9 From above discussion regarding energy, Unani generalization is accounted that *Harart* (energy) plays key role for life.

In case of *Ajsam-e-Jamidah* (solid matter), the lattice energy (form of energy) of a *Jamid* (solid) is the difference in potential energy of the ions packed together in a solid and widely separated as a gas. The lattice energy is always positive; high lattice energy indicates that the ions interact strongly with one another to give a tightly bonded *Jamid madda* (solid matter). 9 This proves the quality of *Nar* which provides firmness and steadiness to the body by its kaifiyyat( *Hararat* and *Yubusat).*

It is observed at cellular level, the chemical reactions in the cell delegate on extracted energy gains from nutrition, this requirement of energy should be provided continuously and constantly to maintain the energy transformation. 38 In humans, alterations *in Hararat* (temperature) are taking place to achieve physiological function; for instances hemoglobin saturation depends upon this energy differences. At 25°C saturation of hemoglobin is 88% and 56% saturation at 37°C. 37 *Hararat Ghareezi* (innate energy) accomplishes functions that are needed by animals. 39

Peter Atkins observes that the life is the outcome of an alliance of molecules. To achieve the dissipation of energy, an aggregation of molecules needs to form, one molecule perhaps to harvest energy from the Sun or from a local hotspot; another molecule to accept that captured energy and respond; another molecule perhaps to be welded to the second in what at first was achieved by simple incorporation. The harvester molecule might become entangled with the welder molecule, and the process of assimilating the environment is continued. The simple incorporation of one molecule causes such aggregate an edge on incorporating others. At that point, evolution would be under way. 36 This explanation supports the view of ancient Greek philosophers on origin of life.

In the presence of heat/ solar energy in plants carbon dioxide and water are converted into glucose and oxygen molecule (6CO2 +6H2O 🡪 C6H12O6 +6O2) and it also generates the Nicotinamide adenine di nucleotide phosphate (NADPH) which is the reducing agent needed in the dark reactions. Second process fixation of CO2 to delegate sugar, does not utilize heat directly but rather uses it indirectly in the form of ATP and NADPH. 38

Green plants play a vital role in the flow of energy through all ecological cycles. Their roots use *Ma’a* (water) and *Arz* (earth), and consequently juices go up to the leaves, where they combine with carbon dioxide (CO2) from the air to form sugars and other *Namiyati Murakkab* (organic compounds). In this marvellous process, known as photosynthesis, *Shamsi Tawanai* (solar energy) is transformed into *Kimiyai Tawanai* (chemical energy) to form *Namiyati Ajza* (organic substances), while oxygen (O2) is expelled into the air to be taken up again by other *Nabatat* (plants), and by *Haiwanat* (animals), through the respiration process. 20,40 Here the concept of transformation of *Arkan Arba* into other form can be accounted.

Life on the Earth most likely arose from vast numbers of natural experiments in which various combinations of organic molecules were mixed and recombined to form complex interacting systems, then exposed to sources of energy such as heat, light, and oxidation–reduction potentials presented by donors and acceptors of electrons. This mixing and recombination probably did not occur in free solution, but rather in fluctuating environments at aqueous–mineral interfaces exposed to the atmosphere under conditions that would tend to concentrate the organic material so that reactions could occur. Through this process, incremental chemical evolution took place over a period of several hundred million years after the Earth had cooled sufficiently for water vapor to condense into oceans. At some point, membrane bounded systems of molecules appeared that could grow and reproduce by using energy and nutrients from the environment. 33 This retrospective contemporary explanation of origin of life can be accounted by ancient Greek philosophers as they advocated that for the composition of three natural kingdoms *Rukn Nar* is necessary, for the reassembling and intermingling *Rukn Ma’a* takes part as a solvent. They also corroborated that, for growth and reproduction the role of *Rukn Nar* can be observed in terms of energy.

*Ma’a* (Water) has especially a life-giving power, since many *Haiwanat* (animals) originated in *Ma’a* (water), and the seed of all animals is *Saiy’al* (liquid). "Augustine holds *'Ma’a* (water) 'to mean 'formless matter. Water may be understood here in the sense of radical moisture (Paracelsus), which is absolutely essential to life, "H2O" being thus as it was an instrument or substrate. The plant cannot shootout leaves, flowers and fruit without it; so man cannot thrive without this radical moisture, or innate moisture. Moreover, on this view the moisture is conserved by a medium which has material humidity a concept which brings us to the domain of chemistry. 17

In the organization of *Arkan* there is either absolute excess or deficiency of these qualities (two of mass and two of energy) i.e. heat and cold are two opposite direction of energy in space while dryness and moisture two contrary reactions of the mass in time. As Einstein has demonstrated in the world of phenomenon there is neither pure energy nor pure mass in any form except as a relative proportion of both in their various manifestations. Everything as being made of mass and energy simultaneously, they were separate from each other in thought. Science also recognizes no form of mass or energy could have quality to the absolute degree, the generalization of the Unani system that all objects including what we may term as the atoms, molecules, elements, compounds, genes or chromosomes, have their own relative proportion of all the four qualities-two of mass and two of energy. The *Hararat* (heat) is present in *Nar* (fire) and *Hawa* (air), coldness in *Arz* (earth) and *Ma’a* (water), dryness in *Nar* (fire) and *Arz* (earth) and moisture in *Ma’a* (water) and *Hawa* (air), Thus the building blockers come to differ as also resemble one another. Each building blocker in this way has a resemblance and relationship through one of its qualities with building blocker next below or higher to it and by its other qualities is of an opposite and different character. It is on account of their mutual similarities and differences that they tend to act and react upon each other. By differing from each other they are able to retain their identity and by resembling one another they tend to combine with each other. 28

The law of conservation of matter and energy are accounted by the Unani scholars by generalizing that building blockers as the ultimate units of matter and energy are incapable of disintegrative alterations and that from one compound to the other, the change is merely a less or more of their quantity and quality. 28

Boyle’s law which states “Temperature being constant, the volume of the gases varies inversely as the pressure to which it is subjected”. It is considered as the action of pressure being similar to that of cold whose direction of force is opposite to that of heat. 28

The method of determining the molecular weight of various substances from the rising of boiling point and the lowering of freezing points of their solution is accounted by the Unani concept, that greater the earth in a solution greater the resistance to change from liquid to gaseous or solid state and hence greater is the weight. 9,28

When the spark of life leaves a human body at death, the four *Arkan* all dissociate and return to their primal state. It is only life itself, manifesting in an organized, living whole, that holds together the four *Arkan*. All four are in every person, although each person is consciously more attuned to some type of energy than others. 41

The *Rukn* of any particular sign shows the specific type of consciousness and method of most immediate perception to which the individual is attuned. Air signs have correlates of the mind’s sensation, perception and expression, specially related to geometric thought forms. Fire signs express the warming, radiating, energizing life principle which can manifest as enthusiasm and love or as ego. Water signs are the cooling, healing, soothing, principle of sensitivity and feeling response. Earth signs reveal attunement with the world of physical forms and a practical ability to utilize the material world. 41 These all signs are according to properties of *Arkan* which are mentioned by Unani philosophers.

**CONCLUSION**

The present facts that have been established after rigorous efforts of previous three centuries evidently furnish a lot of evidences to support the comprehensive framework of four *Arkan* as stated in the literature of Unani medicine in creation and sustenance of life. However this is the first kind of work in this direction, further study is required for better systematization of Unani fundamentals in the light of present sciences.

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