



Research Article

AN EXCURSION INTO THE GENESIS OF IDEAS ABOUT TIME AND SPACE

Submission Date: July 15, 2022, Accepted Date: July 25, 2022,

Published Date: July 30, 2022

Crossref doi: <https://doi.org/10.37547/philological-crjps-03-07-04>

Nigora M. Karimova

Senior Lecturer of Russian philology Ferghana state university Ferghana, Uzbekistan

Journal Website:
<https://masterjournals.com/index.php/crjps>

Copyright: Original content from this work may be used under the terms of the creative commons attributes 4.0 licence.

ABSTRACT

In the proposed article we intend to provide an analysis of the work of Western scholars of science in Newton's writings.

KEYWORDS

An excursion into genesis, an image of eternity, time and space, hypothesis, eschatology.

INTRODUCTION

Modern culture has absorbed not only the Christian conception of time and space. It accumulates all scientific and non-scientific paradigms from antiquity to the present day. In Brodskij's poetic world, which is an organic part of modern culture, we find ancient, Christian, Newtonian and modern features of the notions of time and space, poetically embodied, transformed, but not losing their connection with

their roots. This circumstance makes it necessary to make a brief excursus into the genesis of notions of time and space.

For antiquity, time is, according to Plato, a moving image of eternity. Plato was referring to the rotation of the heavens, i.e. astronomical time. The flow of time is a change of closed cycles. The closed circle of life.



Related to this is the idea of eternal return. There is no movement. Everything returns in the same image. The complete absence of history. As A.F.Losev wrote: "Circle and transmigration of souls is not history. It is a history constructed on the type of astronomy. This is a type of astronomy.

The space of the ancient man was also enclosed. The idea of Cosmos - Order - is incompatible with the idea of infinite space.

THE MAIN FINDINGS AND RESULTS

The Christian understanding of time is very different from the ancient one. Time begins and ends, and in it creative and irreversible life takes place. Time, together with the world, is created by God. St Augustine, in his Confessions, wrote: "...there is no doubt that the world is not created in time, but together with time. Time is singular. It ends when the fullness of time is fulfilled. St. Gregory of Nyssa in this context said: "When humanity reaches its fullness, then this flowing movement of nature will stop, reaching its necessary limit, and another state, separate from the present one, flowing in destruction and movement, will take the place of this life. When our nature has completed a complete revolution of time in its corresponding order and connection, then this fluid movement, created by the succession of generations, will also stop. The filling of the universe makes further increase in numbers impossible, and the entirety of souls from the state of the invisible and scattered will return to the assembled and visible. It is clear from these words that the space of our world is limited and closed. The boundaries of time and space are set by the Creator.

So, the Christian understanding of time is eschatological. Time "flows" linearly in contrast to the ancient cyclical worldview. Christianity has awakened an interest in the temporal and transient, whereas for antiquity all temporal things did not make much sense. This interest arises from the fact that "the Creator in the Incarnation infinitely diminishes himself by going inside the world he created and submitting himself to

the limitations of time. Every moment of the flux of time is insignificant before the Eternity in which God abides, just as the flux of time itself is insignificant before it. But God, having become man, has really contained Himself in each moment of the period of His life. Therefore both the stream of time and history have acquired extraordinary value in the eyes of Christians. Such are the streams of historical consciousness through which Christians have shaped modern world civilization and culture."

The Christian understanding of the irreversibility of the passage of time prepared the triumph of Newtonian celestial mechanics, i.e. the "scientific picture" of the world grows out of Christian ontology. This celestial mechanics is based on the notion of the homogeneity of time and space.

But the new picture destroyed the idea of the world as a cosmos, replacing it with the idea of infinite space. Such an understanding was prepared by the Renaissance, when there was a disintegration of the holistic cosmos into man (the observer) and nature (the universe) in the human worldview. The French historian of science Alexander Coiret³² speaks of two main features of the changed thinking that emerged as a result of the scientific revolution of the 17th century. Firstly, the Aristotelian Cosmos, a finite and hierarchically ordered world, which did not contradict Christianity, gave way in the minds of people to an infinite Universe, which, if it has an internal relationship, only because of the identity of its constituent elements and uniformity of laws. Secondly, the sense of space had changed. The virtuality of Euclidean geometry began to be perceived as reality, as a result of which the concept of motion-state was replaced by the concept of motion-process.

Newton's sense of world space is an "irreversible and immutable nothingness" with which no interaction of material objects immersed in it is possible. Newton's absolutes of space, time and motion are inaccessible to experience.

Descartes, in contrast to Newton, perceives space as



an infinite mathematical body. Descartes and Newton understood space in different ways. Whereas Descartes thought of space as a kind of body and God outside of nature, Newton thought of space as a non-created "receptacle" of the world and God. Another "creator" of the "scientific picture" of the world, Laplace, rejected the "hypothesis" of God altogether. This led to the fact that not only space was thought to be infinite, but also time.

At the beginning of the 20th century, with the discovery of Einstein's general and special theory of relativity, there was once again a revolution in world perception. The "scientific picture" of the world said goodbye to the idea of infinite empty space. Genuine science rejected the picture of the world which "scientific ideology" had concocted. The universe has returned to its "boundaries" - no longer claiming the infinite "space" of God, it no longer supersedes Him with its three-dimensional emptiness.

The space of the world again appears limited and closed, because of its curvature, which leads to closedness - and the time of the world also has a beginning and an end. These are facts of modern science, which are recognised and proven not only by that part of the scientific world which has not broken with the belief in God, but also by the atheist part. For example, English astrophysicist St. Hawking: "The new understanding of space and time was to bring about a revolution in our view of the universe.

The old (i.e. Newtonian-Decartian) picture of an almost unchanging Universe, which may have always existed and will continue to exist forever, has been replaced by a picture of a dynamic, expanding Universe, which appears to have originated sometime in the past and will probably end its existence sometime in the future".

CONCLUSION

Thus science has come to recognise the beginnings and finiteness of our world, hence the beginnings and finiteness of time and space. The modern conception of the world has come to an eschatology that has long

been discovered by Christianity, or more precisely, by Christians.

REFERENCES

1. Literary Encyclopaedic Dictionary // Edited by V.M. Kozhevnikov, P.A. Nikolaev. - MOSCOW, 1987. 185.
2. Mineralov Y. History of Russian literature. The 1990s of the 20th century. - M., 2002.
3. Mirkina Z.A. Enduring Encounter: Poems and Poems. - M., 2003. - p. 86.