

Esoteric Elements In Russian Cosmism

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Abstract

Russian Cosmism is a lively and still productive tendency in the history of Russian esoteric thought, important but little known outside Russia. This paper presents a brief introduction to the ideas of several of the major figures in this tendency. From Nikolai Fedorov, in the last quarter of the nineteenth century, to Svetlana Semenova, today's leading Cosmist, the emphasis of this movement has been on the human role in shaping and directing future human evolution, in all its physical, social, and spiritual manifestations.

Ideas discussed in the paper include Fedorov's project of active resurrection, in which all the living would eventually resurrect all the dead; Vladimir Solovyov's wholly spiritual variation of this project; Konstantin Tsiolkovsky's development of Fedorov's plans for space travel; Vladimir Vernadsky's concept of the noosphere, in which human reason plays a role in its future evolution; Sergei Bulgakov's extension of Fedorov's regulation project into a concept of spiritual economy; and Florensky's extension of Fedorov's idea of the unity of all knowledge and activity into an attempt to unite mathematics and spirituality toward a mystical resolution of all antinomies and apparent contradictions. Other ideas considered include Alexander Sukhovo-Kobylin's theory of human evolution toward spacelessness; Valerian Muravyov's idea of human control over time; Alexander Chizhevsky's research into the influence of solar energies upon mass human behavior; Vasily Kuprevich's speculations on the possibility of human immortality; and Svetlana Semenova's recent advocacy of the Cosmist over the ecosophist worldview. My conclusion is that Cosmists may not have proposed perfect solutions to our world's major problems, but they have raised and directed serious thought to questions that will be even more important in the future than they are today.

Les éléments ésotériques dans le cosmisme russe

George M. Young, Ph.D.

Résumé

Le cosmisme russe est une tendance vive et encore productive dans l'histoire de la pensée ésotérique russe, importante mais très peu connue en dehors de la Russie. Cet article présente une brève introduction aux idées de plusieurs des figures majeures dans cette tendance. De Nikolai Fedorov, dans le dernier quart du dix-neuvième siècle, à Svetlana Semenova, la chef de file cosmiste aujourd'hui, l'emphase de ce mouvement est placée sur le rôle humain à former et diriger le futur de l'évolution humaine dans toutes ses manifestations physiques, sociales, et spirituelles. Les notions examinées dans l'article incluent le projet de résurrection active de Fedorov, dans lequel tous les vivants vont éventuellement ressusciter tous les morts; la variante entièrement spirituelle de ce projet de Vladimir Solovyov; le développement par Konstantin Tsiolkovsky du plan de Fedorov pour le voyage dans l'espace; le concept de noosphère de Vladimir Vernadsky, selon lequel la raison humaine joue un rôle dans son évolution future; l'extension du projet de régulation de Fedorov par Sergei Bulgakov en un

concept d'économie spirituelle; et l'extension par Florensky de la notion de Fedorov de l'unité de toute connaissance et toute activité pour tenter d'unir les mathématiques et la spiritualité vers une résolution mystique de toutes les antinomies et contradictions apparentes. Les autres notions considérées incluent la théorie d'Alexander Sukhovo-Kobylin sur l'évolution humaine vers le non espace, la notion du control humain sur le temps de Valerian Muravyov, la recherche d'Alexander Chizhevsky sur l'influence des énergies solaires sur le comportement humain de masse; les spéculations de Vasily Kuprevich sur la possibilité de l'immortalité humaine; et le récent soutien de Svetlana Semenova pour la vision cosmiste du monde au lieu de la vision écosophiste. Ma conclusion est que les cosmistes n'ont pu être pas proposé des solutions parfaites aux problèmes majeures de notre monde, mais ils ont soulevé et mené de sérieuses réflexions sur des questions qui seront encore plus importantes dans le future qu'elles le sont aujourd'hui.

Elementos Esotéricos en el Cosmismo Ruso

George M. Young, Ph.D.

Resumen

El Cosmismo Ruso es una viva y una productiva tendencia en la historia del pensamiento esotérico Ruso, importante pero muy poco conocida fuera de Rusia. Este escrito presenta una breve introducción a las ideas de algunas de las mayores figuras en esta tendencia. Desde Nikolai Fedorov, en el ultimo cuarto del siglo diecinueve, hasta Svetlana Semenova, el Cosmista mas grande de hoy, el énfasis de este movimiento en el ámbito humano ha sido el dirigir y darle forma al futuro de la evolución humana, en todo lo que comprende con lo físico, social y manifestación espiritual. Ideas que se discuten en el escrito, incluyen el proyecto de Fedorov de la resurrección activa, en la cual todo lo vivo eventualmente resucitara a lo muerto; el plan de Vladimir Solovyov's de viaje espacial' el concepto de Vladimir Vernadsky's de la noosfera, en el cual la razón humana juega un papel en su futura evolución; Sergei Bulgakov's con la extensión de Fedorov acerca de la unidad de todo conocimiento y actividad dentro de la intención de unir las matemáticas y la espiritualidad a una mística resolución de todas las antinomias y aparentes contradicciones. Otras ideas que se consideran y estan incluidas son, la teoría de la evolución humana hacia un lugar sin espacio de Sukhovo-Kobylin's, la idea de control humano del tiempo de Valerian Muravyov's, el estudio de la influencia de las energías solares sobre el comportamiento humano en masa de Alexander Chizhevsky's, La especulación de la inmortalidad humana de Vasily Kuprevich's, y la reciente vindicación del Cosmista sobre el ocosofismo mundial de Svetlana Semenova. My conclusión es que el Cosmista quizás no propusieron soluciones perfectas para los mas grandes problemas de nuestro mundo, pero han elevado y dirigido serios pensamientos sobre las preguntas que serian ahun mas importantes para el futuro que para hoy.

Elementos Esotéricos na Filosofia Russa de Evolução Cósmica

George M. Young, Ph.D.

Resumo

A Filosofia Rússia de Evolução Cósmica é uma tendência animada e ainda produtiva na história do pensamento esotérico russo, importante mas pouco conhecida fora da Rússia. Este artigo apresenta uma breve introdução às idéias dos principais personagens desta tendência. Desde Nikolai Fedorov nos últimos meses do século XIX, até Svetlana Semenova, atual líder da Filosofia Russa de Evolução Cósmica. O ênfase deste movimento tem sido principalmente sobre o papel do Ser Humano na sua concepção e direção da evolução futura, em todas as suas manifestações físicas, sociais e espirituais. As idéias discutidas neste relatório incluem o projeto Fedorov da ressurreição ativa, em que todos os vivos eventualmente ressuscitariam todos os mortos; a variação completamente espiritual de Vladimir Solovyov sobre este projeto; o desenvolvimento de Konstantin Tsiolkovsky sobre os planos de viagens espaciais de Fedorov para; o conceito de Vladimir Vernadsky sobre a noosfera, em que a razão humana desempenha um papel na sua evolução futura; a extensão de Sergei Bulgakov do projeto Fedorov de regulação em um conceito de economia espiritual; e a adição de Florensky sobre a idéia da unidade, de Fedorov, de que todo o conhecimento e atuação esforça-se em uma tentativa de unir a matemática e a espiritualidade, em direção a uma resolução mística que junta todas as antinomias e contradições aparentes. Outras idéias consideradas neste relatório incluem a teoria de Alexander Sukhovo-Kobylin da evolução humana para um estado sem limite no espaço; a idéia de Valeriano Muravyov do controle humano sobre o tempo; a pesquisa de Alexander Chizhevsky sobre a influência da energia solar no comportamento humano em massa; especulações de Vasily Kuprevich sobre a possibilidade da imortalidade humana; e o recente apoio, de Svetlana Semenova, da Filosofia Russa de Evolução Cósmica ao invés da visão ecosofista. Minha conclusão é que os Comistas (Filósofos Russos de Evolução Cósmica) podem não ter proposto soluções perfeitas para grandes problemas do nosso mundo, mas eles propuseram pensamentos sérios para as questões que serão muito mais importantes no futuro do que são hoje em dia.

Esoterische Grundbegriffe im Russischen Kosmismus

George M. Young, Ph.D.

Zusammenfassung

Der russische Kosmismus ist eine lebendige und noch heute produktive Tendenz in der Geschichte russischen, esoterischen Denkens, die obwohl wichtig, so doch ausserhalb Russlands wenig bekannt ist. Die vorliegende Schrift praesentiert eine kurze Einfuehrung in die Ideen von einigen der bedeutenen Figuren dieser Tendenz. Von Nikolai Fedorow, im letzten Viertel des 19. Jahrhunderts bis Svetlana Semenowa, der heutigen, leitenden Kosmistin, das Hauptaugenmerk dieser Bewegung war die menschliche Rolle im Formen und Leiten zukuenftiger, menschlicher Entwicklung in all ihrer physischen, sozialen und spirituellen Manifestierung. Ideen die in dieser Schrift behandelt werden, schliessen Fedorows Projekt der aktiven Wiederbelebung ein, in welcher alle Lebenden letzten Endes alle Toten wieder beleben wuerden, die durchweg spirituelle Variation dieses Projekts von Wladimir Solowjow; Konstantin Tsiolkowsky's Weiterentwicklung von Fedorows Plaenen

fuer Raumfahrt; Wladimir Wernadskys Vorstellung der Nouspaere, in welcher menschliche Vernunft eine Rolle spielt in seiner zukuenftigen Entwicklung; Sergei Bulgakows Erweiterung von Fedorows Regelnprojekt in eine Vorstellung spiritueller Oekonomie; und Florenskys Weiterentwicklung von Fedorows Idee der Einheit alles Wissens und Schaffens in einen Versuch Mathematik und Spritualitaet zu vereinigen auf dem Wege zur Aufloesung aller Antinomien und scheinbaren Widerspruechen. Die Erwaegung anderer Ideen schliessen Alexander Suchowo-Kubelins Theorie der menschlichen Entwicklung gegen Raumlosigkeit ein, sowie Valerian Muranwjow Idee der menschlichen Gewalt ueber Zeit, Alexander Tchischewskys Forschung ueber den Einfluss solarer Energien auf das Benehmen der Menschheit; Wasily Kuprewitschs Mutmassungen ueber die Moeglichkeit menschlicher Unsterblichkeit; und Swetlana Semenowas juengste Befuerwortung der kosmistischen ueber die oekosophistische Weltanschauung. Mein Schluss ist, dass obwohl Kosmisten keine perfekten Loesungen unserer weltlichen Hauptprobleme praesentiert haben, so haben sie doch wichtige Gedanken hervorgebracht zu Fragen die noch wichtiger fuer die Zukunft als fuer die Praesenz von Geltung sein werden.

Introduction

Early in the twentieth century the Rosicrucian and Anthroposophical thinker Rudolf Steiner wrote that Eastern European peoples, and Russians in particular, presciently anticipated the inspiring of the folk-soul that would be the defining characteristic of the coming sixth post-Atlantean age. Russians, he believed, more than other peoples of the current age, demonstrated an awareness of and receptivity to spiritual truths that would become universal in the age that would immediately follow ours (Steiner, 1910). And, indeed, esoteric and new age history offer some support to Steiner's insights on this point. Since the late nineteenth century, more than a few notable contributions to international esoteric doctrine have come west with a strong Russian accent: H. P. Blavatsky, George Gurdjieff, P. D. Ouspensky, Nicholas and Helena Roerich are names that immediately come to mind, not to mention the more recent phenomena of Anastasia of the Ringing Cedars and Vissarion of the Last Testament.

Less widely known, but perhaps at least as important, are a number of Russian thinkers who have devoted serious philosophical, theological, and scientific attention to topics usually considered matter for esoteric speculation, including: self-directed human evolution towards higher levels of humanity; human attainment of virtual omniscience, omnipotence, and even immortality; the restoration of life to the dead; the influence of astral forces on human affairs; the radical alteration and spiritualization of the material world. This tendency, called Russian Cosmism, is a movement very much alive and productive in Russia today, but little known elsewhere. Major figures in the history of Cosmism include the ascetic librarian and visionary thinker Nikolai Fedorov (1829–1903), the Silver Age poet and philosopher Vladimir Solovyov (1853–1900), the self-taught rocket scientist Konstantin Tsiolkovsky (1857–1935), the polymath scientist and conceiver of the noosphere (sphere of reason) Vladimir Vernadsky (1863–1945), the economist and theologian Sergei Bulgakov (1871–1934), the scientist and spiritual philosopher Pavel Florensky (1882–1937), the diplomat and esoteric state official Valerian Muravyov (1885–1932), the heliobiologist, pioneer in the study of the relationship between solar energy and human behavior, Alexander Chizhevsky (1897–1964), and the geronto-botanist Vasily Kuprevich (1897–1969).

Individually, these thinkers did not consider themselves part of an intellectual school of any kind, especially an esoteric school, but regarded together, their contributions to separate fields of study exhibit many points in common with each other as well as with the works of such earlier figures in the Western esoteric tradition as Marsilio Ficino, Pico della Mirandola, Giordano Bruno, Cornelius Agrippa, and Francis Bacon. As Frances Yates noted in *The Rosicrucian Enlightenment*, nowhere in *The New Atlantis* does Bacon mention the Rose and Cross, but the entire work is full of Rosicrucian ideas. (Yates 1972) So it is with the Russian Cosmists: none with the exception of Tsiolkovsky, and to a degree Florensky, acknowledges theosophical or other esoteric sources or inclinations, but all their works abound in theosophical and esoteric insights couched in the rhetoric of ordinary intellectual discourse.

Nikolai Fedorov

One common feature of all subsequent Russian Cosmists is their debt to the thought of Nikolai Fedorovich Fedorov, an obscure Moscow librarian and legendary Socratic figure who published almost nothing during his lifetime but whose papers were collected, edited, and posthumously published by disciples in two massive volumes under the title *The Philosophy of the Common Task*. In recent years, scholars both in Russia and abroad have begun to recognize the scope and depth of Fedorov's influence on subsequent Russian thought and culture. In literature, Fyodor Dostoevsky, Lev Tolstoy, Andrei Biely, Valery Briusov, Vladimir Mayakovsky, Andrei Platonov, and Boris Pasternak are among those whose work has shown Fedorov's influence. In addition to those thinkers to be discussed below, we should note that Fedorov's ideas exerted at least some influence on the work of the philosopher Nikolai Berdyaev, as well as on some of the Promethean scientific, technological, and cultural developments—and according to some, even on Stalin's ambitious attempts at social transformation—that dominated twentieth century Russian history (Young 1979).

Nikolai Fedorovich Fedorov was born in the south of Russia, the illegitimate son of a prince, from one of Russia's oldest and most prominent families, the Gagarins, and a neighbor woman about whom almost nothing is known. As he wrote much later, one of his first childhood memories was the constant awareness that he was both a member and not a member of an illustrious Russian family. He always chose to speak and write from the point of view of the outsider addressing insiders, someone with intimate knowledge of both the highest and lowest strata of Russian life; a voice for the voiceless. His major essay, reflecting his belief in the literal kinship of all humanity, is titled "The question of brotherhood, or kinship, of the reasons for the unbrotherly, unkindred, i.e. unpeaceful state of the world, and of the means for the restoration of kinship. A note from the unlearned to the learned: clergy and laity, believers and unbelievers."

Following Sir Isaiah Berlin's famous division of thinkers into foxes, who know many things, and hedgehogs, who know one big thing (Berlin 1953), Fedorov was a supreme hedgehog. The one big thing he knew is that all problems known to humans have a single root in the problem of death, and that no solution to any social, economic, political, or philosophical problem will prove adequate until humanity has solved the problem of death. But if a solution to the problem of death can be found, then solutions to any and all other problems will fall into line. Nature, for Fedorov, is the force of disintegration and death. Everything that begins as a whole unit, whether social, spiritual, or physical, animal, vegetable, or mineral, is driven

by nature to separate into particles. What he calls the “common task” of humanity is to restore wholeness and integrity to whatever nature disintegrates, whether on a cosmic, a social, or a personal scale. Death, for the individual, is the disintegration of the person into particles. He calls these particles “ancestral dust.” The task for humanity is to unite in a universal project that enlists all peoples, all faiths and unfaiths, all forms of knowledge and action together toward the one goal of re-gathering all the dispersed particles of ancestral dust, no matter where on Earth or beyond Earth those particles have drifted, restoring life to all humans who have lived and died, starting with recently departed relatives, and gradually, with sons and daughters resurrecting their parents, who in turn resurrect their parents, over many generations, resurrecting all the way back to Adam and Eve. The restoration of life to all dead ancestors is the one task that can unite all humanity, all religions, all branches of knowledge, art, and activity. Nothing short of this will suffice. Already in the late nineteenth century, Fedorov included in his project, and was ridiculed for it, such then unthinkable ideas as cloning, genetic engineering, space travel, and eventually the reconstitution of human organisms to live on sunlight and air and to survive throughout the universe in places currently unable to support human life.

For Fedorov, a devout Orthodox Christian, the project of resurrection would solve the problem of divisiveness and enmity among religious creeds. By participating in the act of resurrecting their ancestors, everyone would be following Christ in deed, actively, truly Christian, regardless of creed. The attainment of individual immortality by itself; the goal of the Nietzschean superperson, whom Fedorov calls the eternal adolescent, is the height of immaturity and immorality; for we must regard ourselves first and foremost not as men and women but as sons and daughters of men and women. Christ came not as man or deity, but as son of man and son of deity. So the vertical, Christian ideal of sonship and daughterhood must precede the horizontal ideals of brotherhood and sisterhood, whether French revolutionary *fraternite*, or Marxist comradeship. One of Fedorov’s boldest and most profound ideas is that immortality is acceptable only if it is universal, extending back through all time as well as throughout space. Human love, to be unselfish, must be directed toward those from whom we took life. Present life is spiritual cannibalism, the young devouring the old; future life must reverse that direction and give life back to those whose lives fed us.

The ultimate goal is the restoration of paradise, not only on Earth but on the Moon, the planets, and throughout the cosmos. We will rearrange matter to suit the Divine’s intent, no longer being mere idle passengers, but will become – and he said this in the 1860s, thirty-five years before Buckminster Fuller was even born,—“captain and crew of spaceship earth,” guiding it from its natural orbit into orbits that embody throughout the universe the Divine’s intent, a cosmic icon of the Holy Trinity. After we have changed “the world as it is” into “the world as it ought to be,” there will be no more childbirth as well as no more death, no marriage, no sex, no competition for love or admiration, no war, no enmity,—no cheeseburgers. We will enjoy practical, interpersonal omniscience: everyone who ever lived will be alive again, so all human memory and consciousness will be ours to call on – if we wish to know, for example, how and why Stonehenge was built, we can simply ask the people who built it. All knowledge will not be divided and subdivided into narrow, rival academic specialties, will not be the province of a special educated elite, but will be integrated, active, and shared by all.

One of the most serious problems that Fedorov attempted to solve was the complex problem of nourishment and waste. Or as Fedorov puts it, “the problem of cannibalism.” He writes

that we cannot condemn cannibalism among primitive peoples because: “at the present time we are living on the account of our ancestors, from whose dust we derive our food and clothing; thus all history may be divided into two periods: a first period of direct, immediate cannibalism; and a second period of covert people eating, which continues to this day, and which will continue as long as humans do not find a way out of our imprisonment on Earth. But after this second period a third must necessarily follow—a period of universal resurrection as the single effective expiation for the sin of cannibalism” (Fedorov Vol II).

For Fedorov, only a radical restructuring of our world and of ourselves—he calls it “regulation of nature”—will free us from generational cannibalism. If to achieve immortality means that we will continue to live more or less as we do now, only without dying, then in Fedorov’s view we will only be as immoral as we are immortal. Heaven, or hell, will be of our own making, and so long as we allow ourselves to be driven by nature, we are hellbound. But simply tinkering with ourselves and our universe, without the only true goal, will not do. Only if we follow the icon of Christ, son of the Divine and son of humankind, resurrector of Lazarus and resurrected from Golgotha, can we re-create ourselves and our universe into the paradise that has forever been the dream of humanity—and avoid a monstrous lurching Frankensteinian existence in a botched fixer-upper universe.

For Fedorov, a future goal of humankind should be autotrophy—taking nourishment from sun and air—as now practiced in rudimentary form by certain plants and bacteria. Not in the immediate future, but perhaps in far distant times, we may need fewer and fewer parts of the body we now feed, and eventually become more like mentally and spiritually advanced plants communicating in rich mindfields than like advanced primates leaping faster and higher in increasingly expensive footwear. We could eventually be enormous inter-connected sensibilities with a minimal physical presence.

The hardly imaginable technology necessary for the radical transformations that Fedorov’s project would require caused even his most devoted friends to shake their heads and smile. Tolstoy, who considered himself “proud to have lived at the same time as such a man” could not resist raising his eyebrows in skeptical amusement when he spoke of Fedorov with visitors. And Vladimir Solovyov, who wrote to Fedorov that “since the time of the appearance of Christianity your ‘project’ is the first forward movement of the human spirit along the path of Christ. For my part I can only regard you as my teacher and spiritual father” (Young 1979)—Solovyov was horrified at the scientific-technological side of the idea, and tried to convince Fedorov that resurrecting must be an entirely spiritual activity, utilizing prayer, fasting, meditation, and other spiritual exercises to first develop immortal souls and then to let those souls create the appropriate new bodies – but not to attempt to revive corpses. Critics of Fedrov have accused him of advocating necromancy and the discredited occultism of eighteenth-century Freemasonry. In a more positive light, Fedorovism and the Cosmism derived from it might best be considered a kind of “exoteric thaumaturgy,”—wonderworking under the aegis of intellectual legitimacy.

Although Fedorov severely criticized his admirers Solovyov and Dostoevsky for what he termed their “mysticism” and their preference for the hidden and occult over the open and real, Fedorov himself is essentially restating for his own time, and projecting into the future, ideas long rooted in the Western esoteric tradition. Throughout his writings, for example, is the tacit understanding of “as above, so below.” In the world “as it is” both the human microcosm and the outer macrocosm are driven by the natural force of disintegration:

exploding universe, exploding society, exploding psyche,—body, soul, and intellect all at odds—while in the task of recreating the world “as it ought to be,” the goal will be one world, inner and outer, redrawn into the image of the Holy Trinity. The traditional esoteric idea of a small group of initiates, mahatmas, or advanced souls modeling and guiding the rest of us toward a new age of universal enlightenment becomes, in Fedorov, the idea that the learned must serve as a temporary task force to guide, serve, educate, and integrate the unlearned in the grand resurrection project. The traditional esoteric idea that all religions are essentially cultural variations on a single, secret doctrine becomes, in Fedorov, the idea that all religion is based on the cult of ancestors, and that true, active Christianity, the communal, universal practice of resurrecting of the dead, is the cult of ancestors made active, the one religious activity capable of unifying the world.

Like Agrippa and Bacon, Fedorov viewed “progress” as advancement back to Adam and Eve in a fully restored universal Eden. The task, for example, of linguists in the resurrection project is to rediscover the original language that Adam and Eve used to speak to each other and to the Divine, and once it is rediscovered, it will immediately sound so familiar and perfect that all people on Earth and beyond will easily reacquire it. As Pico wrote as one of his 900 theses, “there is no science which gives us more assurance of Christ’s divinity than magic and the Cabala” (Yates 1972). For “magic,” Fedorov substitutes “future science,” and for “Cabala” the correct, active, projective understanding of the Christian gospel.

In Fedorov, the Neoplatonic idea of “higher reason” that allows us to see through the visible but unreal to the invisible but real world becomes “projective” knowledge, envisioning and creating the “world as it ought to be” out of the “world as it is.” In the epistemology that Fedorov terms “supramoralism,” all currently passive knowledge, all science of observation, will become active knowledge, science as transformation. Meteorology will become meteorurgy, not simply the observation but the control of weather and climate. Astronomy will become the science of astronautics, leading to the exploration, colonization, and even rearrangement of heavenly bodies. As Frances Yates writes about Pico, “He it was who first boldly formulated a new position for European man, man as Magus using both Magia and Cabala to act upon the world, to control his destiny by science” (Yates 1972). Fedorov does not mention Pico, but is writing in his spirit when he writes that all today’s “ologies” must become “urgies.”

Although he does not cite the Divine Poimandres of Hermes Trismegistus, Fedorov’s entire “common task” could be understood as a response to Thrice-Great Hermes’ summons: “People, earthbound people, you who have surrendered yourselves to drunkenness and sleep and ignorance of the Divine, make yourselves sober and end your drunken sickness, for you are bewitched in unreasoning sleep. Why have you surrendered yourselves to death, earthbound people, since you have the right to share in immortality? You who have journeyed with error, who have partnered with ignorance, think again: escape the shadowy light, leave corruption behind and take a share in immortality” (Van den Broek 1998).

One thing Fedorov insisted on is our task to labor to end any gap between ideal and reality. As mentioned above, one of his most radical ideals was that of autotrophy, self-nourishment, allowing one to abstain from any and all eating, or, as he termed it, cannibalism. In life, Fedorov was never able to actually practice autotrophy, but he probably came as close as anyone west of the Ganges could. Lev Tolstoy, who from midlife on struggled with everything “of the flesh,” regarded Fedorov with amazement and perhaps envy, for the

chaste, abstemious life he was able to live without apparent effort. Even though he shared some of the general thrust, but not the details, of Fedorov's idea, in the end Tolstoy always seemed more impressed that Fedorov ate only hard rolls, stale cheese, now and then an onion or root vegetable, and drank only dark tea, and that he wore the same shabby coat winter and summer, managed to donate most of even his very meager salary to the poor, and cursed himself if he came home at night with a few kopecks in his pocket—more impressed that Fedorov slept on a humpback trunk without a bed or pillow than with the project of universal resurrection (Young 1979).

Scientific Cosmists: Konstantin Tsiolkovsky and Vladimir Vernadsky

Not all who knew of Fedorov's boldest ideas ridiculed them. In 1873, Fedorov took under his wing a sixteen year old raw youth from the provinces who had come for self education to the library where Fedorov worked. This young man was Konstantin Tsiolkovsky, who later became the pioneer and grandfather of Soviet rocket science (Andrews 2009) and, in addition to serious mathematical and scientific papers, wrote Fedorovian fantasies and theosophical treatises on panpsychism, and humanity's future in a cosmos in which every atom is not only alive, but sentient (Hagemester 2007). It was Tsiolkovsky's mathematical formulas, inspired by Fedorov, an unrecognized Gagarin, that laid the groundwork for the first Sputnik in 1957 and for the first flight into space by Yuri Gagarin, the most famous name in the long and distinguished Gagarin line.

The idea of a new age and an evolving new humanity that runs through the Cosmist tradition and finds radical expression in Fedorov's call to turn our present culture, which he calls "pornocracy"—with the sex drive at the root of absolutely everything—into a new age, which he calls "psychocracy," with spirit at the center, finds further development in the twentieth century in Vladimir Vernadsky's theory of the three stages of our planet's evolution, which began with the geosphere (inanimate life) which led to the biosphere (biological life), out of which is emerging the noosphere, in which human cognition becomes an active agent of evolution. Considered in Russia to rank with Newton, Darwin, and Einstein among the greatest figures in the history of Western science, Vernadsky was a pioneer in what is now called "environmental" science. In his seminal book, *The Biosphere*, he hypothesizes that it is life that has made Earth what it is, and in his later writings he suggests that human intelligence is in the process of transforming Earth into what it will be, a transformation that will be as fundamental and momentous as the transformation from a mineral to a biological entity (Bailes 1991, Ivanov 1990).

Alexander Sukhovo-Kobylin

Even before Fedorov, a number of Russian thinkers and writers displayed Cosmist tendencies. One of the most interesting was Alexander Sukhovo-Kobylin, a fabulously wealthy aristocratic playwright accused and arrested, but later acquitted, of the murder of his French mistress. The notorious, protracted, scandalous court case embittered him for life but inspired the works that constitute his literary legacy: *Krechinsky's Wedding*, *The Case*, and *The Death of Tarelkin*, a savage comic trilogy satirizing greed and corruption that still plays to appreciative audiences in Russia. Only his enormous wealth, he argued, attracted the false accusations against him, and only the bribes that wealth enabled him to pay secured his acquittal. After his ordeal, he withdrew entirely from his previously active role in Russian high society, and devoted himself to translating and explicating Hegel, and to developing his

own eccentric philosophy. He posits three stages in the development of humanity: telluric, or earthbound man, confined to the planet we inhabit; solar humanity, inhabiting our solar system; and sidereal humanity, inhabiting all worlds throughout the entire universe. Only the third stage of humanity has the absolute freedom that is the goal and perfection of all human movement and development. Important steps in the process of turning ourselves from earthbound human animals into sidereal human angels include becoming vegetarians, developing lighter and smaller rather than more massive bodies, and gradually acquiring the ability to fly. And flight for Sukhovo-Kobylin does not mean merely the invention of flying machines, but the growth of wings and attainment of the birdlike, insect-like skill of aerial self-propulsion.

Sukhovo-Kobylin believed that humanity in its present telluric stage is too much a captive of gravity and the senses. He writes: “If the Divine is spirit, and spirit spaceless, then humans, approaching the Divine, should *consume our spaciousness*, i.e. *reduce our body*, and by this reduction of the body become more and more spiritual, i.e. free ourselves from the burden and fetters of space. We see this in the animal world in the form of flying insects, who, owing precisely to their reduced size, i.e. their proximity to spirit, are wonderfully mobile. A fly in one second flies over approximately *one hundred times its own length*. If a human could attain that same degree of physical freedom which a fly has attained, one could move with great speed one hundred times one’s length, race almost two hundred meters (yards) in one second, i.e. move through space with the velocity of a cannon ball” (Sukhovo-Kobylin, in *Kosmizm* 1993). In our self-directed evolution, then, according to Sukhovo-Kobylin, the further we evolve, the smaller our bodies should become, and as we approach divinity we will also approach a vanishing point of spaceless invisibility. The Divine is invisible, and we shall also become invisible, essentially bodiless, as we approach the goal of perfect, spiritualized, universal humanity.

So those of us who are not very tall can at least take comfort in representing the Sukhovo-Kobylian higher person. To mention him again, Yuri Gagarin, a twentieth century representative of the family Fedorov was born into, and the first person in space, was 5’2”.

Vladimir Solovyov

As quoted earlier, Vladimir Solovyov considered Fedorov’s project “the first forward movement of the human spirit along the path of Christ,” but rejected the scientific technology at the heart of Fedorov’s idea. Solovyov has long been considered Russia’s most important philosopher, but only in recent years has it become evident how much his work was influenced by Fedorov. Essentially, Solovyov offers a smoother, clearer, more systematic, less Russocentric development of several major Fedorovian themes. For Solovyov, the great goal of human life should still be universal resurrection and total unity, but this is to be accomplished via the attainment of deitypersonhood through the mystical embrace of divine Sophia, holy wisdom, a vision of which came to Solovyov during his study of the Kabbalah (Kornblatt 2009).

The great difference between Fedorov and Solovyov is in emphasis: where Fedorov spoke mainly of the God of the fathers, the cult of the fathers, and the resurrection of the fathers, Solovyov emphasizes the eternal feminine. Where Fedorov spoke of science, duty, labor, hardship, and abstention, Solovyov speaks of poetry, love, ecumenism, and the androgynous sublimation of eros. Space travel, genetic engineering, physical resuscitation, and altering the

natural orbits of planets have no place in Solovyov's resurrection plan. And Rudolf Steiner, when he writes about Russia's role in anticipation of the coming of the new universal spirituality of the sixth post-Atlantean age, has in mind chiefly Solovyov's ideas of divinely human Christ and the eternally feminine Sophia.

Alexander Chizhevsky

Another important Cosmist was Alexander Chizhevsky, the internationally honored heliobiologist (specialist in the study of the Sun's relationship to life) whose best known work is on the influence of the eleven year solar cycles upon human mass behavior. Since at least the time of the ancient Babylonians, astrologers have plotted the supposed influence of celestial bodies upon human affairs. Chizhevsky made this influence a topic for serious scientific investigation and found plausible correlations between cyclical variations of solar energy and wars, revolutions, and other mass outbreaks of human violence (Chizhevsky, in *Kosmizm* 1993). Just as Tsiolkovsky had studied under Fedorov's inspiration and direction, Chizhevsky lived and worked with Tsiolkovsky in Kaluga, a small city in central Russia that has the kind of esoteric associations and reputation of a place like Glastonbury, England; Sedona, Arizona; or Roswell, New Mexico. It is a place of pilgrimage for new age Russians. In the early twentieth century it was a major center for Russian theosophy and today is the home of the joint Tsiolkovsky-Chizhevsky Museum for space and cosmobiology.

Spiritual Cosmists: Sergei Bulgakov and Pavel Florensky

Two other major thinkers who developed the spiritual rather than the scientific sides of Cosmism, following Solovyov more than Fedorov, were the theologians Sergei Bulgakov and Pavel Florensky. Both were Marxists in their youth, but, as they both later wrote, "outgrew" their youthful, shallow materialism to find previously unsuspected spiritual depths in Russian Orthodoxy. Both became priests. Bulgakov, earlier recognized as a brilliant Marxist economist, provided a sophiological, spiritual equivalent of Fedorovian regulation of society, which he called *A Philosophy of Economy* (Bulgakov 2000). Where Solovyov viewed the mystical embracing of Sophia; holy wisdom, to be an activity for poets, saints, and other spirits more advanced in their evolution toward deitpersonhood; Bulgakov viewed Sophia as divine spirit at work throughout the human world, the presence that informs and directs the "economy" (in the sense of "management") of the cosmos. Now recognized as a thinker whose proposals for spiritual economy could, as one recent book suggests, "serve as a lynchpin connecting the communal economic ethic of Islamic societies with the individualist ethic of democratic capitalism" (McDaniel 2008), Bulgakov in his own time was rejected by both Marxists and the Orthodox Church. Along with Nikolai Berdyaev and 160 other leading intellectuals, many of whom were major figures in the Russian religious renaissance of the early twentieth century, Bulgakov was put on the so-called "philosopher's ship" of 1922 and permanently expelled from the Soviet Union. At the same time, the Church formally accused him of heresy for his writings on Divine Sophia, a charge which he successfully refuted (Williams 1999). And he was able to spend his last years as head of the great Orthodox seminary in Paris, a center for creative Orthodox theology.

Pavel Florensky, Bulgakov's close friend, a mathematician, occultist, aesthetician, electrical engineer, priest, mystic, and theologian often called "The Russian da Vinci" (Pyman 2010), was not so fortunate. He continued to wear his priest's cassock well after the revolution, and in characteristic Russian contradictory manner, became an active supporter of the Soviet

transformation of Russia, teaching mathematics to workers and supervising electrification projects in the hinterlands. Also during this time he wrote seminal works on the mystic significance of holy names, the hidden meaning of Russian icons, and one of the greatest classics of Orthodox spirituality, *The Pillar and Ground of the Truth* (Florensky 1997). His concept of the “pneumatosphere,” (the sphere of spirit) was a continuation of Vernadsky’s “noosphere” (Florensky, in *Kosmizm* 1993), and a prefiguration of Yuri Lotman’s influential concept of the “semiosphere” (sphere of symbols and signs) of the 1970s and 80s. One of the specific problems that Florensky devoted significant attention to was that of unifying advanced mathematics and esoteric Christian spirituality, a mystical resolution to all antinomies and apparent contradictions. Despite his active support of government policies, and despite his recognized standing as a mathematician and scientist, a status which saved Cosmist thinkers like Tsiolkovsky, Chizhevsky, and Vernadsky, Florensky was arrested; the stated reason being a paper he had written about the theory of relativity, arguing that the geometry of imaginary numbers predicted by the theory of relativity for a body moving faster than light is the geometry of the Kingdom of the Divine. For that, he was sent to a labor camp in the farthest north, where despite nearly intolerable conditions he continued his scientific work, contributing important studies of iodine and of life beneath the permafrost. He was released for a time, then arrested again, and in 1937, he was sentenced to death, executed, and with thousands of others was dumped into a mass grave somewhere outside Leningrad (Pyman 2010).

Valerian Muravyov

Another Cosmist who tried to continue to work within the Soviet system was Valerian Muravyov, a diplomat and descendent of a long line of distinguished public servants. Well traveled and educated in western European schools, Muravyov, despite his initial monarchist and anti-bolshevik leanings, became useful to the Soviet government in its early struggles, mainly because of his recognized brilliant intellect, his fluency in several languages, his overall respectable background, and a close acquaintanceship with Leon Trotsky. Like many young intellectuals from the upper nobility, he quickly abandoned his anti-bolshevik prejudices and became an enthusiastic supporter of the revolution. As he discovered only too soon, his idea of revolution and the revolution that actually emerged were just too different. Muravyov wanted a total alchemical transformation of the individual and the cosmos. While working on various assigned Soviet projects, he wrote and published at his own expense a remarkable little book called *Control over Time* (Muravyov 1998), in which he proposes steps leading to the elimination of minute by minute temporality and the permanent realization of an eternal present. Time is not a universal reality but a human construct, and by restructuring humanity, we can overcome time. In a brief autobiographical sketch, Muravyov writes that he had passed through stages of interest in religion, religious heresies, Pythagoreanism, Neoplatonism, Freemasonry, theosophy, and the ideas of the Illuminati before finding his real calling: working through soviet agencies for the betterment of the people. Despite this apparently sincere declaration, and despite or perhaps because of his close relationship with Trotsky, he was arrested as an enemy of the people in 1929, and sent to work in a meteorological station in the far north where he died of typhus in 1931 or 1932.

Vasily Kuprevich

Many other Cosmists from earlier in the twentieth century are worth talking about, but I'll briefly mention only one more. Vasily Kuprevich, a major Belorussian biologist, botanist, and longtime head of the Belorussian Academy of Sciences, has made important studies of the problem of longevity in microorganisms, plants, animals, and humans. He notes certain plants that have been alive for 10,000–12,000 years, and posits that there is no absolute limit to the human lifespan. Death, he suggests, has not always existed but is a historical phenomenon, needed in earlier eras for evolution,—the death of the old giving birth to the new. However, humans have now reached a stage where death is no longer necessary for change and development. Kuprevich is confident that in the future, science will discover how human cells can renew themselves indefinitely and death will no longer be built into human life. (Kuprevich excerpts in Semenova and Gacheva, *Kosmizm* 1993, pp. 345–352).

Svetlana Semenova

Today's leading Cosmist is Svetlana Semenova: a literary scholar and philosopher, a member of the Russian Academy of Sciences, editor of Fedorov's collected works, author of major works on Fedorov and the Cosmist movement, and vigorous defender of Cosmist ideas against all critics. And there have been many critics. One has denounced Cosmism as "science mysticism," another as "technocratic pseudo-religion," and a third as "the occult shadow ideology" of Soviet Marxism (Hagemeister 2007). Semenova, however, argues that Cosmism offers today's best answers to the world's major problems. She contrasts the Cosmist view, which calls for rational human regulation of the environment, to the views of those she calls the "eco-sophists" who romanticize the natural environment to excess and fear that any human attempts to shape, guide, or alter nature will inevitably lead to catastrophe. In the eco-sophist view, humanity is just another part of great nature, whose role is no more important or unimportant than that of any other living creature: animal or vegetable. But, Semenova, along with Fedorov and the other Cosmists, argues that human reason endows us with greater abilities and responsibilities than other living organisms, that we have a special role in the evolution of our planet and indeed in the evolution of the cosmos. She argues that evidence for this lies in the universally recognized phenomenon of cephalization, the evolutionary trend whereby nervous tissue, over many generations, becomes concentrated toward one end of an organism. Eventually this process produces a head region with sensory organs, and eventually beyond that, a brain. This evolutionary process through eons of time has always moved in only one direction, never backward. To Semenova, this is enough to show that in evolution there is and has always been a direction and a purpose. As Semenova often points out, this directionality in evolution is not a literary or mystical fantasy, but a well established scientific fact. It offers a solid scientific basis for a theory of cosmic design – not the anti-Darwinist version of design propagated by religious fundamentalists, but a theory of design that transcends both scientific and religious narrowness, a theory that unifies materialist and spiritualist truths (Semenova 2004).

Conclusion

My purpose in this paper has not been to argue that the Russian Cosmists have the final answers to all the world's major problems, but rather to suggest that the moral, social, spiritual, and perhaps even the scientific dimensions of their thought are worth looking into, both as an example of another culture's esoteric explorations, and as a probing into matters

that will be even more important for everyone in the future than they are today. Still little-known in the West, Fedorov and the Cosmists began at least one hundred and fifty years ago to ponder and probe deeply into matters whose significance is only now beginning to be apparent everywhere in the world. Their works have been faulted for being utopian, unsystematic, inconsistent with either secular or religious orthodoxy, and unacceptable to serious specialists from any single discipline. Their work cannot be assigned to any single academic or intellectual category, but this breadth, augmented by an extraordinary intellectual depth, can be viewed as more of a strength than a weakness.

New cosmologies are emerging, erasing distinctions that have been taken for centuries as axiomatic (Hawking and Mlodinow 2010). The dividing lines between matter and energy, animate and inanimate, time and space, virtual and real, male and female—all the old dualities—no longer hold. The Cosmist worldview, combining exoteric and esoteric, scientific and spiritual, futuristic and traditional, attempts to embrace the cosmos with a whole mind and to address the most complex questions from a multi-sided vantage point.

The question of just where technological advance is taking us, and just where it should take us, has never seemed so urgent as now. The degree to which we can and should have control over death is no longer a theoretical question. Courts of law, for example, are being asked to decide whether the life of a person in a coma is to be prolonged indefinitely or cut short, and whether terminally ill people in severe pain do or do not have a right to terminate their lives. The advance of technology has put us face to face with moral problems that formerly might have seemed inconceivable. And this may be merely the beginning. The question of whether, and if so toward what end, we should attempt to alter the natural structure of organisms, including ourselves, is another problem that can only become more important in the future. All accounts of recent scientific developments written for lay readers indicate that we are now on the threshold of a new age in which it will be possible for us to restructure, if not actually to create, life itself. Just what we should do with this Divinity-like power is a question that someone is going to have to answer. And most urgently, how can all of us on Earth not only recognize intellectually but actually put into practice the idea that we are all one family, past, present, and future, that our differences in political parties, ethnicities, religions, ideologies, and sexual identities are small things indeed in the vast bends and stretches of the multiverse. The Cosmists' answers may not be the best ones that will ever be proposed, but perhaps their attempts to probe far and deeply into problems of increasing urgency will inspire someone, perhaps even a reader of this journal, to look even deeper and farther.

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