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THE DESTINY OF LIFE AND MIND IN THE UNIVERSE IN THE WORKS BY ARTHUR CLARKE AND OLAF STAPLEDON

ABSTRACT. Arthur Clarke has claimed to be influenced by Stapledon, especially by his *Last and First Men* and *Star Maker*. Clarke wrote about the latter that it is "[p]robably the most powerful work of imagination ever written." He was inspired not only by the Stapledon's grandeur of visions of the future and of the cosmos but also by the aim and scope of *Star Maker*. Stapledon admits that the purpose of the narrator's voyage in *Star Maker* was "[n]ot only to explore the depths of the physical universe, but to discover what part life and mind were actually playing among the stars [...]". The narrator, as well as Stapledon himself, was possessed by "A keen hunger... for insight into the significance of men and of any manlike beings in the cosmos."

Also the works by Arthur Clarke demonstrate the same Stapledonian keen hunger for the insight into the significance of men and other beings in the cosmos, as well as into the destiny of life and mind in the universe. Clarke's novels (*Childhood's End*, *2001: A Space Odyssey*, etc.) clearly manifest his deep interest in the predestination of life in general and intelligent life in particular.

This paper studies Clarke's ideas about the destiny of life and mind in the universe expressed in his *Childhood's End* and confronts them with the ideas of Stapledon in *Star Maker* and *Last and First Men*. The paper analyses Clarke's response to and elaboration of such important issues raised by Sta-

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pledon as the nature of evolution and regress of the human species; the possible ways of mental organization and coexistence of various intelligent life forms in the Universe; the nature and evolution of the Universe(s), the hierarchy of various life forms in the cosmos and possible scenarios of their interaction.

KEYWORDS: Arthur Clarke; Olaf Stapledon; science fiction; evolution; cosmic mind; destiny.

Arthur Clarke has claimed to be influenced by Stapledon, especially by his *Last and First Men* and *Star Maker*. Clarke wrote about the latter that it is “[p]robably the most powerful work of imagination ever written.” He was inspired not only by the Stapledon’s grandeur of visions of the future and of the cosmos, whose “future scenarios still remain awe-inspiring,” but also by the aim and scope of *Star Maker*. Stapledon admits that the purpose of the narrator’s voyage in *Star Maker* was “[n]ot only to explore the depths of the physical universe, but to discover what part life and mind were actually playing among the stars [...]”. The narrator, as well as Stapledon himself, was possessed by “A keen hunger... for insight into the significance of men and of any manlike beings in the cosmos” (Stapledon, 1999b, p. 13).

The works by Arthur Clarke also demonstrate the same Stapledonian keen hunger for the insight into the significance of men and other beings in the cosmos, as well as into the destiny of life and mind in the universe, the predestination of life in general and intelligent life in particular. Clarke’s novels (*Childhood’s End*, *2001: A Space Odyssey*, etc.) and his short stories clearly manifest his deep interest

This paper studies Clarke’s ideas about the destiny of life and mind in the universe expressed in *Childhood’s End*, as confronted with the ideas of Stapledon in *Star Maker* and *Last and First Men*. These works can be viewed as an imaginary dialogue across space and time of these two outstanding minds about the predestination of life and intelligence, as well as about the ways to affront this ultimate knowledge.

In particular, the paper analyses Clarke’s response to and elaboration of such important issues raised by Stapledon as the nature of evolution and regress of the human species; the possible ways of mental organization and coexistence of various intelligent life forms in the Universe; the nature and evolution of the Universe(s), the hierarchy of various life forms in the cosmos and possible scenarios of their interaction.

Leslie Fiedler highly regards the genre of science fiction because it performs at least three important functions. The critic points out at the presence of “the hole left in man’s mythological universe by the Death-of-God philosophers from the French Encyclopedists of the Eighteenth century to Friedrich Nietzsche [...]” (Fiedler, 1983, p. 133). Hence, he writes: “It has, indeed, been one of the chief functions of the post-Death-of-God literary genre called science fiction to create such a new mytho-cosmology in place of the defunct Judeo-Christian one.” Fiedler emphasizes Stapledon’s contribution to this task: “scarcely any one has made that attempt more deliberately than Stapledon, and certainly no one has come closer to succeeding [...]” (Fiedler, 1983, p. 134). We can add here Arthur Clarke as well.

Both *Star Maker* by Stapledon and *Childhood’s End* by Clarke are witty variations on the Cristian mythos of anthropocentric universe, in which both writers create mythos alternative to the Biblical Creation. Though both authors use main concepts of the Christianity (like Creation, God, love, devil, etc.) they ascribe a different meaning to them, sometimes a rather unexpected one.

It may be fruitful to focus on the nature and evolution of the Universe(s) as seen by Stapledon and Clarke, since this issue is closely connected with the evolution of life and mind in the Universe. In *Star Maker*, Stapledon tries to reconcile the Standard Cosmological Model (Liddle, 2003) and the Biblical myth of Creation and Creator, while the narrator travels back in time and watches the birth of the cosmos. He observes the spirit, which,

Though infinite and eternal, [...] limited itself with finite and temporal being. [...] the absolute spirit, self-limited for creativity, objectified from itself an atom of its infinite potentiality.

This microcosm was pregnant with the germ of a proper time and space, and all the kinds of cosmical beings. Within this punctual cosmos, the myriad but not unnumbered physical centres of power, which men conceive vaguely as electrons, protons, and the rest, were at first coincident with one another. [...] The matter of ten million galaxies lay dormant at a point.

Then the *Star Maker* said “Let there be light.” “And there was light. From all coincident and punctual centres of power, light leaped and blazed. The cosmos exploded, actualizing its potentiality of space and time. The centres of power [...] were hurled apart. But each one retained in itself, as a memory and a longing, the single spirit of the

whole; and each mirrored in itself aspects of all others throughout all the cosmical space and time. The cosmos was now [...] constantly expanding. And it was a sleeping and infinitely dissociated spirit.” (Stapledon, 1999b, p. 217)

This is a key concept for the understanding of Stapledon’s idea of mind and various life forms in the universe as possessing spirit, which he further explains in depth in his non-fiction writing. This paragraph contains the quintessence of Stapledon’s mytho-cosmology, which demonstrates close interconnectedness of matter and spirit in the cosmos, the latter being a way of existence rather than a substance. It is important to observe that, for Stapledon, the universe was created by the spirit, which objectified from itself an atom of its infinite potentiality. Hence, Stapledon speaks about interpenetration of the spirit and matter in the beginning of creation. Interestingly enough, this concept of interpenetration of matter and spirit at the moment of the cosmos creation partially overlaps with the concept of cosmos creation and *World Soul* by Plato: “The Creator thoroughly interpenetrated the World Soul [...] and wrapped it round the spherical universe. From this raw material he was now ready to create the cosmos” (James, 1995, p. 45). In *Last and First Men* Stapledon describes the *Soul of All*, which unites all the spirits that have ever lived.

For, if ever the cosmic ideal should be realized, even though for a moment only, then in that time the awakened Soul of All will embrace within itself all spirits whatever throughout the whole of time’s wide circuit. And so to each one of them, even to the least, it will seem that he has awakened and discovered himself to be the Soul of All, knowing all things and rejoicing in all things. And though afterwards, through the inevitable decay of the stars, the most glorious vision must be lost, suddenly or in the long-drawn-out defeat of life, yet would the awakened Soul of All have eternal being, and in each martyred spirit would have beatitude eternally, though unknown to itself in its own temporal mode (Stapledon, 1999a, pp. 286–287).

According to Stapledon, the spirit is inseparable from the cosmos evolution from its first instances of existence, since the atom, objectified from the spirit, was the microcosm, pregnant with the germ of a proper time and space and all the kinds of cosmical beings, which exploded, actualizing its potentiality of space and time, following the Big Bang theory. The cosmos was now constantly expanding but each part of it retained in itself, as a memory and

a longing, the single spirit of the whole; it was a sleeping and infinitely dissociated spirit. Thus, each part of the universe contains the single spirit of the whole, dissociated and sleeping. As follows from Stapledon's fiction and non-fiction writing, dissociation for him means lower stage of evolution and regress. Stapledon always promotes unity in all its forms: duet of souls, community, personality-in-community, human race united by telepathic communication, racial mind, symbiosis, cosmic mind, Soul of All, etc. Hence, dissociated spirit must long to become united in the course of the cosmic evolution. Another important concept in this mytho-cosmology is the sleeping mode of spirit, the lowest mode. According to Stapledon, the spirit exists in two modes: sleeping and awake. Of this later.

In order to comprehend the evolution and destiny of mind and intelligent life in the universe in Stapledon's cosmology, it is necessary to analyse his concept of spirit, which is closely connected with cosmos, mind, and intelligent life. Indeed, the theme of spirit, intended not in the strict ecclesiastic sense but in a much broader sense as love, creation and intelligence is the main theme in fiction and non-fiction writing by Stapledon, it invariably penetrates his works as a *leitmotiv* (Boyarkina, 2014). In many of his non-fiction works, Stapledon gives a very precise definition of spirit: "the spirit means the capacity for sensitive and intelligent awareness, love and creative action in relation to the objective world" (Stapledon, n.d.-1, p. 2). The definition of spirit cited above is similar to the definition in *Sirius*, given by Sirius himself: "love, intelligence, and creating – is precisely what the 'spirit' is" (Stapledon, 1944, p. 144). And Plaxy adds: "The spirit must be the highest of all dialectical levels, the supreme synthesis" (Stapledon, 1944, p. 143). The most complete definition of spirit is given in *The Meaning of Spirit*, where it is described as the fullest possible attainment of awareness of the world, the fullest possible precision of feeling about all this and creative action in response (Stapledon, n.d.-2, p. 5).

It is easy to notice that the majority of words characterizing spirit denote action in process, rather than a static substance; they characterize a way of existence. Indeed, Stapledon often uses the concept of the Way to describe the idea of spirit. In *What are Values?* Stapledon defines 'spirit', or 'Spiritual Way' or (in the Eastern Tao) 'the Way' as

[T]he way of sensitive and intelligent awareness, love and creative action in response to the world that confronts our subjectivity. In the

last resort, that means: awareness of the universe in all its subtlety and beauty, love of all personal beings and of the spirit itself, and creating of further possibilities of spirit. (Stapledon, n.d.-3, p. 10)

In *Power Through Philosophy*, Stapledon defines spirit as “the way of sensitive and intelligent awareness of the world (including oneself and other selves) as the way of love and wisdom and creative action in this actual world. What the spirit’s ultimate status in the universe may be is a secondary matter” (Stapledon, n.d.-4, p. 2). Stapledon often emphasises that “of the spirit as substance we know nothing” (Stapledon, 1948, p. 11). He continues: “Spirit as substance, if it exists at all, is good only in that it can be the ground or medium for the actualization of spirit as form of behaviour” (Stapledon, n.d.-5, p. 3).

As demonstrated above, Stapledon admits the possibility of the existence of other intelligent races in the universe. According to him, representatives of these races might also be endowed with spirit. In his non-fiction works, Stapledon suggests that “[a]ny sufficiently awake being in any period and in any world throughout the universe cannot but give his final allegiance to this spirit ...” (Stapledon, 1948, p. 10). Indeed, Stapledon is sure that the Way does not only guide the human species but is a universal, cosmic phenomenon:

I feel not only that the Way is ‘right’ but also that I am in line with, or contributing to, a process which goes far beyond myself, and is greater even than the process of the development of the human society. I feel that I am in some manner instrumental to a purpose, which is of a very great moment in the universe. (Stapledon, n.d.-6, pp. 4-5)

The writer supposes that other intelligent races may desire to pursue the Way as well:

The Way is the way for the fulfilling of the essential potentiality of conscious beings; and any particular conscious being, at any age and any sphere of existence, if it is sufficiently developed to apprehend what the way is, and if it is not perverted by some irrelevant purpose, cannot but will that all conscious beings should pursue the Way, so far as in them lies. (Stapledon, n.d.-6, p. 32)

As we see, according to Stapledon, the concept of spirit is closely connected to the concept of the Way, which is in its turn connected with Stapledon’s idea of the awake and somnolent state of spirit; that is, with two different modes of personality: “the one more deeply conscious, the other less. Often I am in some respect ‘awake’

and in others 'asleep.' In this more lucid condition . . . just because I am more clearly aware of the world and self and others, I am in a better position to judge matters both of fact and of value" (Stapledon, n.d.-6, p. 6).

Hence, spirit, as seen by Stapledon, can exist in two states: awake and somnolent, or awake and less awake states. Stapledon argues that the difference between these two states is not merely a matter of subjective feeling; it is objective and can be described as follows:

It is the difference between awareness of (and appropriate response to) more of the world confronting us and less of the world confronting us. The 'more' of the world must be taken to include, not merely a greater multitude of things in the world, but also subtler and (I would add) more spiritual aspects of the world, not accessible to the less awake states. ... On different levels of awakesness the moral aim is apprehended with different degrees of clarity and penetration. ...

Always the moral aim is to achieve the greatest possible 'fulfillment of personality' in actual individuals. Or rather, since we are all members one of another, and personality itself involves community, the aim is best described as 'personality-in-community', the greatest possible mutual enrichment by persons united in mutual cherishing.

The concepts of the Way and the spirit are so closely connected with each other that they seem to be almost interchangeable; one can be defined through the other.

Stapledon presents the Creator as the Star Maker, and the protagonist perceives him as "the infinity that men call God." He "sought to capture the infinite spirit, the Star Maker," which appeared as "the blazing source of the hypercosmical light, as though it was an overwhelmingly brilliant point, a star, a sun more powerful than all suns together." It seemed that "this effulgent star was the centre of a four-dimensional sphere whose curved surface was the three-dimensional cosmos." The Star Maker looked at the narrator, and he was blinded, and seared, and struck down by terrible light. The narrator recalls,

In that moment I guessed what mood it was of the infinite spirit that had in fact made the cosmos, and constantly supported it, watching its tortured growth. And it was that discovery that felled me. For I had been confronted not by welcoming and kindly love, but by a very different spirit. And at once I knew that the Star Maker had made me not to be his bride nor yet his treasured child, but for some other end.

[...]

I cried out that, after all, the creature was nobler than the creator; for the creature loved and craved love, even from the star that was the Star Maker; but the Creator, the Star Maker, neither loved, nor had need of love.

[...]

Suddenly "I saw that the virtue of the creature was to love and to worship, but the virtue of the creator was to create, and to be the infinite, the unrealizable and incomprehensible goal of worshipping creatures."

[...]

I said, "It is enough, and far more than enough, to be the creature of so dread and lovely a spirit, whose potency is infinite, whose nature passes the comprehension even of a minded cosmos. It is enough to have been created, to have embodied for a moment the infinite and tumultuously creative spirit. It is infinitively more than enough to have been used, to have been a sketch for some perfected creation". And so there came upon me a strange peace and a strange joy (Stapledon, 1999b, p. 220).

Thus, the traveller finally understood the sense and meaning of his life, and after all, the predestination of all life forms in the cosmos, that is, to have been used and to have been a sketch for some perfected creation. And *in Last and First Men* Stapledon adds to this predestination the strive to "attain the highest kind of fulfillment possible for the human species," (Stapledon, 1930, p. 200) to achieve the fulfilment of the cosmic ideal and the "supreme awakening of all the spirits" (Stapledon, 1930, p. 286).

After gaining this ultimate knowledge about the destiny of life and mind in the universe, and looking into the future, the traveller "saw without sorrow, rather with quiet interest, [...] [his] own decline and fall." "I saw myself, [and now he refers to himself as] the cosmical mind, sink steadily towards death. But in this my last aeon, [...] an obscure memory of past lucidity still consoled me. For confusedly I knew that even in this my last, most piteous age I was under zestful though remote gaze of the Star Maker. [...] I saw my death, the final breaking of those telepathic contacts on which my being depended. Thereafter, a few surviving worlds lived on in an absolute isolation, and in that barbarian condition which men call civilized. [...] World after world either accidentally exploded its little remaining store of matter, [...] or else died miserably of starvation and cold. Presently nothing was left in the whole cosmos but

darkness and the dark whiffs of dust that once were galaxies” (Stapledon, 1999b, p. 222).

If we combine this final stage of the evolution of the universe with the initial stage of its creation and the interim stages, we can analyse the destiny and evolution of spirit, and closely connected with it mind and intelligent life, as seen by Stapledon. Infinite and eternal spirit preceded the creation/explosion of the universe, which, expanding, contained in its every part dissociated and sleeping spirit. Intelligent life appeared in some parts of the universe, which strived to comprehend the ultimate truth and the nature of the universe, after reaching a very high level of development and following the way of spirit. The representatives of the most developed races were able to travel in space as free disembodied spirits (as described in *Star Maker*). They were able to create mental symbiosis and mental community, (based on telepathic communication), which was growing until it filled all the cosmos and became inseparable from it, consciousness and matter became one. Indeed, at the end of the narration, the traveller-protagonist became a cosmic mind, united with the universe, which observed its own death as the result of entropy: “I saw my death, the final breaking of those telepathic contacts on which my being depended.” The cycle is completed. The eternal spirit, integrated and whole in the beginning, becomes sleeping and disintegrated after the Big Bang, then gets united and awake in the course of the evolution of the universe and intelligent life, then observes disintegration of matter and its own telepathic connections as the entropy grows and destroys the universe.

Thus, we observe the universe and the life in it from the moment of Big Bang to the last moments of its existence, when it virtually turns into nothing. We see it through the eyes of the traveller-narrator, who turns into the cosmic mind at a certain moment of his interstellar voyage.

And it is exactly at this point that *Childhood's End* overlaps with the *Star Maker*. The Overmind in *Childhood's End* has too much in common with this cosmic mind in the *Star Maker*. We have no clue whether it is the creator of the universe, but we know that it is a Superbeing, which absorbs into itself all the collective minds/spirits in the universe which reach a certain, very high level of development. Overmind monitors the evolution of different forms of life in the universe in order to pick them up at the right level of their evolution or maturity. In fact, it resembles a gardener who sends

his workers out to pick up mature fruit for him. While Stapledon's traveller observes the cosmos around him and contemplates, Clarke's Overmind observes and acts, picks up fruit everywhere and puts it in the melting pot. However, at the end, it is the same Stapledonian principle of different spirits which unite and travel together in order to discover the ultimate truth about the nature of universe, the sense, meaning and predestination of life and mind in the universe. Only in *Last and First Men* and *Star Maker* we either observe a symbiosis of several species living together or different wandering free spirits travelling together in search of the ultimate truth in the universe. In *Childhood's End*, it is Overmind itself who chooses those collective spirits/species that can join him when they reach the right level of development according to him.

The metaphor of a gardener can be used to describe the Overmind but he can also be compared to a genetic engineer who chooses carefully the species he wants to be crossed with...

In the universe of *Childhood's End*, besides the Overmind, there are two types of intelligent life: Overlords (with no trace of the parapsychical powers latent as, for example, in mankind) and all the other races with parapsychical powers latent.

Who were Overlords exactly?

They had preserved their individuality, their independent egos; they possessed self-awareness and the pronoun "I" had a meaning in their language. They had emotions, some at least of which were shared by humanity. But they were trapped. Their minds were ten- perhaps a hundred-times as powerful as men's. It made no difference in the final reckoning. They were equally helpless, equally overwhelmed by the unimaginable complexity of a galaxy of a hundred thousand million suns, and a cosmos of a hundred thousand million galaxies.

It explains why Karellen Supervisor, one of the Overlords, was watching the destruction of Earth and of humankind, with "a sadness that no logic could dispel."

He did not mourn for Man: his sorrow was for his own race, forever barred from greatness by forces it could not overcome. [...] For all their achievements, [...] for all their mastery of the physical world, his people were no better than a tribe that had passed its whole existence upon some flat and dusty plain. Yet, [...] they would hold fast until the end: they would await without despair whatever destiny was theirs. They would serve the Overmind because they had no choice, but even in that service they would not lose their souls." (Clarke, 1990, pp. 168-169)

This acceptance of their humble destiny is in a way similar to the acceptance of their fate by the Last Men in the wake of their final destruction by the expanding sun in *Last and First Men*. Or to the acceptance of his fate by the narrator in the *Star Maker*: to serve to a superior being and to be used by it.

Jan, the last man on Earth in *Childhood's End* (who is peculiarly similar to the Last Man in Stapledon's *Last and First Men*) describes the last moments of the planet to the Supervisor Karellen. Jan suspects, "that it was not only scientific curiosity that inspired the supervisor: perhaps the Overlords had dreamt of one day escaping from their peculiar bondage, when they had learned enough about the powers they served." Jan was sure that "Even while he (Karellen) served it, he was studying the Overmind with all the instruments at his command" (Clarke, 1990, p. 165). Thus, here emerges one more destiny of life and mind in the universe according to Clarke: to gain the ultimate knowledge about the superior life forms in the universe and to pass to a higher plane of physical and spiritual existence (and may be, join the Overmind one day).

And who is the Overmind?

It bears the same relation to man as man bore to amoeba. Potentially infinite, beyond mortality, how long had it been absorbing race after race as it spread across the stars? Did it too have desires, did it have goals it sensed dimly yet might never attain? Now it had drawn into its being all that the human race had ever achieved. This was not tragedy, but fulfilment. The billions of transient sparks of consciousness that had made up humanity would flicker no more like fireflies against the night. But they had not lived utterly in vain." (Clarke, 1990, p. 159)

Compare it to the closing passage of the *Last and First Man*. Man...

He is only a fledgling caught in a bush-fire. [...] The music of the spheres passes over him, through him, and is not heard. Yet, it has used him. And now it uses his destruction. Great, and terrible, and very beautiful is the Whole, and for man the best is that the Whole should use him. [...] But one thing is certain. Man himself, at the very least, is music, a brave theme that makes music also of its vast accompaniment, a matrix of storms and stars. (Stapledon, 1990a, p. 304)

In Stapledon's *Star Maker*, the universe is made by Star Maker.

Though Stapledon left out of the narration the fact of the creation of the universe, his *Star Maker* created our universe not for men, but out of his sheer curiosity. Thus, our universe is not

anthropocentric at all, according to the science fiction writer and philosopher. Arthur Clarke in *Childhood's End* avoids the issue of the creation of the universe altogether. Both texts represent the search for the true sense and nature of the universe, the destiny of life and mind in the universe. They represent two different views on the organization of life in the universe. According to Stapledon, different species (spirits) in the universe are independent (or live in symbiosis, union, community, etc.).

According to Clarke, some more developed species organize and manipulate the less developed species in the universe. While Stapledon's concept is closer to the Wellsian idea of the World State projected into the universe, the universe, as described by Clarke, resembles an empire in its organization, where highly developed species manipulate and organize less developed ones.

Analysing the works by Clarke and Stapledon, it is possible to distinguish some differences in their views on the nature of evolution and regress of the human species. According to Stapledon, in *Last and First Men* it takes at least 18 different human species to create a utopian society where human species were able to unite in a global telepathic session as a single planetary (or racial) mind and discuss all their issues.

The system of radiation, which embraces the whole planet, and includes the million brains of the race, becomes the physical basis of a racial self. The individual discovers himself to be embodied in all bodies of the race. [...] He now stands above the group minds as they above the individuals. [...] The racial mind transcends the minds of groups and individuals in philosophical insight into the true nature of space and time, mind and its objects, cosmical striving and cosmical perfection. (Stapledon, 1990a, pp. 276–277)

In *Childhood's End*, Arthur Clarke reduced this period of transition to a single planetary (or racial) human mind to a less than a hundred years. According to him, specially gifted children are able to locate each other at a distance and create connections telepathically. Finally, they all unite into a single mind, using the energy of the planet falling apart, and leave the Earth to join the Overmind. Interestingly enough that the idea of the extremely gifted children, who can telepathically establish contact with each other and locate each other at a long distance, was already developed by Stapledon in *Odd John* (Stapledon, 1935).

After a careful analysis, it is possible to conclude that for both Arthur Clarke and Olaf Stapledon, the existence of a certain cosmic

mind is obvious. Hence, the goal of any intelligent life in the universe is to reach the necessary high level of development to be able to reach / join the cosmic mind or the cosmic spirit. While Stapledon emphasizes that the spirit is infinite and eternal, Clarke leaves this question open. However, the recent advances of physics leave some slight possibilities (more than ever) for the existence of infinite and eternal spirit after the discovery of the dark energy, or cosmic vacuum, which density is constant. The dark energy has not been sufficiently studied yet, but it might play an important role in the destiny of mind (and spirit) in the universe, moreover, it may be suggested that at the moment it is the most suitable candidate for the role of God, eternal, omnipresent, incomprehensible.

Clarke and Stapledon have a slightly different view on the nature of the process of unification into a single mind, cosmic mind, as it follows from *Childhood's End* and *Star Maker*. The question remains, however, as to in what way will the membership in the cosmic mind be organized, will it be similar to the empire or confederation? Is it going to be free and democratic, as described in the works of Stapledon? Or, is it going to be controlled and highly selective, as in the *Childhood's End* by Clarke? According to Clarke, Overmind decides himself and chooses the races who can join him, while in the *Star Maker*, all travelling spirits unite freely together in the search of the ultimate truth in the Universe.

In *Childhood's End* and *Star Maker* Clarke and Stapledon mainly discuss the transition of the human species to another, higher level of development of disembodied spirits/beings capable of interstellar travel and comprehension of the true essence of the universe. Interestingly enough, Doris Lessing (1984), influenced by Stapledon, also suggests her own scenario of the human transition to this higher plane of development. However, the human species can encounter serious fatal problems even before reaching that new stage of development. Many factors can threaten and extinguish intelligent life on Earth; some of them are hidden in the human nature (for example, greediness for power and money, aggressiveness, etc. as described by Wells, Stapledon, Orwell, Lessing, Ballard, and other science fiction writers) (Boyarkina, 2018). These human qualities can cause exhaustion of the natural resources, pandemics, fatal wars and climate changes, able to destroy the life on Earth. Other threats can come from the universe, like the fatal collision with comets, asteroids, the Andromeda Galaxy, sun explosion after approximately two billion years, super solar flares, etc. The latter

are dangerous for the life on Earth because of the fatal cosmic particles. For example, “The produced flux on the Earth's surface for the most powerful SF [solar flares] may reach ~4500% in comparison to the background flux of cosmic particles” (Boyarkin, 2011, p. 533). Also, “It is not inconceivable, that the solar electron anti-neutrinos flux produced in a super powerful flare could influence the operating conditions of a georeactor” (Boyarkin & Boyarkina, 2017). Some scientists hold, that super solar flares are fatal for life on Earth, since in the past they could have caused the mass destruction of life forms (e.g. extinction of dinosaurs), the transformation of non-organic matter into organic one, etc.

Even if the human species manages to cleverly prevent these various catastrophes and transcends to a higher level of existence, it still has to face the inevitable (as seen at the moment by the Standard Cosmological model) disintegration of the baryon (visible) matter in the universe, i. e. the death of the universe, caused by its accelerating expansion. The accelerated expansion of the universe is caused by the antigravitational qualities of the recently discovered dark energy, which density is constant. Thus, in the end, the intelligent life in the universe will have to face the death of the universe (as described in the *Star Maker*), caused by the dark energy. The modern science cannot offer any solutions to this problem; hypothetically, some solutions can be found beyond the Standard Cosmological model.

To solve these problems, humanity must be united on the planetary scale. It is clear, that no nation alone has sufficient intellectual and economic resources for adequate space exploration, necessary to solve the problems caused by the abovementioned cosmic catastrophes. Especially if it turns out that the only possible solution for the human species might be to leave Earth forever. However, solving these survival problems, the human species in particular, and intelligent life in the universe in general, should not forget about the existence of other, broader goals and predestination, as described in the works of Arthur Clarke and Olaf Stapledon. As this paper demonstrated, these higher goals are: to become a part of a cosmic mind, to have been used and to have been a sketch for some perfected creation, the strive to attain the highest kind of fulfilment possible for the human species, to achieve the fulfilment of the cosmic ideal and the supreme awakening of all the spirits.

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ИРЕН БОЈАРКИНА

УНИВЕРЗИТЕТ ЛА САПИЈЕНЦА У РИМУ

ФИЛОЗОФСКИ ФАКУЛТЕТ

ДЕПАРТАМАН ЗА ЕВРОПСКЕ, АМЕРИЧКЕ И ИНТЕРКУЛТУРАЛНЕ СТУДИЈЕ

РЕЗИМЕ

СУДБИНА ЖИВОТА И УМА У УНИВЕРЗУМУ
У ДЕЛИМА АРТУРА КЛАРКА И ОЛАФА СТЕЈПЛДОНА

Артур Кларк је изјавио да је на њега велики утицај имао Олаф Стејплдон, а нарочито романи *Последњи и први људи* и *Звездотворца*. За овај други Кларк је изјавио да је то „вероватно најмоћније дело људске маште икада написано.“ Инспирисали су га не само величина Стејплдонове визије будућности и космоса него и обухват *Звездотворца*. Стејплдон је рекао да сврха нараторовог путовања у *Звездотворцу* „није да истражује пространства физичког универзума него да открије коју улогу живот и ум у ствари имају међу звездама [...]“. Наратора, као и самог Стејплдона, одликује „изразита жудња [...] за поимањем значаја човека и хуманоида у космосу“.

Дела Артура Кларка карактерише иста стејплдоновска изразита жудња за спознајом значаја човека и других бића у космосу, као и судбине живота и ума у универзуму. У Кларковим романима (*Крај геињсџива*, *Одисеја у свемиру 2001*, и другим) велика је пажња посвећена предестинацији, како у контексту живота уопште тако и у контексту интелигентног живота.

У овом раду разматра се Кларково поимање судбине живота и ума у универзуму у роману *Крај геињсџива* уз поређење са Стејплдоновим идејама израженим у *Звездотворцу* и *Последњим и првом људима*. У раду се анализира Кларкова обрада и разрада тих значајних питања која поставља Стејплдон у контексту природе еволуције и деволуције људске врсте; могући начини менталног устројства и коегзистенције различитих облика интелигентног живота у универзуму; природа и еволуција универзума; хијерархија различитих облика живота у космосу и могући сценарији интеракције.

Кључне речи: Артур Кларк; Олаф Стејплдон; научна фантастика; еволуција; космички ум; судбина.



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