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PAVEL FLORENSKY AND COSMISM

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Summary

Pavel Florensky (1882-1937) was a major figure in the development of the techno-religious movement Cosmism. Cosmism is the label for school of thought formulated by Nikolai Fedorov (1829-1903) and his followers in the late 19th century. Fedorov's agenda laid out a mission that nourished generations of followers and continues to propel scientific and spiritual research. This paper examines how Florensky managed not only to survive but to flourish under conditions of intellectual fervent, turmoil, and oppression.

A polymath, Florensky left significant contributions in a number of fields, including mathematics, engineering, folkloristics, and theology. Florensky was able to survive the tumultuous times in which he lived because he was widely recognized for his brilliance, and the Soviet state needed such accomplished experts. At the same time Florensky was an ordained priest. Able to unite in his person the two main streams of Cosmist thought, the esoteric and the scientific, Florensky is today remembered as a scientist as well as a mystic.

Key Words: Pavel Florensky, Cosmism, Silver Age, noosphere, organoprojection, imaginary numbers.

Introduction

Cosmism has today come out of the shadows and found its voice. The outlines of the movement, little known in western academia until the 1960s, are increasingly clear. It is a movement with a founder and guiding spirit, in the person of Nikolai Fedorov (1829-1903). Fedorov set the

mission and direction of future scientific and the spiritual research in terms broad enough to nourish generations of followers. One of these was Pavel Aleksandrovich Florensky (1882-1937). This paper will examine Florensky's place in the cosmist movement as well as his significance as a thinker. Focusing especially on the earliest period of Soviet history, the 1920s, the paper will ask how Florensky managed not only to survive but to flourish in both Tsarist Russia and a Soviet Union in turmoil, until he succumbed to the Stalinist purges of the late 1930s.

Florensky's died at 55. He managed to live to that age not because he kept a low profile. In fact, he did not hesitate to write and publish up until his final days. Florensky was able to survive the tumultuous times in which he lived because he was widely recognized for his brilliance, and the Soviet state needed accomplished experts. While still remembered as a scientific genius who contributed to many areas, he is also widely recognized as a Cosmist. Cosmism is a social movement originating in Russia that combines a belief in the power of technology with a mission to colonize the universe. In the Cosmist vision, the universe evolves in a certain direction. Mankind has a predetermined, decisive role in this evolution. Humans are the conscious agents in attaining perfection. Humans can use reason to guide development ethically, toward the goal of becoming a single organism with a higher consciousness.^[1] Or we can fall into the materialist trap, toward annihilation.

Pavel Florensky—Early Life to 1914

Florensky was born in Azerbaijan to a Russian father and an Armenian mother. He attended school in Tbilisi, at the Tbilisi Gymnasium. Florensky was of the same generation as Stalin, and spent his adolescence in the same city. But they turned into very different people. In 1900 Florensky went on to study mathematics at Moscow State University, under Nikolai Bugaev. Florensky was quickly recognized for his brilliance, in particular for his work in non-Euclidean geometry.

Florensky's most formative influences were his spiritual mentor, the Elder Isidore, and the Silver Age circles in which he moved. While in university Florensky met the poet Andre Biely (1880-1934). Considered a symbolist, Biely was active in the Russian Silver Age scene.^[2] The Silver Age, covering the years from 1890 to 1917, saw a powerful flowering of Russia's culture just before the Revolution. As the philosopher Nikolai Berdiaev notes, it was a time when poetry, philosophy, religious exploration and mysticism mixed freely.^[3] Biely introduced Florensky into the elite literary circles associated with Silver Age writers, musicians, and artists. This was no doubt a formative move for Florensky, for it allowed him to connect with the many currents of the Silver Age artistic scene, from abstract art to folklore studies to theosophy.

Florensky completed his studies in mathematics at Moscow State University in 1904. Instead of accepting a teaching position, he recognized he had a spiritual calling, and moved to theological studies at the Ecclesiastical Academy. At Gethsemane Hermitage he met the Elder Isidore (1814-1908), who became his spiritual mentor. Pavel later wrote a biography of Isidore.^[4]

Florensky had intended to lead the life of a monk, but he was advised by a religious superior to marry. Surprising his friends, Florensky was married in 1910 to Anna Giatsintova, the sister of a friend.^[5] He was ordained as a priest in 1911.

1914-1928

Florensky was employed at the Moscow Academy of Theology.^[6] In 1914 he completed his

master's in theology at the Geistliche Akademie, where he was appointed professor. This work was later published as *The Pillar and the Ground of Truth*, considered today a classic of Russian spiritual literature.^[7]

He lived at the major monastery of the Trinity Lavra of St. Sergius until it was closed in 1920. Between 1921 and 1924 he taught at the Academy of Artistic Sciences. He was also a member of the Academy of Sciences, and in 1927 he was appointed to be editor of the *Soviet Technical Encyclopedia*.^[8] His contribution to the nation's electrification project, where he worked between 1921 and 1927, was deemed particularly important to the state. Trotsky, who briefly headed Glavelektro (Chief Administration of the Electrification Industry) during the NEP period, sought out Florensky and invited him to speak at a conference.^[9] And despite having been arrested in 1928, Florensky was given a position as Director of Science Materials in the State Experimental Electrotechnical Institute upon his release from prison.^[10]

Florensky continued to write throughout the 1920s, producing major works on Russian art, electronics, physics and electrodynamics. His *Imaginary Numbers in Geometry*, published in 1924, was a geometric interpretation of Einstein's theory of relativity, which he identified with the geometry of the Kingdom of God.

His attitude toward the new state was practical. He did not struggle against or criticize the regime. "I have," he said, "developed my own philosophical and scientific worldview, which, though it contradicts the vulgar interpretation of communism... does not prevent me from honestly working in the service of the state."

Between 1914 and 1928, we see Florensky at the height of his powers. He was a highly regarded mathematician and scientist of world renown and was seen as a national asset.^[11] He played an essential role in the archetypal Leninist project of electrifying the country. He was a member of the Avant-guard, familiar with all the current ideas in art and philosophy. He wrote copiously, authoring reviews, textbooks, essays, technical papers, and encyclopedia entries, and he edited many collections. Finally, he was a true servant of God who saw his primary task to serve the pastoral needs of others.^[12]

Florensky and Cosmism

Florensky made contributions to electronics, geometry, physics, oceanography, philosophy, theology, art and semiotics. While a student in theology he founded a society to promote the ideas of the philosopher Vladimir Solovyov (1853-1900), the Christian Struggle Union. (He was briefly arrested for this in 1906). Solovyov was from the second generation of thinkers after Fedorov, and is considered to be one of the founding figures in Cosmism.

Florensky's major theological contribution to Fedorov's ideas was the idea of the Divine Sophia. In his writings he legitimized the role of Divine Sophia in Orthodox theology.^[13] By explaining the discourses on the early fathers, he introduced such Silver Age intellectuals as Sergei Bulgakov and Andre Biely to the feminine principle. One of the twelve letters in *The Pillar and Ground of the Truth* discusses the images of Sophia in different eras, from pre-Christianity, through early Christian doctrine and iconography, to the writings of Vladimir Solovyov.^[14] "Sophia," wrote, "is a preliminary hint of the transfigured, spiritualized world as the manifestation, imperceptible for others, of the heavenly in the earthly."^[15] For Florensky, as well as Biely and Bulgakov, Sophia was the "world soul."

George Young, in his study of Russian Cosmism, makes the point that Florensky's thought in all areas was driven by the search for the key to moving between two realms. Sophia, the soul of the

world, was one such realm, one not accessible to the rational mind, save through friendship and love.^[16] Similarly, the face of the icon in Russian religious art serves as the portal to entry between worlds. The sacred word itself has this “amphibian” quality. This approach led Florensky to an interest in the wisdom encapsulated in folk knowledge, and to a major theme in mysticism, the joining of the sound or name with the spiritual entity. One Russian version of this teaching was *Imisaslavie*, Name Worship, a practice which was making a comeback during period.^[17]

Florensky’s second major contribution to Cosmist thought involved the extension of the Cosmist biologist Vladimir Vernadsky’s concept of the noosphere, “the planet of thought.” Vernadsky taught that the noosphere overlays the biosphere. Florensky noted that spirit pervades all matter, and that each person is stamped in body and soul with the *sfraga* (seal) of God. This stamped image function like a “registration [that] stays with every participle of the body even once the body is scattered to the wind.”^[18] He suggested that a further, intermediate layer, the pneumatosphere, composed of spirit and culture, was interspersed and interpenetrated with biosphere and noosphere.

Florensky contributed to a third arena of cosmist thought centered on the topic of artificial organs. In a 1919 article, “Organoprojection,” Florensky introduced the idea of projecting artificial organs in space as extensions of our bodies. Using organoprojection, human capabilities would move throughout the cosmos. We would no longer be a species confined by our physical limitations.^[19] As Young notes, “[b]y a combination of flesh and machinery we can extend our organs to reach as far as we can imagine...”^[20] This suggestion, which points clearly in the direction of prosthetic enhancements as well as virtual reality, is fully in line with Fedorov’s Cosmist mission of traveling to all corners of the cosmos through technology.^[21]

Florensky was multi-talented and excelled in many fields. Yet his greatest contribution may be his insight into the unity of reality. His main drive, as mentioned above, was to approach every topic he studied with the object of finding a way to pass between realms of understanding within that subject. This characterized his thinking in mathematics as well as theology. His mathematical theory of discontinuity sought to equate complete truth (A) with its opposite truth (-A); truth is to be found in the thing and its opposite (A+(-A)).^[22] This was not a unique insight. This same speculation is found in the Madhyamika School of Mahayana Buddhism, which flourished around 150-250 CE in northern India.^[23] It is possible that Florensky was introduced to these ideas, as well as Theosophy, from his interactions in Silver Age settings. Leonid Sabaneeff, who knew him at Moscow State University, was convinced that Florensky practiced “Yogic exercises” in private and was acquainted with Hindu mysticism.^[24] There are no other leads connecting these two realms of Florensky’s life, so this remains speculation. At any rate both in his mathematics and in his theology his teachings fit easily within the mainstream of Cosmist speculation.

1928-1937

Throughout the 1920s Soviet leadership struggled to fine-tune policy towards intellectuals. The state acknowledged the need for the bourgeois specialists who had needed skills. There was therefore an effort not to overly antagonize intellectuals.^[25] Specialists were recognized and rewarded. While the Party in general adopted a “hard line” on cultural issues, especially ideology, the state was allowed to follow a “soft line.”^[26] This unstable policy situation continued until 1928.

How then did Florensky manage to survive and work up until his arrest in 1928? He remained after all a priest, and continued to write philosophy and theology. Yet he was also a member of the very intelligentsia who as a group were sorely needed to build the new economy. Thus, through most of the 1920s and as late as 1932 he was allowed to do meaningful work for the State. But once the

direction of policy shifted, he eventually fell victim to the hardline approach. In hindsight it is remarkable he was able to work as long as he did.

He could have escaped into exile. Yet he didn't. His loyalty to his native land explains his refusal to join the 160+ intellectuals exiled overseas in the two "philosopher's ships." This label referred to two groups of intellectuals sent into exile aboard ships on Lenin's express orders in 1922.^[27] Florensky knew well the risk of staying. As Bulgakov would note, Florensky was willing to accept persecution in his homeland rather than spiritual misery overseas.^[28]

Florensky's ultimate fate follows the same trajectory taken by many intellectuals in the Stalin period. He was arrested by the Soviet state twice. The first time, 1928, he was tried and found guilty of participation in a Church-sponsored, counterrevolutionary plot. He served only two months before he was allowed to return; Yekaterina Peshkova, the first wife of Maxim Gorky, used her influence to get him released early. The second time, in 1933, he was not so lucky. Among the charges brought against him this time, one related to *Imaginary Numbers in Geometry*. In this work he had stated that Einstein's theory of relativity was proof of the geometry of the Kingdom of God, a finding that did not match communist doctrine.^[29] He was sentenced to ten years of hard labor and sent to Siberia. Remarkably, his abilities as a scientific researcher were so widely known that even in the labor camps he was allowed to continue his research on such topics as permafrost and iodine production. But eventually, in 1937, he was brought back to a camp near Leningrad, was found guilty of the same charges brought against him in 1933, and executed.^[30]

Conclusion

Many of Florensky's writings did not see publication during his life. Some have been released due to the efforts of Cosmists in the 1990s, in particular Svetlana Semenova. Today Florensky, along with other religious Cosmists as Sergei Bulgakov (1871-1944) and Nikolai Berdyaev (1874-1948), have been fully integrated into the Cosmist pantheon. But Florensky is remembered as more than a Cosmist. In the religious sphere Florensky is mentioned in prayers by at least one Russian Orthodox group, the Russian Orthodox Church Outside of Russia. Despite many petitions, both the ROCOG and the Moscow Patriarchate refuse to consider his canonization.^[31] And he made contributions to many areas of science—Florensky was rehabilitated by the Soviet state in 1956.

Florensky was a remarkable person who left an important legacy of thought in several fields. He would not have thought of himself as a Cosmist, however—the term was not widely used to refer to Fedorov and his successors until the 1980s.^[32] Yet seen as a whole the contribution of his body of work to the development of Cosmist thought is clear. He united in his person the two main streams of Cosmism, the esoteric and the scientific. Most importantly, one senses in Florensky a spirit totally open to reflection on the world in which he lived. In this sense his tortured journey through Soviet life, which in the end can only be called a tragedy, is intrinsic to his ability to inspire Cosmists today.

^[1]George M. Young, *The Russian Cosmists: The Esoteric Futurism of Nikolai Fedorov and His Followers* (New York: Oxford University Press, 2012), 8-9, quoting Michael Hagemester.

^[2]In his later years he was attracted to the theosophical ideas of Rudolph Steiner, called anthroposophy. He attempted to unite Steiner's ideas with those of the Russian philosopher Vladimir Solovyov.

^[3]Azadovski, Konstantin. "Russia's Silver Age in Today's Russia."

^[4]Pavel Florensky, *Salt of the Earth: A Narrative on the Life of ABBA Isidore*

^[5]Young, *The Russian Cosmists*, 125.

^[6]Groys, Boris, and Michael Hagemester, and Wolfgang Ullmann, "Pavel Florenski: Biographie," at Kontext Verlag website, <http://www.kontextverlag.de/florenskij.biographie.html>.

^[7]Young, *The Russian Cosmists*, 124.

^[8]See Thomas Hopko, "Florenskii Pavel," in Encyclopedia of Religion, first published 1987, updated on encyclopedia.com 25 Mar. 2021, <https://www.encyclopedia.com/environment/encyclopedias-almanacs-transcripts-and-maps/florenskii-pavel>.

^[9] Young, *The Russian Cosmists*, 130-1; Jonathan Coopersmith, *The Electrification of Russia, 1880-1926* (Ithaca and London: Cornell University Press, 1992), 195-6.

^[10] Young, *The Russian Cosmists*, 131; Christopher Schneider, "Pavel Florensky: At the Boundary of Immanence and Transcendence," in Caryl Emerson, George Pattison, and Randal A. Poole, eds., *The Oxford Handbook of Russian Religious Thought* (Oxford: Oxford university Press, 2020), 293-308, p. 294.

^[11]Young, *The Russian Cosmists*, 130.

^[12]Florensky was instrumental in the conversions of several important intellectuals, including Sergei Bulgakov, N.O. Lossky, and Vasilii Rozanov. See Florenskii Pavel, encyclopedia.com updated 25 Mar. 2021.

^[13]Young, *The Russian Cosmists*, 126.

^[14]Young, *The Russian Cosmists*, 126.

^[15]Young, *The Russian Cosmists*, 126; 283 PGT.

^[16]Young, *The Russian Cosmists*, 127.

^[17]Florensky was attacked by the Orthodox Church in the 1913-1915 controversy over Name Worship. See Young, *The Russian Cosmists*, 127-8.

^[18]This explanation is found in a 1929 letter from Florensky to Vernadsky, cited in Young, *The Russian Cosmists*, 132.

[19]Young, *The Russian Cosmists*, 131.

[20]Young, *The Russian Cosmists*, 132.

[21]Fedorov expected that the resurrected bodies of ancestors would be reengineered to make them able to survive in any conditions anywhere in the universe. See Young, *The Russian Cosmists*, 49.

[22]Young, *The Russian Cosmists*, 122.

[23]The Mūlamadhyamakakārikā of the philosopher Nagarjuna develops the teaching that every thing (*dharma*) is empty of essence and combines with its opposite in a non-causal way.

[24]Leonid Sabaneeff, “Pavel Florensky—Priest, Scientist, and Mystic,” *The Russian Review*, Vol. 20, No. 4 (Oct. 1961), 312-325, p. 313.

[25]Sheila Fitzpatrick, “The ‘Soft’ Line on Culture and Its Enemies: Soviet Cultural Policy, 1922-1927,” *Slavic Review* 33(2), 1972, 267-287, p. 267

[26]Fitzpatrick, “The Soft Line,” 268.

[27]Catherine Baird, The Philosophers’ Ships,” on *Revolution from Within* website, 1997, <http://www.catherinebairdbooks.com/the-philosophers-ships/>.

[28]Young, *The Russian Cosmists*, 131.

[29]Ray Zammir, “Physics, Technology, and Theology in Pavel Florensky,” *Melita Theologica, Journal of the Faculty of Theology, University of Malta* 69/1 (2019: 35-46, pp. 36-7.

[30]Thomas Hopko source notes some accounts state he died in 1943 or, perhaps, in the 1950s. The 1937 date is taken from Young.

[31]Giacomo Sanfilippo, “Father Pavel Florensky on Same-Sex Love: A Response to Paul Ladouceur and Richard René,” *Orthodoxy in Dialogue* website, 26 Feb. 2021, <https://orthodoxyindialogue.com/2021/02/26/father-pavel-florensky-on-same-sex-love-a-response-to-paul-ladouceur-and-richard-rene-by-giacomo-sanfilippo/>.

[32]Young, *The Russian Cosmists*, 8.

Bibliography

Azadovski, Konstantin. “Russia’s Silver Age in Today’s Russia.” *Surfaces*, Vol. 9, 2001, DOI: <https://doi.org/10.7202/1065062ar>.

Baird, Catherine. The Philosophers’ Ships,” on *Revolution from Within* website, 1997, <http://www.catherinebairdbooks.com/the-philosophers-ships/>.

Coopersmith, Jonathan. *The Electrification of Russia, 1880-1926* (Ithaca and London: Cornell University Press, 1992).

- Fedorov, Nikolai F. *What Was Man Created for? The Philosophy of the Common Task; Selected Works*. Translated and abridged by Elisabeth Koutaissoff and Marilyn Minto (London: Honeyglan, 1990).
- _____. *The Way of a Pilgrim, and the Pilgrim Continues His Way*. Trans. R.M. French, 1954, San Francisco: Harper, 1991).
- Fitzpatrick, Sheila. "The 'Soft' Line on Culture and Its Enemies: Soviet Cultural Policy, 1922-1927." *Slavic Review* 33(2), 1972, 267-287.
- Florensky, Pavel. *The Pillar and Ground of the Truth*. Translated and annotated by Boris Jakim (Princeton, NJ: Princeton University Press, 1997).
- Groys, Boris, and Michael Hagemester, and Wolfgang Ullmann, "Pavel Florenski: Biographie," at Kontext Verlag website, <http://www.kontextverlag.de/florenskij.biographie.html>.
- Hagemester, Michael. "Russian Cosmism in the 1920s and Today". In Bernice G. Rosenthal (ed.): *The Occult in Russian and Soviet Culture* (Ithaca, London: Cornell University Press, 1997), pp. 185–202.
- _____. *Nikolai Fedorov. Studies on life, work and impact*. Sagner, Munich 1989, ISBN 3-87690-461-7 (dissertation University of Marburg 1989).
- Kenez, Peter. *Cinema and Soviet Society, 1917-1953* (New York: Cambridge University Press, 1992).
- Mally, Lynn. *Culture of the Future: The Proletkult Movement in Revolutionary Russia*. Berkeley, CA: University of California Press, 1990.
- Moabel, Pastor. "Russian Cosmism, Perpetual Generations Abraham's Seed, 500 Quadrillion People". youtube.com. Retrieved 26 September 2019.
- Pyman, Avril. *Pavel Florensky: A Quiet Genius: The Tragic and Extraordinary Life of Russia's Unknown da Vinci* (New York: Continuum, 2010).
- _____. Review of Pavel Florensky *Isimvolisty*, by E.A. Ivanova. *Slavic and East European Review* 83, no. 4 (2005), 740-1.
- Sabaneeff, Leonid. "Pavel Florensky—Priest, Scientist, and Mystic. In *The Russian Review*, Vol. 20, No. 4 (Oct. 1961), 312-325.
- Antilipo, Giacomo. "Father Pavel Florensky on Same-Sex Love: A Response to Paul Ladouceur and Richard René." *Orthodoxy in Dialogue* website, 26 Feb. 2021, <https://orthodoxyindialogue.com/2021/02/26/father-pavel-florensky-on-same-sex-love-a-response-to-paul-ladouceur-and-richard-rene-by-giacomo-sanfilippo/.<.a>>
- Slesinski, Robert. *Pavel Florensky: A Metaphysics of Love* (Crestwood, N. Y., 1984).
- Young, George M. *The Russian Cosmists: The Esoteric Futurism of Nikolai Fedorov and His Followers* (New York: Oxford University Press, 2012).
- Zamir, Ray. "Physics, Technology, and Theology in Pavel Florensky," *Melita Theologica*, Journal of the Faculty of Theology, University of Malta 69/1 (2019: 35-46).

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