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Man and the Universe in Patristic Thought: the Teaching of Maximus the Confessor and Modern Cosmology

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The paper, as a historical insight in the development of views about the place of humanity in the universe, discusses the relevance of patristic thought, in particular ideas of the 7th century's Byzantine monk-theologian Maximus the Confessor for modern cosmology. It is argued that patristic ideas on the central position of humanity in the universe and the possibility of its knowledge remain relevant for modern cosmology which, in a way, allows one to elucidate old philosophical ideas. The modern scientific claim on the power of humanity to articulate the universe as a whole is compared with Maximus' ideas on grasping the sense of creation through the God-given ability.

Keywords: Cosmos, cosmology, creation, incarnation, logos, man, patristics, space-time, theology, universe.

Introduction

In view of persistent claims of some modern scientists that the success of cosmology brings to light the ultimate frontiers of human knowledge, the aim of this paper is to attempt to understand the sense of cosmology in view of historical development of human thought by demonstrating that cosmology reproduces in many of its aspects perennial puzzles related to human existence in the universe. In a way this paper exercises that which can be called philosophical commitment, that is the commitment to understand the existential sense of the universe, or, to be more precise, to "understand" what it means to think *of* or commune *with* the universe. What could it mean the thinking *of* or communion *with* the universe in the conditions of a scientific and technological age in order to avoid this thinking being enslaved by the sphere where knowledge is operated according to some social, but still historically contingent standards? Correspondingly, how could we dress this thinking in words while avoiding all cultural superstitions which engulf our language? And even in the case where we believed that we have achieved such a goal, could we expect any recognition of that form of thinking which intentionally extends beyond the view of the universe which is framed by varieties of scientific projects, conference discussions and numerous publications? All these questions implicitly presuppose that the scientific way of thinking of the universe does not cover the

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fullness of our communion with the universe which is concealed in the very fact of our existence. This concealment follows, for example, from the fact that humanity is able to interact not only with the physical world of corporeal objects, but also with the realm of intelligible forms, to which cosmology can attest only indirectly. To think of the universe is thus to explicate the sense of the universe on existential grounds, where our understanding of the adjective "existential" follows from the sense which was asserted by existentialists in the 20th century, namely, that human life and existence is the primary and unquestionable metaphysical fact from which the whole reality is unfolded. Thinking of the universe in existential categories thus implies the extended vision and perception of the universe, which, in words of a 7th century Byzantine monk-theologian Maximus the Confessor, is the *makro-anthropos*, that is that which was created in order to be humanised.

To think of the universe on the grounds of existential communion entails freedom of such thinking. It does not necessarily imply the overthrowing of scientific authority in the questions of physical cosmology: it implies that cosmological theories and hypotheses can be interpreted not as propositions about outer realities but as movements of the human heart and spirit which reflect a fundamental anxiety of existence. In this case the universe is perceived as a certain *whole*, whose *partial* phenomenality is explicated by science. This *whole* includes not only the physically fragmented or united cosmos, but it includes the infinity of human life (the infinity of relations of human beings to created existents) in the universe. Correspondingly all accumulated forms of knowledge, established in history to this very date, are merely pieces and moments, temporary and provisional sketches of the immensely mysterious phenomenon of personal beings. The "non-technlogical" thinking of the universe, even if it will not be able to reproduce this "whole of the universe" (which was, however, attempted in works of art and poetry) and hence will remain no more than a symbol rather than reality, can receive its justification in a deep hope, that through this thinking we learn something of ourselves which has never been present in our vision of all. Being an intentional thinking, thinking of the universe as a whole brings that one who thinks beyond any conditional objectification and positivity which could seem as that which fulfils this thinking. In a way, thinking of the universe is transcending the limits of thought at all which requires from the enquirer exceptional discipline, courage and humility in front of the fact that the task will never be fulfilled and that they are ready to learn of themselves something which could shatter the image of their own "I".

By thinking of the universe as a whole, we attempt to explicate our intrinsically ambivalent existential situation, being a part of the universe, in its particular time and space, and at the same time being at "that" paradoxically central "nowhere" from which the wholeness of the universe is unfolded. Some cosmologists can object to this by saying that in terms of time we are living in a very special era in the universe, that it is only now that it is possible to detect the universe's evolution, its origin in the Big Bang etc. The universe as described by specific cosmological theories is not contingent from the point of view of these models. However, from the point of view of the very possibility of such a description, that is from the point of view of the contingent facticity of life of knowing persons, it is still contingent. The pole of "nowhere" remains intact simply because cosmology, which deals with the physical background for existence of embodied human persons (that is, its necessary conditions) is not able to shed the light on the nature of the sufficient conditions of existence of intelligent

observers and theoreticians of the universe. Being engaged in thinking of the universe as a whole we are immersed not so much into the present of the scientific discourse of the universe but into the present of thinking itself. And this present is dictated not only by the advance of contemporary physical theories of the universe but to a great extent by the advance of thinking *per se*, that is its free philosophical mode which is not subjected to the logic of the already known but follows that which Husserl called humanity's "infinite tasks". Here it is appropriate to quote K. Jaspers, rephrasing a little his text, that our historical consciousness of the universe, in spite of being a temporal phenomenon, is a "free-flying" consciousness without "any ground and original point accessible to knowledge, ultimately rooted in that source which is always and necessarily present in ourselves" (Jaspers 1982, s. 77). This type of thinking, flying away from mundane realities and technological delimiters, will reveal deeper and clearer the fact of our, as Heidegger termed it, "planetary homelessness" (but still centrality) which pertains to the present intellectual, social and political unpredictability of the human condition. One must, perhaps, amplify this point by using the term "cosmic homelessness" implying the lack of understanding of the human place in the whole universe. We are homeless because the universe is infinite, and in spite of some claims of our centrality in the universe, we still do not know our place in it, that is we do not know scientifically the grounds of our facticity in it. What we know for sure, however, is that it is us who articulate the universe, so that, perhaps, as some claim, we are in the centre of the universe, but the question of "where" this very centre ultimately is, remains in the field of perennial *certitudes négatives*.

While Jaspers could say that the realisation of "cosmic homelessness" (as the denial of the historical consciousness) becomes "the metaphysical consciousness of being (Sein), which being constantly present, must become evident in true being (Dasein), as if in eternally present" (Ibid.), according to Heidegger, our "cosmic homelessness", that is inability to answer questions about own essence, drops a shadow of doubt with regard to being of the universe itself (our "cosmic homelessness" can be qualified as *non-being*).[1] Then it is from this perspective of our own finitude, mortality, non-attunement to and incommensurability with the universe that one must have the courage to think of the universe in order to assert ourselves. However this assertion of ourselves has a particular spiritual importance only for those who still value the humanity of the humans, naturalness of nature, justice of the police, and other perennial values which crown man in the centre of the world, for whom this world is given to fulfil the "infinite" task of finding its destiny in the union with the underlying foundation of the universe.

It is not difficult to see that thinking of the universe as if we think of the thinking itself at present, allows one to establish certain articulations of the overall temporal span of the universe, its past, present and future in conscious acts which fight oblivion which pertains to the eternal flux of being. When articulated, the universe is being remembered not only as its realised past. The question of active remembrance of the universe, is the question of such an understanding of human life in which past, present and future are not considered anymore as signs of the all-annihilating *Kronos*, but as being able to be integrated through remembrance in the image of humanity living in tension between a thanksgiving for existence and a hope for its non-transient sense.[2] To study the universe does not mean to establish a simple vision of the world on the grounds of mundane curiosity or personal needs. It rather forms a vision of that "selfhood" of the universe (as the *makro-anthropos*) which

is truly important for one's existence and which brings to unconcealment the truth of the human existence. When we speak of the "self" of the universe, we do not presume that it does have personal features but, allegorically speaking, humanity by looking at the "face" of the universe, sees this "face" as looking at themselves, and it is this all-penetrating "glance" of the *makro-anthropos* that forms the image of humanity as its ability to see the infinite in the finite. In a certain sense human beings, as they are sustained by this last mentioned glance, want to respond to it thus asserting not only their longing for the commensurability with the universe, but also their infinitely transcending lordship over the universe resisting their cosmographic insignificance and a fear of being crushed under the weight of astronomical facts. Pascal compared man with reed, thinking reed, in the universe, the weakest but thinking element in the chain of being, so that a drop of water can kill a man and the universe does not need to arm itself in order to crush man. "But even if the universe should crush him, man still would be more noble than that which kills him, since he knows he is mortal, and knows that the universe is more powerful than he is: but the universe itself knows nothing of it. All our dignity, then consists in thought. It is through thought alone that we have to lift ourselves up, and not through space or time which we cannot fill."[3]

The vision of the universe along the lines just formulated above definitely transcends the scope of science. Its sense is the acquisition of those ways of thought which have already been exercised by many great thinkers before the era of scientific cosmology has come. What was typical to them is the integral vision of the universe in the context of human life and not vice versa, that is positioning human life in the background of the vast cosmos. The existential issue was to make the sense of the universe through establishing the sense of life. Correspondingly the vision of the universe was sometimes very imaginative and committed to a certain faith in existence of the ultimate foundation and sense of existence. Interestingly enough is that such a vision, being imbued with spiritual and existential motives, was not eliminated at all through the development of modern cosmology. Om the contrary the existential sense of modern cosmology can be elucidated by re-invoking the old but never outdated themes making the sense of the universe to be comprehensible only from within the history of humanity. This is the reason why, as a matter of a historical analogy and as a case study, we undertake in this paper a hermeneutical analysis of some modern cosmological ideas about the universe and humanity in it through reading a 7th century Byzantine theologian, nowadays a Saint, Maximus the Confessor, who is often quoted in historical studies on Patristics and its cosmic dimension.

Maximus the Confessor and his "cosmology"

Maximus the Confessor lived his human life fourteen hundred years ago in a cultural and social environment considerably different from what we have today. Having been imbued with the Greek philosophy originating from pre-Christian times, he (as well as the Church Fathers before him) must have inherited the picture of the physical world based in the Aristotelean philosophy and Ptolemy's (2nd century BC) astronomy in which the cosmos was presented by a system of the heavenly spheres, bearing the moon, five planets and the sun, rotating around their geometrical and ontological, immovable centre with the earth. The cosmos was finite and concluded by the sphere of immovable stars, a boundary of the universe, beyond which was a mysterious nowhere. We

cannot say with certainty how much of this ancient astronomy was known to Maximus. He probably was not concerned too much with knowledge of the world *per se* and cosmos did not have the same importance for Maximus as for the pagan philosophers. Correspondingly when one invokes the term "cosmology", "cosmos", "cosmic vision", "cosmic liturgy", "Christocentric cosmology" etc., reflecting in the context of Maximus' writings that often claimed "cosmic dimension" of Greek Patristic or Orthodox theology, these cosmic connotations are not those which were meant by the ancient Greek philosophers and certainly not by modern physical cosmology. One could suggest, hypothetically, that Maximus could have been interested in reconciling the ancient Greek cosmology with that of the Genesis of the Bible which does not have any indication of the spherically structured universe with the centre at the spherical Earth. However, we cannot find any direct references to this in the writings of Maximus; unlike his predecessors Basil the Great and Gregory of Nyssa, Maximus did not produce his own explicit "Hexameron". One can add to this that the perception of the finitude of the spatial dimensions of the natural world following from Ptolemaic cosmology must have been complemented by the perception of the finitude in duration of the world that followed from Biblical teaching. Maximus probably thought of the universe as being few thousands years old after the time it was created. However, this cosmographic, or, so to speak, natural finitude was inherent in Maximus' thought not only because of astronomical ideas and Biblical tradition; for Maximus as a philosopher, space and time were finite first of all on the grounds of their epistemological understanding as expressions of finitude and limitations in general. For example, temporality is a characteristic of the finite creation related to all things: "… everything is certainly in time, since everything that possesses existence after God possesses this existence in a certain way and not simply. And therefore they are not without beginning. For if we know how something is, we may know that it is, but not that it [always] was."[4] In other words, the universe cannot be infinite in time and space because it was created out of nothing, so that its hypothetical infinitude would contradict its created nature. In this sense the notions of infinite space and endless time are contradictory as being a mixture of that which is supposed be uncreated (the infinite) and created (which is always given in rubrics of limited spatiality and limited movement (temporality)). Time and space [place] in Maximus exist simultaneously and cannot exist without each other: there is a common source of their contingent facticity in their otherness.[5] Contemporary cosmology would agree on the interlink between space and time based in general relativity; however, space and time in physics are relational upon created matter whereas in Maximus this relationality is linked to the conditions of creation in general between the ultimate causation of the world and its final consummation. In this sense space and time are not only forms of the world's finitude, but also the conditions of the Divine presence in the world.

Modern cosmology would be in a partial agreement with what concerns the finite past of the universe, whereas the same cosmology asserts the indefinite accelerating expansion of the universe in the future. In terms of space it is understood that the visible part of the universe is limited because of the conditions of observation, but not because of any philosophical assumption.[6] Whether or not the universe is spatially infinite beyond the visible universe, remains a theoretical conviction. In spite of the conviction that allows for the universe to be potentially geometrically infinite, the point of view of Maximus can be valid

if we restrict ourselves to the epistemological finitude which follows from the creaturely nature of the universe.

From what we have said so far it follows that Maximus' thought is not irrelevant and can be engaged with modern cosmology; however, the term "cosmology" which is used in the scholarly studies of Maximus must be carefully elucidated. Cosmology in Maximus is related either to the created world as a whole with its generic ontological structure, or to the very "act" of creation of the world out of nothing, in "which" the wholeness of the world is represented in an encapsulated form. Cosmology in Maximus is related to the constitution of the created world, for example, as the distinction and difference (*diaphora*) between the visible and invisible (sensible and intelligible) realm in creation. Cosmology in Maximus is realistic in the sense that Maximus does not enquire into the conditions of the very possibility of constituting the world. From a modern philosophical point of view this cosmology is based on the presumption *of faith* in those realities which are posed by human subject as ontological ones. The access to the universe is guaranteed by the acceptance of the fact of life as that saturated givenness in the human Divine image which cannot be denied. In other words, a realistic stance in anthropology connotes with a realistic stance in cosmology: anthropology mimics the same basic differences in creation and legitimises, on the grounds of the analogy, the process of knowledge and understanding of the universe. It is through theological anthropology that the Christian dimensions enter cosmological considerations and, vice versa, Christian teaching receives its cosmological sense. However, all these aspects of the so called "theological cosmology" can be related to cosmology understood as the science of the physical universe only to a very limited extent. Then it becomes clear that the issue of discussing the legacy of Maximus the Confessor in the context of modern cosmology presupposes a different level of enquiry, which brings both Maximus' teaching and the modern view of the universe to the common "denominator", humanity itself, understood not through its cosmically insignificant position portrayed by physical cosmology, but through its central place in creation being a centre of disclosure and manifestation of the universe originating in its Divine image.

Another dimension of Maximus' legacy in the context of modern cosmology arrives from an observation that studying and thinking of Maximus in the 21st century is not so much studying facts and models of physical reality. It is rather studying and learning his ways of thought. As was asserted by G. Florovsky, to study the Fathers of the Church is, first of all, to "acquire their mind" to learn how to think of the world through the eyes of faith in God in order to discover this world as being rooted in God. In other words, how to see the reality of the world in its intimate link to its creator, to approach life in the universe in its God-given integrity and communion and to see the presence of that God's reality in every aspect of the human wonder of the world, every scientifically articulated fact. In this sense the cosmic vision of Maximus the Confessor is interesting not in terms of its physical aspects, but in terms of its impact on the understanding of divine humanity and its central role in articulating the universe. Maximus' vision of the universe teaches us how to withstand the attacks of the exterior sense impressions and the lure of the aesthetic artefacts of scientific theories in order to preserve our human dignity, to preserve humanity at all costs and not be swallowed by the immensities of the "beautiful universe", or, as it was said by G. Marcel in the middle of the 20th century, not to be crushed under the weight of astronomical facts.

Contemporary scientific vision of reality condemns humanity to physical slavery, its consubstantiality to the tiny portion of the material stuff in the universe. In this sense physics is immanent and monistic: it chains us to the world and its necessities which follow from physical laws. It disregards those dimensions of personal existence which deviate from the phenomenality of objects. The value of Maximus' thought comes from the exactly opposite move: he teaches us of how to *transcend* this phenomenality. When we say "transcend" it does not mean that we pass the universe over, leave it behind, and aspire to God, the transcendent. "To transcend" in this case means to preserve our difference and distinction from within the universe, to retain personhood and our divine image even in those conditions, when science positions us in the universe as a "virtually non-existent, dust". "To transcend" means to be able, while studying the universe, to develop the "inner kingdom" of the human heart, which, being conditioned by the necessities of embodiment in the universe, still retain the faculty of communion with the source and giver of life. In this sense, the cosmic vision of Maximus the Confessor is never dated and outdated, because it teaches us how to increase our faith in God through studying the universe and then withdrawing from it. This latter thought corresponds to a phenomenological attitude to cosmology, namely that cosmology speaks not only about outer physical realities. Its theories attest to the structures of human subjectivity, that is to the structures of disclosure and manifestation which reflect the search of humanity for the sense of its own existence.[7] It is through this search that cosmology advances the sense of personhood as a radically different state of being, different from all non-hypostatic entities which cosmology predicates. It is through this ever unfolded sense of personhood that the reality of the Divine Personhood manifests itself with an ever unceasing force.

Creatio ex nihilo in Maximus the Confessor and modern cosmology

There is no need to speak at length about one of the major elements of the Christian teaching, namely the affirmation that the world was created by God out of nothing. Maximus predecessor's Basil the Great and Augustine asserted this differently. Basil the Great, in his *Hexaemeron* made a distinction between creation of the intelligible world with no temporal flux and no spatial dimension, and the creation of the visible universe together with "the succession of time, for ever passing on and passing away and never stopping in its course." [8] Basil asserts that the meaning of the Biblical phrase "In the beginning God created" must be understood as "in the beginning of time" (Ibid., p. 55), that is God created the visible world together with time, and it was the beginning of time in the visible world[9]. In order to articulate the a-temporal nature of "the beginning of the world", and to remove any causation at the beginning in terms of time-series, Basil affirms that "the beginning, in effect, is indivisible and instantaneous...the beginning of time is not yet time and not even the least particle of it" (Ibid). Augustine in *Confessions*, XI addressed the problem of the origin of time directly, affirming similarly to Basil, that: "The way, God, in which you made heaven and earth was not that you made them either in heaven or on earth....Nor did you make the universe within the framework of the universe. There was nowhere for it to be made before it was brought into existence"[10]; the universe was not created by God in time, but was created with time[11]. Augustine affirmed the creation of the universe and time within it as the only consistent expression of the Christian affirmation of *creatio ex nihilo.* The *nihilo* could not be something, it could not have any attributes of created things, it must be an absolute philosophical no-thing.

Maximus the Confessor, following his predecessors, repeats that the world was created out of nothing because of God's will and goodness, by his Wisdom and Logos. The createdness of the word implies its non-eternity and consequently its beginning in time. However, in spite of that this beginning in time can be understood only from within the already created world (according to Augustine this cannot be a "beginning" as if it would be seen outside the world), Maximus points to a difficulty that can arise. One reads a passage from his *Centuries on Charity* 4.3: "God, who is eternally Creator, creates when He wills by His consubstantial Word and Spirit, because of His infinite goodness." This is a general statement which does not raise any questions because this is a matter of religious conviction. Then Maximus anticipates a possible question on details of this creation of the world: "Nor must you object: Why did He create *at a certain time* since He was always good?" Here the question is formulated from within those categories of sequence and time which pertain to the already created world. Indeed, if the creation of the world happened several thousand years ago measured by the created time, why this age of the world is such as it is; in other words, can we enquire into the nature of this age's contingent facticity as it is contemplated from within creation? Maximus gives a characteristic response – "no": "The unsearchable wisdom of the infinite essence does not fall under human knowledge."[12] It is impossible to transcend the boundaries of the created and to enquire into its facticity on the grounds of the impossibility of knowing the divine volitions and intentions; creation with its scecific and contingent features remains a divine mystery connected with the divine providence. This response has general apophatic overtones related to the unknowability of God. [13]

However, one must analyse further some implications of the question, discussed by Maximus. If the question about "when" of creation is related to the temporal span of the physical universe seen from within this universe then one can find parallels with contemporary cosmology. Formally, Maximus' question can be translated by using modern cosmological language into a question about the initial conditions of the universe which fix its physical parameters, including its age. But physical cosmology cannot give an account of the initial conditions for dynamical laws which drive matter and space of the universe. Correspondingly cosmology cannot provide a clear explanation why the age of the visible universe is 13.7 billion years. Since we can speculate on the nature of the initial conditions only from within our universe by extrapolating backward the properties of the observable universe, the 'knowledge' of the initial conditions thus achieved does not tell us anything about these conditions, as if there were special trans-worldly physical laws responsible for these conditions as the outcomes of these laws.[14] Being bounded by the universe one cannot know the "laws" of the initial conditions of the universe as if they could be attested from beyond the universe (we can only postulate them). In this sense Maximus' response "no" with respect to the initial conditions of the created universe exactly corresponds to "no" of scientific cosmology in respect to the initial conditions which fix the contingent facticity of the universe.

However, Maximus's question about "when" of creation can be posed and reformulated differently as if the universe appeared out of something preexistent. One can imagine a pre-existent space-time continuum in which our universe appears at some "moment" and "location" in this pre-existent continuum. Then the question "when" of creation will have another sense as a particular "when" of pre-existent time. We are not concerned here with the nature of this preexistence, that is whether it is related to the

multiverse, or something "before" the Big Bang, or to a cycling universe of Penrose's type. What interests us is a possibility to approach creation as an "object", as a transition from something "before" to that which is here and now. This would be typical for the natural attitude to "look at" the creation and ask a question on the specificity of this or that "moment" of its happening in the preexistent scheme of things. Certainly one could refer to Augustine's ways of responding to such a question simply pointing to the fact that "before" the world was created no entities such as all-embracing space or time could exist. Such an Augustinian response is true in its philosophical essence, but it would be useful to confirm this truth through a negative assessment of modern models of creation with preexistent space-time. Indeed to ask why creation "now" but not later or before, would imply the possibility of approaching the creation in the objective scheme of things, that is to position it as an "event", as a particular happening in the series of causations.[15]

As an example of "creation" in preexistent space time one can consider a model of "creation" of matter in the universe (not space and time) from the initial state with the total energy of matter equal zero. This requirement can be treated as a meta-law, imposed on matter of the future universe in the *pre-existent* space and time. Such a model was offered by Tryon[16]. The major feature of this model is that the universe originates in *preexistent* space and time as a result of a fluctuation in the physical vacuum (a physical state of quantum matter in which the values of all observables of particles are zero). Geometrically the development of such a universe can be presented as a future light cone, whose apex is positioned completely arbitrarily in preexistent space and time (see Fig. 1). It is exactly this arbitrariness of the "place" and "moment" of origination of the visible universe in the background of the preexistent space and time, which constitutes a difficulty similar to that of Maximus: it is impossible to specify and justify why the universe originated at a specific point of space and time (that is it is impossible to specify "when" of this origination). In this theory the spontaneous creation of the universe

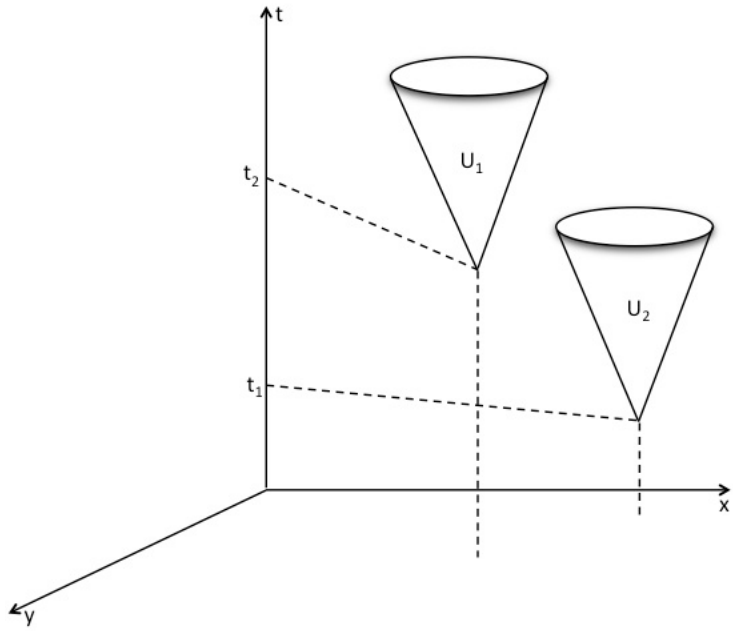

Fig. 1. Indeterminacy of "creation" of the universe in cosmology with preexistent spase and time

could occur anywhere and at any moment of pre-existent space and time. (A variety of different universes could originate at different locations of the preexistent space-time, driving cosmology to face a serious problem of the mutual influence of different universes; see Fig. 1.)

Correspondingly the question of "when" of "creation" not only cannot be answered, but, in fact, does not have any sense, for if the preexistent space-time is infinite, an infinite time could have passed since our universe originated. But this makes the question of temporality of the moment of creation devoid of any meaning. [17] Similarly the question of a spatial location of such an origin in pre-existent space does not have any sense.[18] There is no need to argue that this kind of model has nothing to do with creation out of nothing in a theological sense, for space, time, the meta-law, and the quantum vacuum are all assumed to be pre-existent. It is reasonable to talk about the *temporal origination* of the material universe rather than about its creation out of nothing.[19]

The beginning of the world and its created temporality can be grasped from within the world, so that this beginning is the constituted beginning from within the world. No constitution or objectivisation of this beginning is possible from beyond the world, because this "beyond the world" is not an "object" but rather the condition of the very possibility for the world to be manifested *to* and articulated *by* human beings. In this sense the quest for the beginning of the created universe reveals itself as a quest for the limits of human consciousness attempting to grasp the facticity of the world.

What is interesting is that the refutation of models of "creation" of the universe in preexistent space-time leads us to further clarification of what is meant by creation in theology. Indeed, the logical difficulty of models with pre-existent space and time is connected with the inability to locate the moment of time and place in space where the universe originated, from outside, by transcending beyond the universe itself, into its imaginable preexistent "before". One can argue about the beginning of time within the visible universe by extrapolating its expansion backward in time. But this will never allow one to claim scientifically that there either was or was not pre-existent time "before" our universe came into existence. The situation was described by Kant in terms of his first cosmological antinomy as a logical tension between the thesis, that the world has a beginning in time and is also limited as regards space, and the antithesis, that the world has no beginning and no limits in space; it is infinite as regards both time and space. [20]

The abovementioned antinomy which arises in cosmology with pre-existent space and time can be considered from a different perspective, without any reference to space and time, which brings us even closer to the thinking of Maximus the Confessor. For example, the thesis can be treated as the affirmation that the visible universe is unique and finite as regards space and time, whereas the antithesis is that the visible universe, being finite in terms of its temporal past, is one particular representative out of the *ensemble* of universes with different boundary conditions (corresponding, in the previous logic, to different moments of their origination in preexistent time). The plurality of different boundary conditions corresponds to the logical multitude of a Platonic-like kind, so that the antinomial nature of any predication on the uniqueness or not of these conditions becomes evident because the ontological status of that which is predicated in thesis and antithesis is different: while with respect to the visible universe we can make an empirical inference, an assumption that there is an ensemble of universes, which we cannot verify empirically, requires an intellectual inference, that is the reference to the realm of the intelligible. In this case the whole meaning

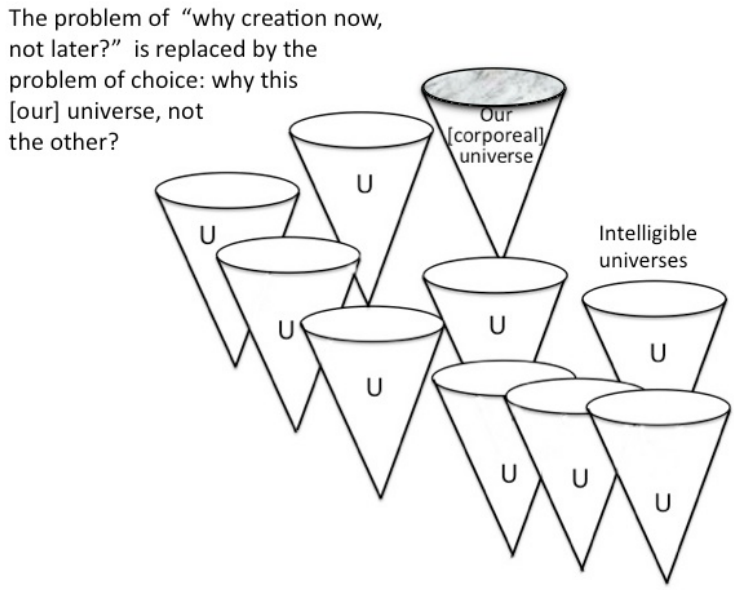

Fig. 2 An ensemble of intelligible universes with different initial [boundary] conditions

of the antinomy reveals itself as predication about two ontologically distinct realities, that is the empirical visible universe and the Platonic-like ensemble of the universes. If we extrapolate this reasoning back to the problem, discussed by Maximus the Confessor, the question posed by him in the *Centuries on Charity* 4.3 must be transformed in such a way that the temporal aspect of the specificity of the creation of the world is replaced by the aspect of "choice" of this particular world out of many potential possible worlds, namely "Why did God choose to create this world but not the other?" (See Fig. 2).[21]

To tackle this issue Maximus introduced different arguments.

The Origin of the Universe and the *logoi* of Creation

In *Ambigua 7* Maximus states that "the *logoi* of all things known by God before their creation are securely fixed in God.… Yet all these things, things present and things to come, have not been brought into being contemporaneously with their being known by God; rather each was created in appropriate way according to its *logos* at the proper time according to the wisdom of the maker…."[22] He makes a distinction between knowledge of things by God in their *logoi* and their actual coming into being. Knowledge of things even if they are known eternally does not imply the necessity of their existence as created. There is an ontological incommensurability between things known by God as potentially existent and those which were brought into being. If one applies this thought to the universe as a whole, one can suggest that the knowledge by God of this universe with a potential to become created does not necessarily imply its creation. There is a gap in the necessitation between knowledge and actual creation which is based, according to Maximus, in the Divine wisdom and will and which not only brings all things into existence at their proper time, but ultimately brings the actually existing world as a whole into existence. The words of Maximus related to the wisdom of the Creator with regard to the "determination" of a proper moment of creation can be, by a matter of philosophical suggestion, applied to

the "determination of the choice" of the world as such, or, in cosmological phraseology, the choice of the world with those boundary conditions which led to the actual display of the universe. Then the question is: "Could God know not only of this world which he has actually created, but other potential worlds which either have not been created at all, or have been created in a different *mode* of being?" If the answer is yes, then we must suppose that just as God applied his wisdom for creating this world, he must have been wise of not creating other worlds, or creating them in a different *mode* of being. This wisdom reveals itself through God's will to make a choice in the actual creation of this world. Correspondingly all other worlds, being only potential possibilities either remained as such, or they were implanted in creation, for example, as intelligible entities with the *logoi* not to acquire any corporeal shape, remaining the images and prints of the divine wisdom accessible to an intellectual search and contemplation. In this sense the very idea of the variety of the "boundary" conditions for the created world manifests itself as a pointer, a *paradeigmata*, towards the detection of the divine wisdom. If our way of extrapolating Maximus' thought is correct, then it relieves us from the uncertainty of creation related to the allegedly preexistent choice of the possible worlds with different boundary conditions and makes the problem of the specific temporal beginning (as special boundary conditions) of our universe to be transformed toward the problem of the *special* ontological distinction, or extension (*diastema*) between God and the world. This transformation allows one to look at the distinction between God and the universe (that is between uncreated and created) in terms of a definite structure in creation, namely in terms of the difference between that world which has its corporeal representation and those potential worlds which do not have such a representation remaining no more then intelligible traces of that which could be known by God, but not created in the corporeal form. The actual choice of creating our universe is thus a *setting up a special difference in creation* between intelligible (created non-corporeal worlds) and sensible (our actual world). In this case the setting of the boundary conditions for the actual physical universe, as a corporeal choice out of many possible universes, implies that these boundary conditions, or the origin of the physical universe, presuppose a definite structure of the intelligible realm which complements the actual universe in the whole creation. In different words, the choice of the corporeal world out of many potential worlds means setting up the basic ontological difference (the basic *diaphora*) in creation, which thus becomes a constitutive element of *creatio ex nihilo*.[23] The will and wisdom of God in creating this world with its particular immanent age (which is the subject of Maximus' discussion) is thus encapsulated in the specific *diaphora* between this world and all those which are not destined to become corporeal. And it is this last sentence that unfolds to some extent the sense of the *logos* of creation of our universe.

Coming back to the initial stance of Maximus on creation, one could suggest that his ultimate objective was to provide a logical and philosophical argument that the world had a beginning in the sense that it is not eternal and hence incommensurable with God. The fact that the world's parts are subject to temporal flux and decay is part of the mundane experience. The question of the temporality and decay of the world as a whole is much more problematic. Everything depends on how this wholeness is understood: if it is just an additive something comprised of the parts, then the criteria of the finitude and created temporality can be applied to the world as well. However there is a difficulty, which is well understood in modern cosmology, that one cannot speak about the universe as a whole as

being in space and time and hence as subject to the same constitutional synthesis which is applied to separate physical objects. In this sense the universe as a whole is not in space and time and that is why it is unclear how one can contrapose the whole universe to the Divine eternity and what kind of incommensurability is implied here. The logical inconsistency of applying such notions as space and time to the universe as a whole, does not remove, however, the fact that the universe is created and its contingency requires a sufficient foundation. If this universe as a whole is not eternal (in terms of immanent time), then it has "transcendent beginning" which rather implies a logical origination, or dependence upon something which is absolutely necessary. Even if cosmology would pronounce that the world is eternal as evolving indefinitely in terms of the immanent time, this eternity as an endless temporal flux has a different ontological status in comparison with the transworldly eternity understood as absolutely necessary being.

Here we come to an interesting point about the wholeness of the universe. For Maximus the whole or the totality of the universe was not of the same ontological order as the parts of the universe (*Mystagogy* 1). In his time, when physics, applied to the visible universe did not exist, it was natural to suspect that the decoherent and chaotic parts in the created order are brought to the unity by the supreme principle of harmony and beauty, which is God himself. This was the point of view of Maximus' predecessors, such as Athanasius of Alexandria, as well as that of Maximus himself. Nowadays cosmology presents the whole of the visible display of the universe as ordered and structured due to the physical laws which act across the universe, including its remote past. Correspondingly, the wholeness of the universe is understood as its parts being held together by the forces of nature. There still remains a question of the origin of these laws: some suggestions point to the *boundary conditions* of the universe which are responsible for this order. Ultimately, this entails that the totality of the universe is associated with a kind of "beginning = boundary" which "separates" this universe from that which is "beyond" it in an ontological sense, that is, as contingent upon "that" beyond. Cosmology asserts the totality of the universe not as a sum total of its parts, but as that unique remote state in the past of the universe which is treated as the originary origin of the universe, the so called Big Bang. One can responsibly think of the totality of the universe only through the notion of the Big Bang because it is only in the vicinity of the Big Bang that one could potentially have access to the universe in its entirety: the visible part of the universe comprises only a tiny part of the universe as a whole, physically relating to it only through the common origin in the Big Bang. Graphically this can be illustrated with the help of a diagram where the visible universe is indicated by the onion-like curve, whereas the rest of the circle is that universe which is invisible to us (see Fig. 3).

The centre of this diagram symbolises the Big Bang and the concentric circles symbolise the universe as a whole corresponding to different cosmic times. The unity of the universe for every moment of time is guaranteed only by its procession from the original Big Bang state. Humanity, being contingently positioned in the universe, could potentially have access to this totality only through the Big Bang, that is in the remote past. However the Big Bang, being a mental construction can be accessed only intelligibly. In this sense the notion of the Big Bang is similar to what was implied by Maximus when he claimed that the totality of the universe is not of the same ontological order as things of the universe. Being an intelligible construct the Big Bang (as well as the universe as a whole) is of a different ontological order in comparison with particular empirical things in the universe.

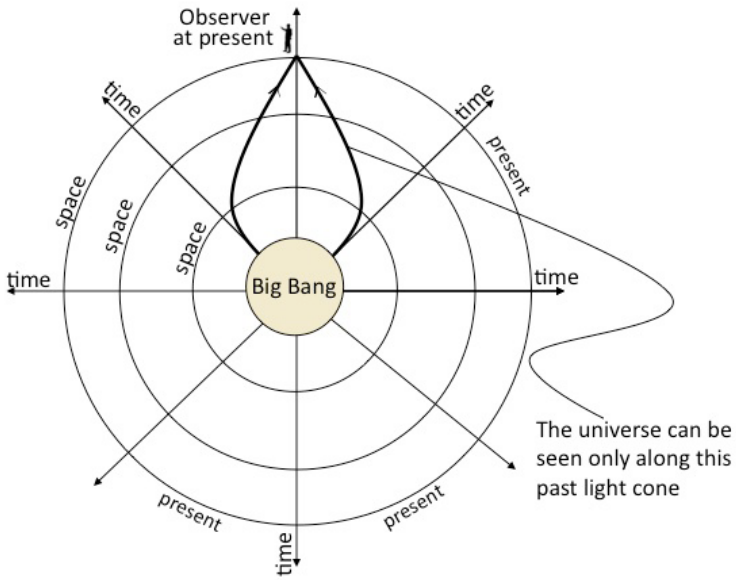

Fig. 3 The unity of the universe as generated from the Big Bang

One can conclude that the cosmology of the evolving universe with a temporal flux and decay pertaining to it, points to the original "state" of a different ontological order, beyond which physics is naturally problematic. This entails in turn another conclusion that the totality of the universe in its contingent formation refers to its otherness, which in scientific cosmology (not in theology), can mean not the transworldly foundation, but an ontologically different (but created), *intelligible* unity, which is invoked by theoretical scientists. In this sense, epistemologically, one cannot assert the wholeness of the world as a physical property *per se*; rather one can only claim that as such it belongs to the intelligible world, whose existence, however, can be asserted through the observation of things empirical. Where this intelligible unity comes from and why it is possible to detect it at all, these questions can be answered by reference to Maximus: according to him the principle of unity in totality explicates to some extent the content of that to which he refers as *logoi of creation*.

In brief, the *logoi* of natural created beings, which are the forming principles and ideas of the sensible and intelligible things, on the one hand, are apprehended as existing through the links with their common source, that is the Divine Logos; on the other hand, the same *logoi* can be considered with respect to the world which is constituted by them. The whole created world is seen then as manifesting the different intensities (condensations) of the incarnation of the Logos, which is mysteriously hidden in His *logoi* under the surface of the created being (*Ambigua* 10 [PG 91: 1129B]). The *logoi* have a complex relationship to the Logos of God and to the created world. On the one hand, according to Maximus the *logoi* are preexistent in God; on the other hand God called them to realization in concrete creation to show forth the continual presence the Logos in Creation. One can assert that the *logoi* are both *transcendent* to and *immanent* with the created world; as immanent they manifest the divine intentions and principles of every single nature, that is, of every object, thing, law and their intelligible image; they manifest the *existential purpose* of every thing they materialize in the created order, but they are not themselves created.

In other words their "material" manifestations through sensible things and their intelligible images, do not condition them from within the creation; for they have the ground of their immanent manifestations in the transcendent Logos. The *logoi* do not dissolve the Logos, and their unity in the Logos does not eliminate their individuality. The *logoi* are thus neither identical with the essence of God, nor with the empirical forms of existence of the things of the created world. Maximus invokes a geometrical analogy (used before him by Proclus, Plotinus and Dionysius the Areopagite), that of the radii and the centre of a circle, in order to describe the relationship between the Logos, Who is the center of a circle, and the *logoi* which represent the radii of the circle, originating from the center and terminating on the boundary of a circle, which imitates the created realm (*Mystagogy* 1*, Chapters on Knowledge* 2.4).

Now, coming back to the issue of the totality of the universe, one can give an interpretation of the cosmological diagram at the Fig. 3, combining it with the graphical presentation of the *logoi* by Maximus mentioned above. On the one hand, seen from within the created universe, the principle of unity of this universe can be referred to the Big Bang as that originary origin which gives rise to all states of the physical universe afterwards. The radii at this diagram originate at the original singularity of the Big Bang and terminate at the circumference which denotes the present day state of the universe as a whole. The wholeness of the universe represented by the set of circles at this diagram manifest itself as an intelligible "object" (a construct) which is accessible only through intellectual intuition because there is no empirical access to the universe outside of the past light cone (onion-like curve). The causal unity of the universe could have been in physical existence only in its past, that is in the Big Bang. From the point of view of observations even this remains no more than a hypothetical possibility because the universe was hot and non-transparent before a certain early age (300-400 thousands years after the Big Bang) so that at present stage of knowledge the "empirical access" to the past of the universe is possible only through indirect experiments based on fundamental particle theories. The *logos* of the universe, that is the principle of its unity and totality, can thus manifest itself either through a causal connection of the visible universe and the rest of its totality at the Big Bang, or, through *intelligible causality*, linking the present-day visible universe with the allegedly existing overall totality of the universe (beyond the visible). The contemplation and intellection of the universe as a whole leads human mind to a split in the representation of the universe onto its physical part and an intelligible counterpart, revealing that which Maximus the Confessor called the basic *diaphora* in creation, namely the difference between the realm of sensible and intelligible.

Physical cosmology is not satisfied with a simple assertion that the universe as a whole can only be an idea (rational of aesthetical). It wants to go further in order to justify a scientific methodology of thinking and speaking of the universe as a whole. Since the Big Bang predicts the multitude of causally disconnected regions in the universe cosmology needs to remove the epistemological consequences of the contingency of the human position in the universe and thus the contingency of that display of the astronomical universe which we observe. This causal disconnectedness can be interpreted as the initial disordering of the universe related to its being created out of nothing, that nothing which does not have any principles of order. However, there is still one ordering principle which unites all causally disconnected parts of the universe "together", namely the principle that all these parts have a common origin in that nothing. The

principle of this origin, its *logos*, being a principle by definition, must have its explication and an outward formulation. Cosmology states this principle under the title "cosmological principle", that is the principle of the cosmographic uniformity of the universe: the universe as a whole, to be physically comprehensible and explicable, must look the same at large scales from all possible hypothetical places in the universe which are not accessible to human observers. One sees that the *logos* of the universe, that is the underlying principle of its creation, receives its further elucidation as the *principle of explicability* of the universe by humanity. But this principle of explicability, or rationality, of the universe is generated by the Logos of God through Whom and by Whom this universe is created. The elucidation of that which is meant by the *logos* of creation through the cosmological principle does not entail that this *logos* is *known* in the sense of Maximus. One can account, for example, neither for the facticity of this principle as such, nor for the contingent facticity of the universe. In spite of this one has a twofold elucidation of this *logos*: the constitutive difference in creation between the visible (empirical) and invisible (intelligible), is brought to their mutual unity in knowledge through the cosmological principle of homogeneity in the created order.

Finally, one can combine the cosmological diagram (Fig. 3) with the graphical presentation of the *logoi* by Maximus, extending it to three dimensions where the vertical dimension corresponds to the transworldly foundation of the universe (see Fig. 4).

On the one hand the vertical dimension links the original point of the universe (the Big Bang) with the Logos of God by whom and through whom the visible universe (as well as the non-observable and invisible) was brought into being. This vertical link can be associated with the *logos* of creation, related to the universe as we understand it. However the presence of the *logoi* is not restricted only to the Big Bang. The universe as a whole (including the visible one) is supported and sustained by the *logoi* in all aspects of its existence, so that the *logoi* proceed from the Logos to all other points of the

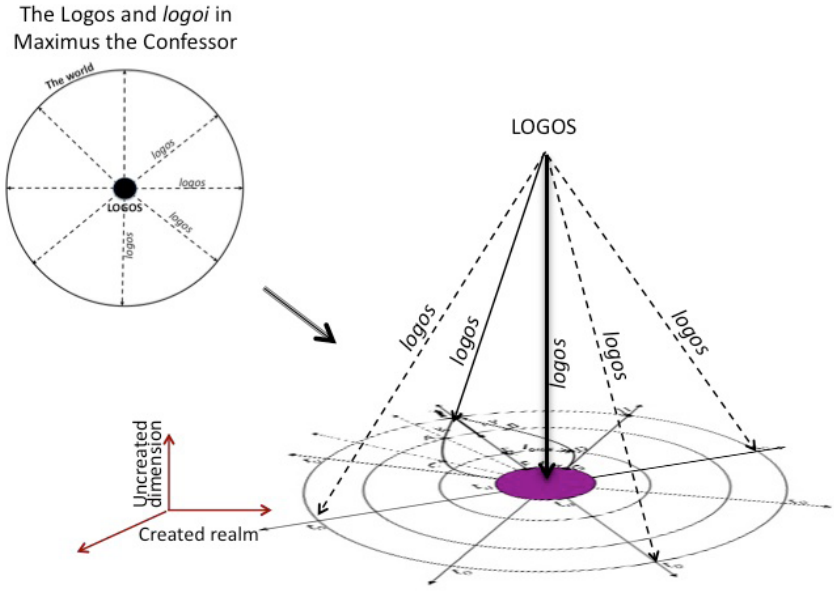

Fig. 4. From theogenic uniformity of the universe to its cosmographic uniformity?

universe (the boundary of a circle) at present. In this sense the meaning of the cosmological principle as the equivalence of all points on the circumference at present time can be interpreted as a *theogenic* uniformity related to the presence of the *logoi* in all potentially possible points of the universe. The *logos* of creation receives its further formulation as a principle of *theogenic* uniformity of the universe. The question of what are the grounds that cosmology can proceed from the *theogenic* uniformity to the cosmographic uniformity (cosmological principle) relates to the anthropological issue of how and why the Divine image in humanity (perceiving *theogenic* uniformity preteoretically) cascades towards its outward theoretical expression through the principle of spatial or material uniformity. The temporal beginning of the created universe in the diagram above means that the Big Bang itself was not in place on the same ontological level as it is for the Logos: the appearance of the original point in the diagram implies the appearance together with it of the whole plane in which the diagram was drawn. However, it is quite difficult to express graphically the ontological "non-simultaneity" of the universe and the Logos, that is the creation of the universe.

The important conclusion from this discussion is that modern cosmology, in spite of all its attempts to predicate the initial state of the universe through the theories of the Big Bang, comes to the same conclusion that was grasped long before by Maximus, namely that the "original" state of the universe which symbolises its unity, identity and totality cannot be defined in immanent terms; it requires a founding principle which explicates the *logos* of creation of the universe, the principle which can be formulated in Maximus' words as "the whole of creation admits of one and the same undiscriminated *logos*, as having not been before it is"[24], or, "the divine principle which holds the entire creation together is that it should have non-being as the ground of its being." [25] This helps to give the discursive explanation of what it means to *detect* the presence of the *logos* of creation from within the created realm: namely to establish the understanding that every created object, intelligible or sensible, is theogenically uniform, that is it has one and the same transcendent ground of its existence in its non-existence (non-being), or, in different words, in its otherness. It is this *theogenic* uniformity which cascades, in cosmology, to the *cosmographic* uniformity.

Modern cosmology is unanimous in that the Big Bang was an *event* in the past which is extraordinary and antecedently efficacious with respect to all possible events that happened in the universe since then. This exceptional event, predicted theoretically and having some observational consequences tests the limits of the physical sciences. That physics which has been discovered on the planet earth in a relatively short historical period can be applied only up to this boundary in the past of the universe beyond which any scientific claim is problematic. In spite of the obvious fact that there is no evidence for claiming that this event can be associated with *creatio ex nihilo*, its theoretical prediction at least sheds the light on some constitutive elements of *creatio ex nihilo*, which explicate the *logos* of creation of the universe. We intentionally avoid any talk about the "explanation" of the creation of the universe out of nothing; instead we speak of the detection of the presence of the *logos* of creation, the *logos* of that originary state in the universe with respect to which human comprehension experiences an imminent difficulty.

It is important to realise that the detection of the *logos* of creation contains in itself a movement of human thought in two opposite directions: on the one hand the detection of the *logos* takes place through the contemplation of the universe through scientific advance as a process directed

to the future. On the other hand an attempt to detect the *logos* through the theory of the original past of the universe positions the intended material pole of cosmological explanation in the temporal past of the world. In other words, the explication of the *logos* of creation of the universe as related to its past becomes the *telos* of cosmological explanation.[26] To understand the cosmos and make it fully "humanised" in the sense of Maximus' "makro-anthropos" idea, one must understand its origination, those constitutive elements in creation which point to the *logos* of creation of the universe. One can reiterate by saying that when Maximus appeals in the natural attitude of consciousness to the idea of the *logos* of creation, he implies that the unfolding of the sense of this *logos*, its mental and linguistic explication (through or with the help of the natural contemplation[27]) is a dynamic process which is always directed to the future, but whose ultimate goal is to understand the sense of creation of the world either in terms of its temporal past or in terms of its ontological otherness with respect to God. Since, according to Maximus, the creation of the world has its root in the divine wisdom and will, the detection of the presence of the *logos* of creation through cosmological theories ultimately points towards the wisdom and will of God which are hidden in creation. The *telos* which pertains to the human ascent to the Divine, through overcoming obstacles to the unity of creation and God (and by which, according to Maximus, it is destined to be transfigured), becomes in cosmology the *telos* of cosmological explanation, that is an ultimate unfolding of the sense of the universe's contingent facticity, as well as the contingent facticity of human beings. However this *telos* can only be fulfilled through the reference to the saving economy of the Divine in the created world. This brings into our discussion another dimension which makes the issue of creation of the world and the sense of the universe to be closely connected with the Incarnation of the Logos of God in Jesus Christ.

Humanity in the Universe

Maximus the Confessor's theology asserts the creation of the world out of nothing by the Divine wisdom and will. This means that on the one hand there is no necessary link between the essence of God and the essence of the world, on the other hand the world is created according to that wisdom which makes it possible to fulfil the Divine economy. This entails that the perennial issue of the contingent facticity of the created world must somehow be linked to the divine intentions with respect to this world. The contingent facticity of the universe means that its physical parameters have specific values: modern cosmology teaches us that the physical universe is old and huge. Humanity lives in the periphery of a mediocre galaxy among billions and billions of other galaxies, in a mediocre stellar system with the contingent number of planets at one of which exists life. Contingency of humanity in the universe means that it is because of the spatial and temporal incommensurability between the universe and human embodied creatures that there is no sense of talking about the cosmographic centrality of the planet Earth. There are specific cosmic conditions which must *necessarily* satisfy for human beings to exist in their biological form. These conditions tell us not only that we live in a very special planet but that we live at a particular temporal era in the universe's development. This era is characterised by two major factors: the availability of the physical material (stardust) to form human bodies, and particular large-scale parameters of expansion of the universe, which allow us to make insights on its evolution and origin in the remote past. Thus, in spite of a mediocre position in space, we live in a special era of time which is effectively responsible not only for our physical shape but also for our

ability to learn about the universe and detect the presence of the *logos* of creation. By generalising this, we live in such era when *theology* is possible in the universe. Here we come back to the theological question posed in the beginning of this paragraph: why the world was created by God out of nothing in such a peculiar way in order to have us, that is those who predicate God through relating the universe to Him? Rephrased formally, it can amount to the question about the *sufficient* conditions for humanity's existence in the image of God.

The answer to this question could come from a theological assertion that God anticipated the creation of the world in the perspective of the mystery of Christ, that is the Incarnation of the Logos of God.[28] Seen post-factum, the Incarnation required a human body, a body of Jesus, as well as the body of his Mother, ever-virgin Mary. As we have mentioned before, the existence of a body is related to the specific physical and biological conditions and, as it is understood in cosmology, the whole large-scale spatio-temporal structure of the observable universe is pivotal for that. Correspondingly there is a question: does the free creation of the world out of love by the Divine counsel presuppose an element of necessity related to the Incarnation of the Logos which was *foreseen* before the creation of the world and which is related to the recapitulation of humanity in Christ?

One can conjecture that the structure of the natural world has a direct relation to God's providential activity in the world in order to fulfil His plan. This implies that for the Incarnation of God to take place on Earth, in the visible universe, this universe must possess some features such that the making of man in God's image as well as the incarnation of God in human flesh would be possible. This links the creation of the universe and its structure to the phenomenon of man, and the Incarnation articulates this link, making the whole sense of it as being grounded in the will and love of the personal God, who transfers the image of His personality to human beings who in turn can articulate the universe as being amazingly fashioned for life. The cosmological anthropic principle which links the structure of the universe to the conditions of biological existence can then receive its theological generalisation as that principle which links the structure of space-time and matter of the entire universe with the possibility of the Incarnation. Apart from the physic-biological conditions for existence of living beings this extension touches upon the most important aspect of humanity's existence related to its being the centre of disclosure and manifestation of the universe from within the universe, that is its further articulation through knowledge which partially explicates the sense of what is meant by the Divine image of man. The Divine image requires not only human body, but the archetype of the hypostasis of Christ. To have knowledge of the universe as a whole humanity must have been endowed with that ability of the fully human Jesus Christ to experience the universe as "all in all" through Christ the Logos who is fully divine and through whom and by whom the universe is created and sustained. Correspondingly the abovementioned extension of the anthropic principle transforms into a theological principle of creation of man: the universe must have been created in such a way in order to have the conditions for creation of man in the image of God, the conditions which have been recapitulated in the Incarnation. However, humanity is not just the purpose of creation; its coming into existence can only be understood in the context of the promise of God for its salvation.

Thus the conditions for the possibility of the Incarnation are encoded in the facticity of the world whose mode of being proceeds from the hypostatic action of the Logos, who confirmed

this through the Incarnation. And it is this facticity that predetermines the possibility of appearance of humanity as that vessel (receptacle) in which the Incarnation was possible, as well as that personal medium through which God realises the world's communion with himself. One can conjecture in this case that if the Incarnation was foreseen by God before all ages, then the precondition for humanity to appear in the universe must have been in place in the "act" of creation. Then one can further conjecture that the world was freely created *love* but with a certain *intent*. Then one can think that the structure of the material world in its contingent essence has a direct relationship to the providential action of God in the world in order to fulfil its promise for salvation. This can be further explicated through a reference to Maximus's discussion of the possibility to know God from within creation. Maximus affirms that the only possible approach to knowledge of God is through contemplating the effect of the preserving and providential power of God. Here is the quotation:

"It is in terms of no principle or concept or even reality that the divine has relation and communion with the things that are, but it is completely and in every way transcendent, and only grasped from his *preserving and foreseeing* everything…"[29]

There are two crucial words emphasised in this quotation: "preserving" and "foreseeing". These words characterise Divine activity within creation. We will analyse the sense of "preserving".[30] To preserve means to preserve certain already created things, that is to "conserve" them in their identity from the overall decay to which creation after the Fall is subjected. To preserve things means to take care of these things through sustaining their integrity and supporting them in receiving God and responding to his invitation for being in communion with him. "Preserving" could mean the conservation, sustenance of the species, or a particular kind of created objects. Their self-identity follows from them to be individually enhypostasized by the Logos. But the identity of a created object as unique and separate from others implies, from the point of view of the created order, two things: their identity in space, that is their corporeal separatedness, and their identity in time (endurance) as the possibility of stability and knowability of this particular created existence. When one refers to the intelligible world, one can speak about "preservation" of ideas and intelligible entities in general, that is regardless time – it is a kind of "logical conservation", sustenance etc. However being projected onto human life, this conservation of ideas is understood as their constant presence in time in the mind of human beings. Time is still present as that background which makes it possible to discriminate temporality as a flux and a-temporality, as frozen time. This means that our articulation of eternal ideas assumes the intrinsic temporality of our consciousness. *Preservation* in this case means the stability of our consciousness, that is the conditions such as memory or internal time-consciousness, which makes it possible to discern patterns and structures in the background of the variety of sense-data. Stability of consciousness includes not only memory but also ability to attempt to plan the future as if it has already been in existence. One means here the memory of the future, as the realisation of that teleological ingredient which is present in human consciousness as activity. Thus "preservation" means in this sense some particular pattern of the human subjectivity which makes it possible to contemplate God. "Preservation" means the faithfulness of God *to* and constant God's presence *in* humanity while the sustenance of space and time become the conditions for this to be possible at all. The understanding of the Church, as the body of Christ, as catholicity

and multi-hypostatic consubstantiality, implies a principle of differentiation of hypostases, that is human persons, in space and in time. This is necessary for the Logos to take human nature in the incarnation and to be different and distinct from other human beings. The incarnate Logos-Christ recapitulated human nature in general, but still the incarnation took place in a concrete and specific man – Jesus from Nazareth, who was different from others. It is in this sense that space of creation manifests the principle of differentiation (*diaphora*) (not *division* (*diairesis*)) of humanity onto many individuals.

Since the differentiation of human beings still presupposes their unity as related to the same Father, the accommodating space must prevent the disintegration of hypostases. Thus the unity of space is of the same quality as the unity of many hypostatic beings: it comes from the Logos and is determined by him. It is exactly from this that the catholicity of Christians (as conciliarity) receives its justification: the catholicity is the unity of people and hence the unity of their shared space; it is not only humanity's consubstantiality, but their *con-spatiality* as belonging to the same encompassing space which is a form of relationship with God.[31] The same can be said about time in light of the idea of *pleroma* of humanity.[32] Correspondingly space and time appear to be those forms of mediation between creatures and God, which make it possible to realise the Divine promise for salvation implanted in the creation and rearticulated in the Incarnation. If so, then, by applying the logic of physics of the created one can refine further the conditions for the Incarnation.

The "preserving" of physical objects can easily be interpreted as conservation of their physical qualities, related, for example, to energy (mass), momentum (velocity), angular momentum (spin). It is known that conservation laws and the existence of corresponding integrals of motion is the consequence of space-time symmetries. Homogeneity (uniformity) of time entails energy conservation. It is because of this uniformity that the identity of objects as stability in time is possible.[33] Physical cosmology asserts the evolution of the universe in time, but the temporal scale of changes in this universe is so huge (with respect to the human life on Earth) that one can assume that time effectively has been homogeneous for the last 4.5 billion years of Earth's existence. Uniformity of space entails momentum (velocity) conservation which makes it possible to separate objects from the forces which acts upon them. The uniformity of space is confirmed by indirect observations and serves as, we mentioned above, a major epistemological presumption of the knowability of the universe (cosmological principle, that is the principle of *cosmographic* uniformity of the universe). Thus the cosmographic uniformity of the universe can be theologically justified through God's preserving power upon creation in order ultimately to reveal himself to human being. In this case the principle of theogenic uniformity which we have discussed above becomes in its formulation exactly what Maximus described in terms of "preserving". The transition from theogenic uniformity to cosmographic uniformity then can be elucidated by placing the Maximian theological sense of God's preserving of creation in a physical context.

If, coming back to the quotation from Maximus where "preserving and foreseeing" is associated with the modes of humanity's knowledge of God, then one can go further by explicating this "preserving", first of all, as preserving the very existence of human beings themselves. This existence is defined by the necessary conditions following from physics and biology. Thus preserving in this case means the support of fundamental physical constants which are responsible for the stability of material

structures, like planets and atoms, which make it possible the corporeal existence of human beings and, theologically, the Incarnation to happen. For example, the dimension of space d=3 is necessary for the planetary and atomic orbits to be stable and thus "preserving" those structures which are necessary for life.[34] This type of a link between the large-scale structure of the universe and the fact of existence of life that appears in cosmology in rubrics of the so called anthropic inference can be employed in order to demonstrate that the "preserving" of the large scale-structure of the created universe and hence human life in it can be used a pointer (*paradeigmata*) towards detecting the presence of the Divine in the universe. Thus the facticity of space and time can be used as a witnesses to the *special* relationship between God and the created world based in God's intent for such a creation which will make possible to fulfil his plan. The world *is* hypostatically in the Person of God. If this "is" for God is the bringing the world inside the sphere of Divine interiority, in order to make the world of its own and to bring it in communion with Himself, for the created humanity this "is" is the all-encompassing wholeness of the world as its spatial, geometrical whole, which, in spite of its extended properties seen from within the world, is perceived as the manifestation of the Divine relationship to the whole world as devoid of any extension and distance. One can say that the universe as a whole is theologically homogeneous, that is "theogenic", because God is present at every point of the universe through the fact that all parts of the universe are equally enhypostasised by him, so that there is no extension and distance between God and the universe. In this sense if sometimes the universe is presented graphically as a geometrically extended shape embedded in a sort of pre-existent continuum, for the Logos of God this universe is an instant or an event, in which all distances and ages are encapsulated in the archetypically present "all in all". This implies further that space and time reveal themselves as those particular modalities of the world which explicate the archetypically present "all in all" of creation in the conditions after the Fall. Since the created world is corporeal the extended space perceived by human beings can be treated as that corporeal form of communion with the Divine which itself is "preserved" by God (and which is the source of further "preserving" through a purposeful articulation of the universe by human beings).

The Ecclesial Vision of the Cosmos in Maximus the Confessor

The reformulation of the cosmological anthropic principle in terms of humanity made in the image of God, presupposes that humanity is not treated anymore as a *natural microcosm*. Rather it acquires a different status which can be termed as a *hypostatic microcosm*. What is meant by this term can be grasped from the fact that human reason can penetrate in thought through space and time and contemplate in different symbols things 'both invisible and invisible', both micro-particles and cosmological structures. It is because of the hypostatic unity of the body and soul that it is possible to argue (together with Maximus the Confessor as well as other patristic writers) that man, in a way, imitates in his composition the whole universe (that is, the empirical and the intelligible realms). In other words, humanity manifests in itself the basic *diaphora* (difference) in creation that points to the *logos* that holds the different parts of creation together.

Maximus the Confessor developed an allegorical interpretation of the universe as man, and conversely of man as microcosm, recapitulating in its constitution the whole creation. He articulates in *Mystagogy* 7 the

similarity between the composition of the human being and the composition of the universe from a point of view of the hypostatic unity of the different parts in them.[35] In a scientific cosmological context this can be interpreted as an insight that leads the cosmologist beyond the sphere of the visible, which is accessible to the senses, to that which is invisible (for example, to the wholeness of the universe or its origin) and can only be described in the mathematical terms with which human reason (being an analytical part of soul) operates. Reason dwells in the body, and it is through the visible universe that reason reaches the intelligible universe. It is because of the hypostatic unity of cosmologists' bodies and souls that they can reveal the hypostatic unity of the visible and intelligible universe. A cosmologist relates opposing phenomena: the small (atoms) and the large (galaxies); the visible, present cosmos and its invisible past; the cosmos as a multiplicity of different visible facts (stars, galaxies, the distribution of clusters of galaxies, etc.) and the mathematical cosmos (as uniform and isotropic space, etc.).

The ability to recapitulate through knowledge all constituents of the universe, and to realise that the human existence is deeply dependent on the natural aspects both of the microworld and the cosmos as a whole, makes the position of humans in the universe exceptional and unique. The recapitulation of the universe in man takes place not only on the natural level (as is affirmed in the anthropic arguments), but – and this is much more non-trivial – on the hypostatic level implying that human beings are participating in the outward *hypostasization* of their own existence by revealing the meaning of various levels of the universe. This is possible only because human beings can use their own hypostasis in order to bring the not yet articulate *existents* in the universe to a proper, personal mode of existing. In other words, human persons, or humankind in general, in spite of being physically located in one particular point of the universe, share their existence with all other places and ages of the universe through the fusion made possible by knowledge. This existence of the universe in the other, that is in human beings, means that the universe is *en-hypostasized* by human beings.[36] Humanity, as an event, becomes itself the source of a further en-hypostasization in the universe that reveals intelligibility of the universe, the soteriological meaning of its creation. Thus the universe is present in one and the same human being both through the bodily consubstantialilty, and through the hypostatic inherence of it within human subjectivity.[37] What makes the image of the universe as a whole possible and what is the principle which holds this image interlinked with the physical universe remains a deep philosophical and theological mystery. To address this mystery one needs to turn to the Christological dimension of any philosophising on humanity's place in creation, in particular, to the relevance of the Incarnation. Indeed the Incarnation provides us with the only available historical and archetypical evidence of how a human being can hold the entire universe in a single consciousness. To make it explicit, it is worth appealing to the non-trivial connection between the problem of space in the universe and the concept of the Incarnation.[38] The link between the Incarnation and the spatial display of the universe takes the form of a paradox: on the one hand, Jesus Christ, being in full human nature, lived in the world and was located in a body in a particular place and time of the Earth's history (in Palestine two thousand years ago). On the other hand, being fully God, he did not leave his 'place' on the right hand side of the Father, and thus, was was *always* present in *all* places and times of the universe created by him. We have here a non-trivial temporal and

spatial relationship between the finite 'track' of Jesus in empirical space and time and the whole history of the universe as the unity of "all in all" of spaces and times of the universe proceeding from the Logos' creation of the universe.

Origen first reflected on the extraordinary position of Christ, being man and God, in the universe conceived of in terms of space.[39] Origen stressed the point that God, who is the creator and governor of the whole universe, by becoming incarnate in the flesh in Jesus Christ, did not cease to be, as God, the provider of existence and intelligibility for every thing at every point in the universe. Being incarnate in the flesh, that is being a man among men, Christ as God was still ruling the whole universe and holding together the entire creation. By creating the universe and giving it meaning so that it could receive the his Son in the flesh, God has prepared a place for himself, but in such a way, that while descending into the created world in a particular place and time he still holds the entire creation together, being present himself in all possible 'places' of the universe. One can say therefore that the Incarnation recapitulates the whole creation in the totality of its spatial and temporal spans, and not just human nature. By being incarnate at one point of space and at the same time not leaving his 'place' as transcendent Creator, and by holding together the wholeness of space, God demonstrates that his relationship to space is not a spatial relation.[40]

Athanasius of Alexandria expressed the unity of the divine and human in Christ appealing to the analogy of space in terms similar to those used by Origen.[41] Athanasius argues that in spite of the fact that the Son-Word of God descended to Earth in order to live with men, he did not become closer to us by doing so, for he is always in everything in the universe, which was made by him. 'Space' is a predicate of the Word of God; it is determined by his agency and is to be understood according to his nature. This means that the 'spatial relationship' between the Father and the Son is in no way analogous to the spatial relations among creaturely things. Human nature in Christ always operated within the reality of empirical space and historical time, whereas his divine nature was always beyond the empirical and intelligible aeons in the uncreated realm from where Christ the Logos of God coordinates the empirical space in which he dwelt in the body with the rest of the created universe. The Christ-event, being thus a manifestation of the spatio-temporal relationship between God and the physical universe, recapitulates the very humankind-event relating it to the whole structure of creation.

One can use a different analogy in order to illustrate this point. Indeed, space and time are perceived by human beings from *within* creation and can be treated as "internal" forms of the relation of the universe with the transcendent Divine. This internal form of space and time cannot be conceived, however, without its "external" counterpart, that is its "boundary", which can hypothetically be articulated from "outside", that is from the perspective of the uncreated. The question that then arises is how is the internal space-time of the universe maintained in relationship with the divine "environment" (that is its "external" form) in which it embedded? Here an analogy with the hypostatic union of the two natures in Christ can be used. Indeed, it is because of the hypostatic union between the divine and the natural (human) in Christ that one can argue by analogy that the interplay between the space and time of the universe and its uncreated ground is also upheld hypostatically by God in the course of his "economy" in relation to the world. The fulfilment of this economy took place in the Incarnation when the link between the humanity of Christ (in space) and his divinity as the Logos (beyond space) was established. Thus the universe in its spatio-temporal extension manifests its

Christologically evidenced hypostatic inherence in the Logos.

The Incarnation of the Logos of God in flesh, which entails the annunciation of the Kingdom of God, brings the whole of humanity not only to the realization of its *microcosmic* function, but also to a knowledge of its *ecclesial* function in building the universal Church as the Body of Christ. Humanity is called by God to be the 'priest of creation'. Then the whole universe, having participated through its creation and the Incarnation in the hypostasis of the Logos, will be represented for human beings in the Holy Church. Maximus develops the analogy between Church and the universe in his *Mystagogy 2*.[42] It is from this analogy that one sees again the cosmological meaning of the Incarnation: the whole Church represents the world, and it is Christ who is the head and the foundation of the Church. The universe, being mirrored in the Church, is held hypostatically by the Logos of God, who is the head of the universe understood as a Church. When we say that the universe inheres in the hypostasis of the Logos of God, we understand this primarily from the perspective of the universe's creation and its further articulation by human beings. When we say that the universe as the Church is held hypostatically by Christ, however, we understand this from the perspective of the Incarnation.

By relating humanity to Christ, whose hypostasis, after the Pentecost, was transmitted to the Church, theology implicitly affirms the centrality of Christ-event for our comprehension of how the knowledge of the universe as a whole (that is as "all in all") is possible. It also affirms the cosmological significance of this event for the universe as such if the knowledge of the universe is treated as part of the created universe. Then one can conjecture that the development of the universe has, theologically speaking, a drastically different meaning before the Incarnation of the Logos on Earth, and, after it.[43] It was necessary for the universe to be in a state of constructive development in order to sustain life on Earth and to allow God to condescend to us and to assume human flesh in order to initiate the new stage of salvation history. This means, that nature, as it existed before the incarnation (being lost in the sense, that it did not know its own Divine origin), was transfigured through the knowledge of its meaning and destiny which it received from man; for the acquisition of the ecclesial hypostasis through the building of the body of Christ leads human beings to the transfigured state, where the balance between their natural and hypostatic qualities should change in favour of the latter; the sustenance of the natural dimensions of human existence, which has been conditioned by cosmological conditions, ceases probably to function as the precondition of the fulfilment of the divine plan. This confirms our conjecture that the constructive development of the universe as evolving towards the conditions where human beings could exist, had to take place only prior to the incarnation. After the Incarnation it is humanity that becomes fully responsible for the fate of the universe. Together with this theological argument one can reassert that the universe in the future is not to be seen as anthropic in a physical sense, but its vision becomes more dependent on the condition of humanity. The matter of salvation of the universe becomes an ecclesial activity of the transfiguration of nature and its unification back to God. Humanity then is not just a purpose of creation (that is that which was asserted by the some versions of the anthropic principle); it can only be understood in the context of the promise of God for its salvation as constituting the *locus* point of the meeting of God and His creation, as the mediating agency whose purpose is to bring the whole universe through its genuine knowledge to the new creation.[44]

Conclusion: Transfiguration of the Universe through Deified Knowledge

Orthodox theology, by asserting a priestly role of humanity with respect to the whole creation implies that the entire universe is to be transfigured through being brought back to union with God. What is the meaning of this assertion in view of present-day perception of the actual infinity of the universe? Cosmology explicitly states that the physical universe is huge and that humanity effectively sees the frozen image of its past reaching us through light travelling billions of years. The universe at large is causally disconnected and most of its space will never be reached physically. In this sense any analogy with the theologically asserted transfiguration of the Earthly nature, which sometimes is invoked in the context of ecological concerns, has no sense. The language of "use" or "development" of nature, which needs humanity for its transfiguration must be abandoned as irrelevant in application to the universe as a whole, if one aims to avoid a suspicion in producing pseudo-scientific mythology. When we speak of "en-hypostasiszing" the universe we mean that this has something to do with the humanity's quality as "hypostasis of the universe", that is being able to articulate the universe and make it palpable. It is not a matter of "shaping" the universe into a human product, but of bringing it into a conscious relationship with God. And humanity does this through understanding the universe's meaning in its connection and unity with the primordial ground of the Logos. In other words, to grasp the meaning of the universe in the context of its unity, means to reveal this unity as that one which proceeds from God. Thus to understand the universe means to understand it through relationship with God. Correspondingly such an understanding implies that its very process within the limits of the human nature is subjected to participation in the Divine activity. Maximus the Confessor anticipated such an understanding when he argued that the mind lacks the power to gain a "scientific" sense of reality because it does not grasp how the manifold of the universe is related to God. The issue of such a relationship is a longstanding theological problem and we do not discuss it here. The only thing we would like to mention is that in order to reconcile God's transcendence and His presence in the world, one usually makes a distinction between divine essence and its activity: God differs radically according to essence and is identical according to activity. As we argued elsewhere, this subtle distinction in relationship can be expressed through the language of hypostatic inherence (obviously, it cannot be tracked on the level of the worldly causality) whose pointers can be detected through the study of the universe (Nesteruk 2004, pp. 169-83). The detection of the Divine presence in the world presupposes participation in the Divine which takes place on different levels of reality by understanding, intellection, sensibility, coordination in rubrics of space and time and other aspects of life.[45] And to secure the transcendence of the Divine, such a participation implies a change not of human *nature*, but a *mode* of being, an acquisition of such a new hypostasis which would allow the natural cognitive faculties to function in a modified state when the vision of the universe in its extended spatiality and temporality is transformed towards its theogenic uniformity, that is unity in God.

Since all talks about participation in the Divine have sense in the context of Christ being the ultimate archetype of this participation, it seems plausible to make an epistemological analogy with some of Christ's activities which manifested the presence of the Divine mode of being within his fully human nature. As an example, we consider His walking on the water, in analogy with T. Tollefsen's line of thought, adjusting it for the purposes of our

reasoning (Tollefsein 2008, p. 211). To walk is a human activity; to walk on the liquid and fragile surface of water shows that there is a double activity is involved, that is the human walking and the Divine activity which enables Christ to actualise a mode of being which transcends that which pertains to His human nature. What is obvious here is that the divine activity penetrates into the human nature of Christ, but this nature is preserved in the sense that the *logos* of this nature is secured in God. What is changed is the "mode" of being, that is the way in which human nature exists and executes its natural functions. The presence of this "mode" of being indicates that humanity of Christ participated in the Divine activity, thus being deified. Making an analogy with the case of knowledge of the universe one can say, on the one hand, that to think and see things in the universe in its *diastatic* display is also a human activity; on the other hand, if a human being involved in the study of the universe, exercising their ability to see and comprehend the visible universe, subject themselves to the actualisation in them a mode of being which transcends their human nature, so that the divine activity penetrates their human nature,[46] while preserving it, they will be able to see the universe beyond that which is visible according to the capacity and delimiters originating from his created nature. They think the universe as a whole, but their thought transcends discursive reasoning in contemplating the universe as the unity held in Christ's "right hand" (Rev. 1:16). This analogy receives it justification in the fact that Christ, being fully human, must have been subjected to the vision of the universe in its unity with God through enhypostasizing his human nature by the Logos in the same way as the whole universe is inherent in Him.

In a way, to see the universe as whole creation, that is to see it as an instant of the unconditional Divine Love with respect to the world, means to participate in the actually infinite mode of the Divine activity. To comprehend the universe as a whole as a "simultaneous" with the instant of the natural life, means to achieve the change of a *mode* of this life. Maximus describes this by saying that "such a one has no experience of what is present to it, and has become without beginning and end; he no longer bears within himself temporal life and his motions…". In this, effectively deified condition, a human person acquires the vision of the universe through the "eyes" of the Logos Himself, for, according to Maximus, "he possesses the sole divine and eternal life of the indwelling Word…"[47] With all this, human nature is preserved and not destroyed. What is changed, is *mode* of being through interpenetration by God when the whole universe is perceived as the saturating "all in all" of inexpressible communion with Love. It is through this love that "cosmic homelessness" (M. Heidegger and E. Fromm), "non-attunement with the universe" (J. F. Lyotard) and "alienation" from it (R. Ingarden), are overcome through love to that unconditional Love of Christ which is similar to that unconditional mother's love to her children impressed on them through the saturating givenness of her smile (H. U. von Balthasar). The universe becomes for us something greater and other than "only the universe", because the specific "worldly" character of the universe is overcome without the universe itself being "removed" or "eliminated". The meaninglessness of the universe, its pure factuality and impersonality, its indifference to the Divine truth, are also overcome. The universe is transfigured from within human contemplation and comprehension, but preserved in its naturalness. It is transfigured exactly to the extent the human person relieves itself from the grief of living in it, when the sense of life in God and with God makes the entire rapidly expanding universe with myriads of scintillating stars no more than an instant of communion. The universe is transfigured because it is transcended. It

transcended, but not abandoned. It is transcended in the direction of the inside of human person, that is towards strengthening and asserting that existence which is *free* as much as possible from the physical and biological, as well as social and historical necessities.

Such a freedom of thinking of the universe proceeds from the freedom of human beings made in the image of God. And it is this image becomes the "delimiter of free thinking" of the universe: all thoughts and articulations of the universe always contain in themselves the traces of the divine image. Even when cosmology proves the insignificance of humanity in the universe, the divine image remains exactly because human mind resists all attempts to be circumscribed by the rubrics of the natural, finite and transient. Human beings attempt to understand the underlying sense of beings and things not according to their "nature" (which is unfolded in the sciences) but according to the final causes of these beings and things in relation to the place and goals of humanity in creation. This understanding cannot be explicated only through physics and biology. It is based in views on humanity as the crown of creation made in the image of God. And this is the reason why in a God-like fashion humanity wants to recognise all sorts of beings (either simple physical objects or living organisms) not according to their nature (as happens in scientific research) that is according to their compelling givenness, but as results of humanity's *free will*.[48] The image of eternity as a different mode of being retains in any cosmological theory created through free willing even if this theory predicts the finitude of all actual forms of existence and life. Free thinking of the universe is thinking of the freedom of the incarnate human person, brought into being in the Divine image by the will of the Holy Spirit (Sakharov 1999, p. 171).

In conclusion one may quote Maximus the Confessor's *Mystagogy*, where he characteristically confirms our thought that free thinking of the universe and an attempt to see it through the "eyes" of God corresponds to the destiny of humanity of bringing creation back into union with God:

[…] when the world, as man, will die to its life of appearances and rise again renewed of its oldness in the resurrection expected presently […] the man who is ourselves will rise with the world as a part with the whole and the small with large, having obtained the power of not being subject to further corruption. Then the body will become like the soul and sensible things like intelligible things in dignity and glory, for the unique divine power will manifest itself in all things in a vivid and active presence proportioned to each one, and will by itself preserve unbroken for endless ages the bond of unity [ET: (Berthold 1985, p. 197)].

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1 It is worth recalling Kierkegaard expressed in a dramatic form his anxiety about the impossibility to describe one's position in being: "One sticks his finger in the ground in order to judge where one is. I stick my finger in existence — it feels like nothing. Where am I? What is the 'world'? What does this word mean? Who has duped me into the whole thing, and now leaves me standing there? Who am I? How did I come into the world; why was I not asked, why was I not informed of the rules and regulations… How did I come to be involved in this great enterprise called actuality? Why should I be involved in it? Am I not free to decide? Am I to be forced to be part of it? Where is the manager, I would like to make a complaint!" (Kierkegaard 2009, p. 60).

2 As was suggested elsewhere the universe as its past, even if human beings know their meaning only precariously, can be *respected*, as certain ancestors of our being, so that this respect can establish a sense of communion with the universe which overcomes loneliness and despair (Primack 2006, 291).

3 B. Pascal, *Pensées*, 199 (c.f. 113) (Tr. Lafuma 1962, p.103, 67) [This ET: (Jarret-Kerr 1959, p. 78, 39)].

4 Maximus the Confessor, *Ambigua* 10, [PG 91, 1180 C-D], [This ET: (Louth 1996, p. 139)].

5 See (Tollefsen 2008, pp. 110-15), (Balthasar 2003, pp. 137-42).

6 It is because of the finitude of the speed of propagation of physical signals in the universe that what we observe in the universe is restricted to that geometrical manifold, called the past light cone, which is formed by light reaching us from the past. If, as it is believed, the visible universe has a finite age of the order of fourteen billion years, that spatial domain which is accessible to observations cannot be more than fourteen billion light years.

[7] See the explication of this thesis in (Nesteruk, 2011).

[8] Basil the Great, *The Hexaemeron*, I:5. [ET: NPNF, vol. 8, p. 54].

[9] In a different passage Basil argues that the creation of the world was not a spontaneous origination, i.e. conception by chance, but, on the contrary, it was created with a purpose an reason. See. *Op. cit.*, I:6, p. 55.

[10] Augustine, *Confessions*, Book XI:5. [ET: (Chadwick 1991, p. 225)].

[11] Augustine, *City of God*, XI:6.

[12] This ET: (Sherwood 1955, p. 192).

[13] Here it is interesting to note that Augustine was essentially concerned with the same question as Maximus later. In his *Confessions*, Augustine, enquired, from the name of an anonymous converser, on why creation is not eternal: "But if it was God's everlasting will that the created order exist, why is not the creation also everlasting?" (Conf. XI, 10) [ET: (Chadwick 1991, p. 225)]. One can grasp that this question od Agustin is equivalent to the question of Maximus the Confessor on why creation now and not later by appealing to another text of Agustin from "The City of God" where he discusses another question on why the first creation of man happened later that before. Agustin reacts to the question "why an infinity of ages passed without man's being created, why his creation was so late that less that six thousands years, according to scriptural evidence, have passed since he first came into existence" by making a reference that any finite period of created time, be it six thousands or six millions years is incommensurable with the Divine eternity, and thus the questions as to why now, that is late, and not before, has not sense in the perspective of eternity. Augustine reduces this question to the problem of the contingent facticity of creation of man in general: "Therefore the question which we now ask after five thousands years or more, posterity could as well as, with the same curiosity, after six hundred thousand years, if the mortal state of humanity, with its succession of birth and death, should last so long…In fact the first man himself might have asked, on the day after he was made, or even on the very day of its creation, why ha had not been made sooner. And whenever he had been made, no matter how much earlier, this objection about the beginning of temporal things would have had precisely the same force then as now-or at any time" (Civ. Dei., Book XII. 13) [ET: (Bettenson 1980, pp. 486-87)]. In the modern context the passage quoted above is interesting by that it explicates the problem of the phenomenological concealment of both a birth (or conception) of man, as well as creation of the world as a whole. Augustine points out that the concealment of both events is associated with the incommensurability of the finite and limited created on the one hand, and that ontologically other foundation of the hypostatic life and the world, which can be characterized as non-original beginning, as that immemorial without which one cannot have a temporal perception of the world and which nevertheless escapes all definitions in terms of this world. In its essence, since the concept of creation out of nothing excludes any causal foundation of the world, creation of the world and man are both contingent events with respect to which any question of their "earlier" or "later" has no sense. The analogy between the phenomenological concealment of creation of the world and of man's birth was discussed in my article (Nesteruk 2012[1]).

[14] A famous example of such a hypothetical law is R. Penrose's hypothesis postulating the low gravitational entropy in the beginning of the universe (Penrose 1979), or a more recent book (Penrose 2005, pp. 726-32; 765-68).

[15] This logic is, in a way, inverse with respect to what, in history of discussions on extracosmic space, was called "intrusion" arguments. The essence of these arguments is that is the cosmos in its entirety will decay through fire, there must be extra space for that conflagration. A similar argument for extraspace was historically produced by Cleomedes in his hypothesis of the possibility of the whole cosmos to be shifted. If this were to be possible, there must be extracosmic void. (See details in (Sorabji 1988, pp. 125-141).

[16] See (Tryon, 1998).

[17] By an analogy with the abovementioned reference to St Augustine, the universe emerging from the vacuum fluctuation is incommensurable with the totality of the infinite pre-existent space and time, so that its positioning in the infinite space time does not have any sense.

[18] One can invoke a famous Aristotelian objection to existence of a void beyond the cosmos on the grounds of the counter arguments to Cleomedes who suggested that the whole cosmos could be shifted as a whole. According to Aristotle the logical difficulty would be exactly in the choice of the direction of movement: why should the cosmos move in this direction rather than that, and why should it stop here rather than there? (Aristotle, *Physics*, 4.8, 215a1). In modern terms this can be described as if the preexistent space would be uniform: the uniformity makes devoid of any sense questioning the absolute position of the cosmos since all locations are equivalent, so that the location of he cosmos could be described in terms of "everywhere" and "nowhere".

[19] It is interesting to note that the first 'scientific' ideas on the origination of the universe in pre-existent space and time were proposed by Newton who intended to reconcile the Biblical account of creation, where the world had to have a beginning, with his view that time could have neither beginning nor end. Newton asserted that the visible universe was brought into existence by God in the past which is separated from us by finite time, but this took place within the absolute and infinite space and time. The creation of matter in Newton's model is detached from the creation of time. One sees here a fundamental difference not only with the contemporary views based on General Relativity, where space and time are relational upon matter but even with Maximus the Confessor for whom space and time where inseparable elements of the creaturely nature of the world (Balthasar 2003, p. 139).

[20] I. Kant, *Critique of Pure Reason*, A 426-427/ B454-455.

[21] In modern cosmology such an interpretation corresponds to different models of the multiverse. It has also particular connotations with Penrose's suggestion that the special initial conditions of our universe responsible for arrow of time in it, are set up from outside through choosing them out of many other possibilities, which could lead to different universes; see (Penrose 2005, pp. 726-32).

[22] *Ambigiua 7* [PG 91, 1081A], [This ET: (Blowers, Wilken 2003, pp. 56-7)].

[23] See details in (Thunberg 1995, pp. 50-55).

[24] *Ambigua* 41 [PG 91, 1312B]. [This ET: Louth, *Op. cit.* p. 160.]

[25] (Thunberg 1995, p. 401). C.f. *Centuries on Charity* 3.28: "We affirm that the divine substance alone has nothing contrary, since its is eternal and infinite and bestows eternity on all the rest. The substance of things, however, has not-being as contrary" [ET: (Sherwood 1955, p. 178)].

[26] See more on this in (Nesteruk 2008, pp. 250-54). More details can be found in (Nesteruk 2012[1]; 2012[2]).

[27] One must make a distinction between the *knowledge* of the *presence* of the principles of creation (i.e. the *logoi*), i.e. that there *are* the *logoi* which hold the creation on the one hand, and the *contemplation* of the *logoi* as a special stage of an advanced spiritual development. For if the former is probably accessible to the discursive reason, through scientific research, for example, the latter requires one to have made an advance in religious contemplation, which is rather sustained by one's participation in ecclesial life. Definitely when both the knowledge of the existence of the *logoi* and their contemplation are combined in one human person, science can be said to participate in the contemplation of the *logoi* of creation.

[28] Avoiding a long discussion on whether the Incarnation was caused by the Fall, or the opposite, that the hypostatic union of God and man was the eternal fulfillment of the will of God (see (Nellas 1997, pp. 34-42, 94-96), or a more recent discussion in (Bugur, 2008), our position is that since the universe and human beings themselves were enhypostasized by the Logos, so that humanity was capable of making room for its Archetype, that is the incarnate Logos, the creation of the universe out of nothing must have been effected in view of the mystery of Christ and his kind to be an instrument of the Incarnation and perfecting the Divine image. (See Maximus the Confessor, *Ad Thalassium* 60 [PG 90, 621A]).

[29] Maximus the Confessor, *Scholia on the Divine Names* (of Dionysisos the Areopagite) , PG 4. 321 B. [ET: (Yannaras 2005. p. 63), emphasis added].

[30] The foreseeing by God means that all creation is in a state of existence which has as an implanted aspect of being subordinated to this foreseeing. For humanity the revelation of this goes through what E. Husserl called in the 20th century "marvelous teleologies" which lead consciousness to the transcendent idea of God. Unlike Maximus, Husserl subjected this idea to his phenomenological reduction thus putting it within the sphere of subjectivity with no ontological reference. However the way of ascent to the ide of God was similar to what Maximus was advocating in the last quotation: the power of God's foreseeing is contemplated by human beings through observing teleologies in nature.

[31] Compare with the unity of all humanity in the Church in Maximus the Confessor's *Mystagogy 1*,

[32] The intuition of fullness of humanity through ages of time, that is of all generations of humans who ever lived is formulated in the idea of fulfilment of *pleroma* of humanity, that is of the fullness of the "body" of humanity in Christ. Gregory of Nyssa argues that when the Holy Scripture says "God created man according to His image and likeness", it does mean "…the entire plentitude of humanity was included by God of all, by His *power of foreknowledge*, as it were in one body… The whole race was spoken of as one man… Our whole nature, then, extending from the first to the last, is, so to say, one image of Him Who is." (Gregory of Nyssa, *On the Making of Man*, 17. [ET: NPNF, vol. 5, p. 406 (emphasis added)]. See also (Ladner 1958, pp. 82). The fact that for its fulfilment *pleroma* of humanity in its fallen state needs time and generations of procreation, indicates that on the one hand, all human beings (including those who lived before the Incarnation) are created in the image of God; on the other hand if one thinks about the fulfilment of *pleroma* of humanity as some event in the future, one thinks of the ecclesial catholicity as an eschatological objective of the whole movement of creation towards its transfigured state in God.

[33] Whatever mode of understanding related to analogies of experience cosmology uses, it places its subject matter in rubrics of time which, according to Kant, guarantees the unity of experience (Kant, *Critique of Pure Reason*, A 177/B 219-220).

[34] See in this respect (Barrow, Tipler 1988, pp. 258-76).

[35] [ET: (Berthold 1985, p. 196). Emphasis added].

[36] Christian Orthodox cosmology makes it explicit that it is cosmic history that is understood as part of the human history, that is the history of salvation, and not vice versa. Correspondingly one can say that it is human history which manifest itself as a centre of disclosure and manifestation of cosmic history. The assertion of Orthodox theological cosmology that that cosmic history is included in the history of salvation is a very strong aspect of the theological commitment in the dialogue between modern cosmology and theology for it is assumed here that man is not only the natural microcosm, but that man at this stage of the history of salvation determines the fate and future of the universe. This conviction entails not only geocentism, related to the planet Earth as that place where humanity was initiated, but also a spiritual anthropocentrism related to hypostatic existence, from within which one assert the existence of the universe as effected articulated words about reality. When it is affirmed that humanity is *hypostasis of the universe* (see (Clément 1976, p. 91), it is pointed towards Christ as the incarnate Logos, in the hypostasis of whom the universe as well as man exist. In this sense the geocentrism and anthropocentrism of Christian cosmology, means its Christocentrism for it is here on the planet Earth that the meeting of the Divine and human, uncreated and created took place, and it is because of this that Earth is spiritually central as that place from which the disclosure and manifestation of the sense of the created universe takes place.

[37] This ambiguity of the human position in the universe constitutes a matter of what modern philosophy names as "the paradox of the human subjectivity in the world" (See a detailed discussion of this paradox in (Nesteruk 2008, pp. 174-84). Maximus the Confessor anticipated this paradox: "As a compound of soul and body he [man] is limited essentially by intelligible and sensible realities, while at the same time he himself defines [articulates] these realities through his capacity to apprehend intellectually and perceive with his senses." (*Ambigua*, 10:26 [PG 91, 1153B], [ET: The *Philokalia*, v. 2, p. 277]. See an alternative translation in (Louth 1996, p. 124)].

For Maximus, however, the dichotomy, present in this affirmation was not a problem, for according to his theological position the fundamental non-locality which is present in human insight about the universe originates from the human ability to comprehend the intelligible realm which contains ideas about the universe as a whole. However, because man did not fulfil his task the unity of all creation through the mediation of man is only present in the human condition as a potentiality.

[38] The importance of which has been highlighted by (Torrance 1997).
[39] Origen, *Contra Celsum*, IV [ET: (Bettenson1969, p. 213)].
[40] Origen, *Contra Celsum*, I.277 [ET: (Chadwick 1953, p. 187)].
[41] Athanasius, *On the Incarnation*, 8 [ET: 1996, p. 33].
[42] ET: (Berthold 1985, p. 188).
[43] C.f. with a similar division in Maximus: "Therefore we may divide time into two parts according to its design, and we may distinguish both the ages pertaining to the mystery of the Incarnation of the Divine, and the ages concerning the deification of the human by grace…and to say it concisely: both those ages which concern the descent of God to men, and those which have begun the ascent of men to God…Or, to say in even better, the beginning, the middle, and the end of all ages, those which have gone by, those of the present time, and those which are yet to come, is our Lord Jesus Christ" [PG 90, 320B-C], [This ET: (Florovsky 1976, pp. 169-70].
[44] The fact that this knowledge can be different in comparison with ordinary knowledge is not just a matter of speech. The renewal of knowledge (*metanoia*) while human beings acquire their ecclesial hypostasis leads to the development of a new conciliatory and thanksgiving intentionality and thus to the change of its noematic correlate, so that the "content" of knowledge, the strategy of exploration of the world and its necessity is driven by the saving *telos* of humanity in building the Body of Christ making thus the universe by that which has been called "new creation".
[45] Maximus the Confessor, *Ambigua 7* [PG 91, 1080 B-C].
[46] Maximus the Confessor, *Chapters on Knowledge*, 2.21 [PG 90, 1133D].
[47] *Ambigua 10* [PG 91, 1144C], [ET: (Louth 1996, p. 116)].
[48] The analogy comes from St. Maximus the Confessor's discussion on whether God knows created things according to their nature. His answer is negative: God knows things according to his will: "…when Christians were asked by some outsiders puffed up with their learning, how they can claim God knows existent things…and that he knows intellectual being intellectually and sensible things sensibly, they replied that he neither knows sensible things sensibly nor intellectual things intellectually. For it is out of question that the one who is beyond existent things should know things in the manner proper to beings. But we say that God knows existent things as the products of his own acts of *will*…" (*Ambigua* 7 [PG 91, 1085B], [ET: (Blowers 2003, pp. 61-2) (emphasis added)]).

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Abbreviations:

1. PG: ed. J. P. Migne, *Patrologia Graeca*, 161 vols, (Paris, 1857-66).

2. NPNF: *The Nicene and Post-Nicene Fathers*, ed. P. Schaff and H. Wace (Grand Rapids, MI: W. B. Eerdman Publishing Company, 1994-96).

3. *The Philokalia*: *St. Nikodimos of the Holy Mountain and St. Makarios of Corinth. The Philokalia: The Complete Text,* 4 vols., ed. G. E. H. Palmer, P. Sherrard, and K. Ware, (London: Faber, 1979–95).

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4. *Ambigua* [ET: either in A. Louth, *Maximus the Confessor* (London: Routledge, 1996), or Blowers P. M., R. L. Wilken, *On the Cosmic Mystery of Jesus Christ*, *Selected Writings from St. Maximus the Confessor* (Crestwood: St. Vladimir's Seminary Press, 2003), or *The Philokalia*, v. 2].

5. *Ad Thalassium*, PG 90.

6. *Centuries on Charity* [ET: P. Sherwood, *St. Maximus the Confessor. The Ascetic Life. The Four Centuries on Charity* (London: Longmans, 1955).]

7. *Chapters on Knowledge* [ET: in *Maximus Confessor. Selected Writings*, Tr. and ed. G. C. Berthold (New York: Paulist Press 1985), pp. 129-80].

8. *Mystagogy* (*The Church Mystagogy*) [ET: in *Maximus Confessor. Selected Writings*, Tr. and ed. G. C. Berthold (New York: Paulist Press 1985), pp. 181-225].

9. *Scholia on the Divine Names* (of Dionysisos the Areopagite) [ET: C. Yannaras, *On the Absence and Unknowability of God* (London and New-York:T&T Clark, 2005].

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13. Augustine, *Confessions* [ET: H. Chadwick, *Augustine's Confessions* (Oxford: Oxford University Press, 1991)].

14. Basil the Great, *The Hexaemeron* [ET: NPNF, vol. 8, 1996].

15. Gregory of Nyssa, *On the Making of Man* [ET: NPNF, vol. 5, 1994].

16. Origen, *Contra Celsum* [ET: H. Bettenson, *The Early Christian Fathers* (Oxford: Oxford University Press, 1969); or H. Chadwick (Cambridge: Cambridge University Press 1953)].

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Человек и Вселенная в патристической мысли: учение Максима Исповедника и современная космология

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В статье, как историческом свидетельстве о развитии взглядов о месте человека во Вселенной, обсуждается связь идей греческой патристики, в частности византийского монаха-богослова Максима Исповедника, с современной космологией. Показывается, что представления патристики о центральном положении человека в творении и сама возможность его познания, сохраняют свою актуальность в контексте современной космологии, которая «по сути» позволяет прояснить взгляды античных мыслителей. Уверенность современной космологии в том, что человек в силах артикулировать Вселенную в целом, используя научные методы, анализируется в контексте идей Максима Исповедника о Богом данной способности постигать творение.

Ключевые слова: Вселенная, воплощение, космос, космология, логос, патристика, пространство-время, теология, творение, человек.