

HE is the First (*al-Awwal*) and the last (*al-Ākhir*), the Qurʾān tells us regarding Him Who is the Manifest (*al-Zāhir*) and the Hidden (*al-Bāṭin*). These Most Beautiful Names (*al-asmāʾ al-ḥusnā*) of Allāh have remained the focus of Muslims ever since they were first revealed to Muḥammad bin ʿAbd Allāh, the unlettered Prophet upon whom, the Qurʾān informs us, *Allah and His angels send salutation*, recommending the believers to do the same. Since He is the First, it follows that all that exists was non-existent; its coming into existence, the Qurʾān tells us, is merely a matter of God’s issuing a command, *kun* (*Be*). The modalities of this operative command are not mentioned by the Qurʾān, but it does specify a definitive order and scheme of creation: He made the Earth in two days; stabilized it with mountains; spread His bounties and blessings on it in four days; He then directed His attention toward the sky, which was still in the form of a steam or smoke (*dukhān*); in two days He fashioned the seven heavens (*sabʿ samawāt*), and adorned the sky nearest the Earth with stars, and protected all of them. The Book further informs us that the seven heavens are paths traversed by the angels in fulfillment of Allāh’s commands.

How are we to understand these cosmological verses of the Qurʾān? Perhaps a good start is to begin by asking how the Companions of the Prophet understood these verses. Ibn Kathīr relates in his celebrated *tafsīr* that Ibn ʿAbbās, ʿAbd Allāh bin Masʿūd, and many other Companions affirmed “Allāh’s Throne was on water when He had not yet created anything. When He then decided to create, He caused a steam to rise from the water, from which He made the sky; when the water dried up, He fashioned one Earth from it and then differentiated it into seven Earths over two days, on Sunday and Monday. He created the Earth on the Whale (*ḥūt*) mentioned in the Qurʾān in *Nūn waʾl-qalam*. And the Whale was on water and the water upon stones (*ṣafāh*), and *ṣafāh* upon an angel, and the angel upon a rock (*ṣakhrah*)...and the Whale moved and the Earth

trembled, so Allah set down mountains upon it which stabilized it, and He the Exalted said: *We set down mountains upon earth so that it does not move*".

A modern reader may exclaim: What does it mean to say "the earth was on the Whale and the Whale on water"! This bewilderment is, however, a result of the loss of vocabulary used in sacred cosmology, which, in turn, is a result of the eclipse of that cosmology by modern science whereby "Whale" has only one meaning and can refer only to the large mammal in the ocean. Astronomers may recognize that the word is also used for the constellation Cetus, but even they are likely to limit its meaning to the physical constellation lying above the equator containing the variable star Mira. If we wish to grasp the meaning of the tradition we will first have to understand various layers of the meaning of the Arabic words used in the tradition; let it suffice here to say that *hūt* does not mean the mammal in the ocean and *ṣafāh* does not refer to pebbles one finds by the wayside.

This and other traditions going back to the Companions provided the foundation for the emergence of a sacred cosmology in later Islamic thought. This cosmology is concerned with the order of creation in a comprehensive manner. To understand the cosmos in this manner is to understand the inherent relationships between the Creator and the cosmos, on the one hand, and between the cosmos and humanity, on the other. These are intrinsic relationships, not externally construed modalities. The cosmos that emerges from this sacred tradition is a cosmos which contains not only visible entities—mountains, rivers, trees, planets, stars, suns, and moons—but also the invisible angelic worlds. Further, it is a cosmos which comes into existence from within the Qur'ānic Creation Theme, and thus points us toward the goal and purpose of its coming into existence.

As opposed to this sacred cosmology, the new scientific cosmology built upon the work of Tycho Brahe, Johannes Kepler, Galileo Galilei, and Isaac Newton claims to know exactly what happened some five billion years ago, within the first ten seconds of the so-called Big Bang, which is generally taken as the beginning of the cosmos. Built upon a complex mixture of speculation, theory, mathematical calculations, and supported by observations gathered through such powerful tools as the 200-inch telescope on Palomar Mountain, this cosmology has evolved rapidly during the twentieth century. That is to say, "rapidly" in relation to the 2500 years prior to 1905 (the so-called "year of wonder"), when Albert Einstein published five papers which set the stage for the two most important revolutions in science, changing both our conceptions of space and time and of matter and radiation.

The somewhat dramatic accounts of Einstein's five papers sometimes

obscure the fact that it was not truly that sudden a leap which brought us face to face with a space-time continuum subtly curved to give rise to gravity. Nevertheless, Einstein's initial insights, built upon the work of earlier scientists (notably Lorentz and Poincaré), are taken as the beginning of modern cosmology, for, eleven years after the publication of his initial papers, his *special* theory of relativity would lead to the full formulation of his *general* theory of relativity, and his initial insights into the nature of matter and radiation—built especially upon the work of Max Planck, who asserted in 1900 that energy of radiation is produced in discrete little bundles, in direct proportion to the radiation's frequency (the famous $E=hf$ equation)—would lead Bohr, Heisenberg, Schrödinger, Dirac, and Fynmann to work out the Quantum Theory, which in turn would change our perception of the physical world.

These insights have ushered us into a cosmos filled with not merely stars and planets but galaxies extending in all directions as far as our telescopes can see. The first of these galaxies was shown to exist when Edwin Hubble resolved the stars of the Andromeda nebula in 1923, with the help of then newly built 100-inch telescope at Mt. Wilson. Hubble even calculated the rate of this expansion, based on the observation of twenty-four galaxies, to be about 150 kilometers per second per million light-years of distance. Since then, the process of mapping the great expanse of an expanding universe has given rise to numerous new discoveries, leading to the emergence of the now popular Big Bang model of creation. The origin of the Big Bang goes back to the 1940s, when Fred Hoyle first used the term in his BBC radio series.

No sooner had the Big Bang model seemingly resolved all the mysteries of the cosmos than there appeared a set of difficulties which rendered it problematic. Hubble's estimate of the rate of expansion was wildly inaccurate, and it was not until 1958 that it was dropped to 15 to 30 kilometers per second per million light-years. This, however, was merely one of the difficulties with the initial calculations which had set the entire time scale for the so-called evolution of the universe on the wrong path. Subsequent theories were to give birth to many variations of the Big Bang model and the process continues, producing, in turn, an inflationary universe, a chaotic universe, multiverses, an eternal universe, and so on. As cosmologists, physicists, and astronomers peer through earlier times, searching for the Beginning, their models break down at the approximation of a classical description of space-time, at times of the order of 10^{-43} seconds, and the whole picture dissolves into quantum ambiguity, leading Stephan Hawking to exclaim: the universe will neither

be created nor destroyed—it will only *be*.

What one gathers from these attempts to understand the Beginning leads us back to the beginning of all things—the First, Who in His infinite Wisdom created out of nothing a vast cosmos for a purpose and for a duration the knowledge of which is given to none. This may sound like dogmatic re-assertion of doctrine, but in fact it is a considered reassertion of the traditional cosmology that tells us that there exist worlds upon worlds in a hierarchy bound by a vertical axis that points to Ultimate Reality. This is not merely an admission of human inability to fathom the extent of God's creation—though that is a self-evident truth—but, more importantly, it is an attempt to draw attention to the pitfalls which arise out of an excessive attention to the corporeal. This primacy of the corporeal has all but obscured the immaterial from the modern outlook, with the result that while science claims we live in an expanding cosmos our real cosmos is rapidly shrinking.

This shrinkage, which is like a veil, is rapidly obscuring certain facets of our relationship with the cosmos and its Creator. These disappearing cosmoses of the spirit have left humanity in the abysmal state of self-denial in which nothing but the corporeal remains. There is no denying the fact that corporeal reality has its own place in the hierarchy of existence, but what has ironically been lost in the emergence of modern cosmology is exactly the relative aspect of corporeality. Devoid of that Divine presence which alone can impart a relative importance to the corporeal world in the overall scheme of things, the macrocosm not only becomes bereft of the Light which allows us to remain cognizant of its ontological dependence on the Creator, it also distorts the relationship between the macrocosm and the human being—the microcosm consisting of three distinct entities: the spirit (*rūḥ*), the soul (*nafs*), and the body (*jism*).

A restoration of the true relationship between the microcosm and the macrocosm inevitably requires a restoration of the relationship between the Creator and the one who wishes to peer into the beginning of all beginnings, wherein is only the First, Who is also the Last—and to Whom we are all to return.

WaʿLlāhu Aʿlam

Wuddistān

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