Pavel Florensky-Priest, Scientist, and Mystic

By LEONID SABANEEFF

FLORENSKY was one of those persons in my life who made the deepest impression on me, owing to the intensity and profundity of his intellect, which amounted to unquestionable genius despite his propensity to paradox and contradictions. He was a man quite unlike any other. "A clever and cruel monastery priest"—thus one who had been closest to him described him later, in exile. And he would add: "There was something creepy about him." I should put it more exactly: "something awesomely creepy," demoniac or diabolical, and yet holy. It is difficult to put this impression into words.

I had known him for a long time, ever since we were undergraduates together in the mathematics department of the Moscow University. He was older and a year ahead of me. He rarely attended lectures (like most senior students, who preferred to read books on their subjects at home). He seemed oddly old for his age. I remember something said about him at that time (the end of last century) by the extremely gifted Rafail Soloviev (nephew of Vladimir Soloviev), who died young: "He looks as if he had already lived a thousand lives."

Florensky's appearance was strange, strikingly unusual: oriental features, oddly spare movements, eyes that avoided looking at you, always cast down, looking inwards, contemplative. It always seemed to me that he was himself apprehensive of the baneful effect of his glance. Maybe it was due to his indubitable asceticism and the habit of concentration, of looking at his own thought rather than at his interlocutor.

From him emanated clearly perceptible vapors of a highly complex nature: one had an impression of genius, of unusual depth and power of thought, and at the same time there was something of black magic, dark, devoid of divine grace. I remember what Professor Luzhin, a faculty colleague of mine, once told me about him, a strange story about three of his "spiritual disciples" whom he was training in "spiritual asceticism": All three committed suicide.

I felt that Florensky possessed immense spiritual experience and was endowed with hypnotic power. His own asceticism was beyond doubt. It was manifest that he had undergone a complete and thorough training in "religious intellectual practice," possibly following the Russian Orthodox monastic tradition, but more probably also in other ways. He regarded himself as Orthodox, but to me his views always appeared much broader than the dogma of Orthodoxy.

His erudition was vast. He held degrees from two university departments (philological and mathematical) as well as from a theological academy. He was a philosopher, theologian, historian, mathematician, physicist, but he apparently took little interest in the biological sciences and none whatever in sociology. He lived in his own closed, ascetic, intensely intellectual world and in the world of his secret "spiritual exercises." He never talked about it, and when I questioned him he would give some evasive answer or none at all. Yet I had good reason to assume that he at times engaged in Yogic exercises and was well acquainted with Hindu mysticism. In his tastes and psychological attitudes he seemed close to the early medieval gnostics (Origen, Basilides, and others), much closer probably than to pure and naive Orthodoxy.

His mind was complex, many-storied, and to some extent even hostile to simplicity. One might even call it a cabalistic mind, though he had no Jewish blood, but apparently some Armenian or Persian. Certainly there was something "Asiatic" in his re-

sponse to the world. His extravagant and excessively luxuriant thoughts often contradicted one another, but this did not embarrass him in the least. He often spoke of the "many facets" of any true thought and of the compatibility of contradictions on the deepest level. He even asserted that every perceived law "generates" its own negation, inasmuch as every law discerned by the logical apparatus of man is but a part of a real, comprehensive synthetic law embracing "all that exists" and "all that is possible and thinkable." Logic is valid for the "earthly life," for the lower levels; but the true world is one where contradictions are compatible—a realm of antinomies. He obviously regarded antinomy as the basic law of the universe, encompassing all others.

Florensky was rather short, swarthy, with a long nose, a slight stoop; he spoke in a husky voice with a slight stammer; he was not eloquent but took pains to express himself with the utmost precision—the heritage of mathematical discipline. Outside his chosen sphere, science and mysticism, he generally talked very little and would keep silent for long periods. I do not remember ever having talked with him about an everyday matter. His conversation was always significant, often fraught with deep meaning. He was completely devoid of any drawing-room manner and affectation, unlike Viacheslav Ivanov, for example, who esteemed him highly but was rather worldly and smooth-spoken himself.

It was Ivanov, by the way, who brought me and Florensky closer together. After our graduation from the University we had somehow drifted apart. Florensky no longer lived in Moscow and stayed most of the time at the Troitse-Sergievsky monastery. Yet it was during these very years (the beginning of this century) that I myself was engrossed in the study of mystical doctrines from a scholarly point of view. Ivanov brought about a renewal of our friendship by introducing Florensky into the world of the composer Scriabin, to which he was close and in

which I was completely immersed myself. Florensky, however, did not fit into Scriabin's set. He was too far removed from music and from art in general. Moreover, it was all too clear, to me at least, that the rather fashionable atmosphere of the Scriabin milieu was not congenial to him, for Florensky's intellectual level and psychological "tonality" were superior and more complex by far. Still, he evinced some interest in Scriabin's concept of "mysteries," although, to my mind, it was hardly compatible with his own views and his whole personality. But then, as has been mentioned, Florensky's own utterances did not always chime with each other, which he considered rather an asset than a defect. I remember how at the funeral service for Scriabin he came up to me and said in his husky "otherworldly" voice that he felt that Scriabin's "mystery," despite his death, might still be realized, but only after thirty-three years. I did not forget this number. But in 1926 I left Russia forever and lost all contact with Florensky. All the more interested I was to learn from an outsider, also by then an émigré, that exactly thirty-three years after Scriabin's death, in 1948, Florensky himself had died, probably in a concentration camp in Siberia (previously he had been deported to the Solovetsky monastery). The "mystery" had been consummated-not for Scriabin but for Florensky himself. He seems to have had some kind of foreboding.

It so happened that most of our talks took place during the era of Lenin's NEP. Florensky was still a priest, but without a parish, without intercourse with believers. The atmosphere of the Soviet regime, at that time fiercely anti-religious and generally opposed to mysticism and philosophy, was antaagonistic to him. However, in his talks with me (and presumably with others) he never touched on topics of a "social" nature. I know nothing of his political views. The Bolsheviks had deprived him of his office and his chair at the Theological Academy, but he accepted the situation with serenity. He took off his cassock, wore civilian clothes, and supported himself by giving lessons

in mathematics and working at the electro-technical department of the "Glavelectro" (he was a good physicist). He seemed to look upon the Bolsheviks from some mystical height, as a necessary link in the historical process.

In those years many were afraid to meet him because, as a former priest and a mystic to boot, he did not stand well with the authorities. He would call on me often but irregularly and always without warning. At that time there were few people left in the U. S. S. R. with whom he could converse about lofty subjects. As for me, I enjoyed playing the part of his "victim," since his conversation was always highly meaningful, often so paradoxical as to verge on the fantastic, yet withal intellectually inspired. By then I had familiarized myself with his fundamental opus, The Pillar and Foundation of Truth, 1914, (Stolp i utverzhdenie istiny), which once had earned him the degree of doctor of theology, and was able to appreciate this immense work, a remarkable compendium of knowledge, wisdom, profundity, intellectual imagination, all this now and then forming a dense mass of allegory, symbolism, and analogies. It contained philology and philosophy, mysticism of every brand, mathematics, physics, as well as theology in the narrow sense. The style came closest to that of the cabalists (symbolism of numbers, allegorical method of thought). I was struck by one observation: everything in his masterwork that touched upon knowledge, thought, comprehension of the universe, was on the level of genius; but whenever he attempted to deal with the leitmotif of the Christian religion, symbolized in the image of the "heart," he sounded flat and unconvincing, even lapsing into a kind of cloying sweetness, utterly alien to his psychological type. His innermost, intimate religion was closer to a synthesis of all great world religions than to the Orthodox faith. By nature he was an occultist and was possessed rather by the spirit of cognition on a grand scale than by that of kindness and charity; Lucifer was closer to him than Christ. This increased rather than diminished his fascination for me.

In my last, and to me most memorable, talks with Florensky—already against the background of the Russian Revolution—we hardly ever discussed any problems of theology proper, or even his monumental work, *The Pillar and Foundation of Truth*, partly because my approach to religion was more scholarly than theological. Mostly he talked about his cosmic ideas and fantasies, which he set forth with great animation, at times ecstatically. They were often so bold and challenging that I consider it my duty as a scholar to transmit them to posterity.

In respect to his ideas about the structure of the universe it is interesting to note that while in the theological sphere he was rather an archaist, a man of the early Middle Ages and the gnostic era, in the field of science he was a "modernist" eagerly watching the progress of his favorite sciences, mathematics and physics. His cosmic theories, like all his ideas, were always keenly paradoxical; but they were subject to change, depending both on his whim and on the quick pace of evolution in these scientific fields.

He began by acquainting me with the conception of the structure of the cosmos he had developed in his pre-Bolshevik period. In this sphere he was utterly free of his usual theological and mystical preoccupations: one sensed his desire to reconcile science and revealed truth. His initial theory of the structure of the universe centered in the idea that "there are no stars," that the stars are actually optical replicas of the sun, for the reason that light rays, in his opinion, cannot be exactly rectilinear. Not being rectilinear, they must, when returning to the earth, produce images of the sun on a diminished scale—i.e., the stars. The "sizes" of the stars, according to this theory, correspond to the cycles of the revolution of a curvilinear light ray issuing from the sun. The most ancient cycles form agglomerations of stars such as the Milky Way, which actually is nothing but the sun itself.

From the very first this hypothsesis seemed to me devoid of solid foundation, yet it was novel and interesting, and in a scientific sense no less, and perhaps more, revolutionary than the Copernican system once was with regard to the Ptolemaic cosmogony. It was marked by a paradoxical freshness of thought and a thrilling audacity. He did not go into details, nor did he submit his theory to a test; he was interested only in launching a general synthesizing idea (an attitude contrary to that of Newton, who avoided setting up hypotheses). Here was pure speculation, a pure hypothesis without preliminary experiments and measurements. He did not "degrade thought by experiment."

After the appearance early in this century of Einstein's postulate about the relativity of time, and as Florensky's scope expanded to include the new theories of the structure of space known as the non-Euclidian geometries (those of Lobachevsky, Riemann, and others), he developed and modernized his cosmic theory. Yet in essence the revised theory remained the same and preserved the idea of a "single sun" and its "optical scattering" in the guise of the stars. But the "curvature of the light ray" due to various causes as it travels through billions of light years (a curvature that is more than just probable, according to Florensky himself) was replaced by the assumption that straight lines within "curved spaces" are apt to curve of themselves. Florensky gave preference to Riemann's "spherical" space over Lobachevsky's "pseudo-spherical" one; in the finite spherical space the closed straight lines of light rays would necessarily produce the same optical effect-the "multiplication of the sun" in the form of a multitude of its optical reflections, the stars. Moreover, beyond the boundaries of Riemann's spherical spacewhere we have, only mathematically, "virtual" points and a virtual area of space-Florensky desired to locate "the empyrean world of divine entities" (here spoke the theologian). He arrived in another way also at the assumption of this "virtual empyrean world," mathematically expressed by what is known as

"complex numbers." Michelson's famous experiment, the starting-point and source of Einstein's theory, had been a notorious failure: the light rays were found to be insensitive to the relative movement of the earth, regardless of whether or not this movement coincided with the direction of the rays or went in the opposite direction. From this empirical fact Florensky drew the logical conclusion that "the earth does not move at all," and that the Ptolemaic "geocentric" system is closer to truth than the Copernican "heliocentric" one. Actually, of course, the matter was not so categorically simple as that; and I am even inclined to believe that Einstein himself, fascinated by the paradoxical character of his theory, had been too rash with his conclusions, the artist in him, at this point, prevailing over the scientist. As for Florensky, the idea of an immobile earth had a special attraction for him, for he saw it as a confirmation of the truth of the Biblical tradition. Here the theologian and archaist came to the fore, albeit operating with the most modern tools. If the earth is immobile and the sun revolves around it, then the fixed stars removed from us millions of light years must move with even more incredible speed than the sun. Yet according to Einstein's theory, velocities greater than that of light do not exist and are impossible in nature. Consequently, here once again we reach the region sought and longed for by Florensky-that of the "virtual mathematical spaces"-and he was not long in locating here "the empyrean world and the heavenly hosts," upon which he had set his heart.

In this reasoning Florensky reveals his medieval mentality and cabalistic turn of mind—the cult of the number, the belief in the sacred meaning of numbers ("numbers rule the world")—as well as his hieratic attitude towards mathematics and his profound conception of it as a sacred science, the most fantastic and creative of sciences, the most independent of experience, autonomous, generating its own separate world, possessing its own logic, broader than the ordinary scientific logic and dominating it.

Contradictions did not dismay him, for he professed that the "whole" truth has many facets and necessarily contains its own antinomy. His dream was to create a system of metalogic having about the same relation to ordinary logic as non-Euclidian to Euclidian geometry. He even claimed to have drafted a detailed outline of such a metalogic based on the negation of certain logical axioms (the method of Lobachevsky and Riemann) which formed the basis of the Aristotelian logic.

According to my notes, my intimate and highly saturated talks with Florensky were not very numerous-about thirty-five in all, taking a total of about a hundred hours. It is difficult to remember all the themes discussed in the course of these conversations to which I ascribed then, and still do, an exceptional value, for myself as well as for history and science. I did not keep minutes of our talks so as not to inhibit the free flow of his thoughts and the flight of his imagination, for he was secretive and, strange as it may seem, rather diffident: he would suddenly fall silent if he sensed some subtle change in the atmosphere or in his interlocutor. I tried, therefore, to commit everything he said to memory and used to jot down a short résumé after every session: although my memory at that time was exceptionally exact, I could not be sure that it would always remain such. I was aware, moreover, that Florensky's position in the U. S. S. R. was very insecure and that, deprived as he was of the opportunity to publish anything or even to do any scientific work, he was hardly in a position to keep any notes of his ideas himself. It is unlikely (although I do not know it for sure) that any manuscripts of his have been preserved after his death, besides those published before the Revolution. I do not know the date of his deportation and have no information about the entire period of his life from 1926 up to his death in 1948. But surely in his place of deportation he was free only to think his thoughts, not to write them down nor, of course, to have them published.

I was far from being always in agreement with his theories and scientific fantasies. Mostly these were intellectual improvisations unsupported by any kind of experiment, not even by spiritual experience. Yet despite the wide divergence in our scientific methods I was always under the spell of this powerful flow of profound and unusual ideas, especially when they related to fields of knowledge in which I was then, and still am, engrossed.

An excellent mathematician who concentrated his attention primarily on the latest trends in mathematics, he expressed time and again the idea that mathematics was broader and more comprehensive than the human mind. Mathematics, according to him, "is more intelligent than the human brain; it leads man farther ahead into regions inaccessible to the brain and not corroborated by sensual images." It was clear to me that mathematics was his guide even in the area of mystic speculations: it helped him not only through the elementary language of numbers (as in the case of many earlier mystics) but by means of the whole panoply of the modern mathematical apparatus: analysis, the theory of sets, and all the latest theories on the boundary between physics and mathematics.

It seems to me that the dominant motif of his life was the idea of the alliance and fusion of science and revelation, the termination of the antagonism between these two spheres that had developed in the course of the historical process. Hence, perhaps, the occasional confusion of his methods: in the field of science he would think, to some extent, in religious terms (intuition, prescience, intellectual revelation, the tendency to transgress boundaries), while in religion he would often reason in terms of science and apply to it purely scientific methods.

His inspiration could be stirred by some insignificant stimulus. I remember a few such sudden unfoldings of the intellectual imagination—explosions, as it were, of intellectual energy. Once the subject came up of time as the fourth dimension of

the universe. A chance remark about this was sufficient to make Florensky burst out with a veritable poem on time. Here is a brief summary of the ideas to which he then gave expression.

Time for him was something considerably more complex than it is usually assumed to be. Time, he said, did not present itself to him as a single dimension, as a "line of time" such as it is generally imagined (even in Einstein's theory). Time has many dimensions. The actual universe cannot and ought not be limited by any number, inasmuch as the series of numbers is infinite and in modern science is further complemented by the categories of new number sets (irrational numbers, "virtual numbers" of various orders). If there exists one dimension, then there may be two, and many, and an infinite number. If there exist "virtual numbers" and virtual points, then there must also be virtual moments and virtual areas of time. The number of space dimensions is neither three nor four but infinite; and this complex of spaces can include three-dimensional and even two-dimensional ones: and all Euclidian, as well as non-Euclidian, spaces may be its component parts. The same goes for the sense organs: there are by no means only five of them, or any other finite number; there is an infinity, but for a given "psychological atom" at any given moment of any one time only a few are available. There must exist a world with different psychological and physical properties, a world lying in other spaces and moving in different times.

Time, he went on, besides not having a finite number of dimensions, must be "ramified"; there exists not one future but an *infinity of various future moments*, of which at every given moment only one is experienced, because the limited human psyche is incapable of encompassing in its consciousness the immense multitude of moments of different dimensions and all the ramifications of the future. Moreover, time, like space, can be not only straight but also curved (Einstein's time is curved). It can be infinite, but it can also be closed (analogous to a

closed line. The concept of a single future is nothing but a theory of predestination. Futhermore, at every moment, the future divides itself into a multitude (infinity) of actual new futures. The "closed" time, after having run its cycle, "returns" and is inevitably drawn into the "sphere of eternal repetition," into a vicious circle, which he was inclined to identify with the idea of "hell" in religion. He thought that God did not create the world in time at all; this is even logically impossible since the act of creation already requires time, two moments of time: the moment without creation and the moment of creation. God has always (outside of time) coexisted and formed a whole with the universe and with time-more exactly, with the infinity of various times and spaces, physical and psychological. In contrast with the concept of "eternal repetition," linked for him with the idea of "hell," the prison of the spirit, the religious concept of "paradise" and "eternal bliss" he definitely connected with the idea of the "abolition of time." He imagined paradise as independent of time, as existence in "timelessness."

The "divine entities" demanded by his mystique he regarded as inhabitants of other times and other spaces which only on rare occasions intersect our ordinary world and space. Such intersections are not easy of realization, which explains their comparative rarity. Occasionally, as I have mentioned, he would assign these entities to "virtual spaces and times," whose actual existence he considered not only possible but inevitable. As for the psychological world of living creatures (human beings, animals, plants, and even minerals) he regarded it as a separate many-dimensional world entirely independent of other worlds, yet maintaining a constant, though only partial, connection with them and capable under certain conditions of achieving contact with them, even without the intermediary of the organs of the senses.

Once he mentioned the possibility of man's experiencing exceptional states of awareness, in particular "the acceleration

of time." He hinted at instances of a flash-like "perception of the sum total of the past" and of "states of cosmic consciousness." Since he spoke about this quite positively and with utter simplicity as of something in no way supernatural, I gathered that he had experienced such states of consciousness himself, although he never said so outright. As I knew him, he was utterly incapable of exaggeration or myth-making in that particular sphere, still less of untruthfulness; he just was not that kind of person. I assumed that he had travelled a long road of spiritual growth and trial, that he had graduated from the "mystical academy"-surely not only the Orthodox one. I strongly suspect that he had gone through Hindu stages of Yoga and was somehow linked with the remnants of gnostic and cabalistic wisdom. Certainly his appearance was peculiarly appropriate for this. However, I must admit that he never spoke of this and avoided discussing such topics, possibly because he was unwilling to compromise his "Orthodoxy," which was already stretched beyond measure anyway. Still, I think it probable that states of cosmic consciousness were known to him from personal experience. It would be interesting to know whether he left any manuscripts and, if so, what has been their fate.

My account of Florensky's views is of course sketchy and incomplete. I have been able to give here only an outline, not a detailed report, of our talks. A complete exposition of his ideas would have required a volume, of the kind of *The Pillar and Foundation of Truth*. From my association with Florensky I draw the general conclusion that he was a man of immense stature, a powerful personality of rare profundity and incontestable genius. The scope, depth, and originality of his thinking place him in the company of such dominant figures on the human horizon as Plato, Pythagoras, Hermes Trismegistus, the great gnostics. He failed, however, fully to cultivate his special mystical domain. As I intimated above, his intellect prevailed

over his "charisma" and, measured by his spiritual stature, he gave little of his strength to his charismatic rather than his intellectual faculty. In him the motif of loving-kindness, of grace and forgiveness, sounded muted, and he disliked making it sound at all. From him emanated awesome, deep and complex vapors, and he never appeared to me as just "a good and kind man" in the usual sense. Beyond any doubt there was a demoniac element in him, and as indubitably he was an extraordinary man, an outstanding personality, quite beyond comparison with any other prominent man of his time.