1. From Aristotle to Ilyenkov
As Aristotle famously noted in *Metaphysics*, philosophy begins from the feeling of astonishment: “For through astonishment men have begun to philosophize both in our times and in the beginning” (*Metaphysics*, A, 2, 982 b 13–16). Everyone seems to know this famous sentence, although without much detail. In the Greek original, Aristotle uses the word *thaumazein*, which can be translated as “astonishment” or “amazement,” meaning a kind of intellectual shock that forces us to think. In this sense, Aristotle notes, those who create myths are also on their way to philosophy, as myths are also created on the basis of wonders, in response to something astonishing.¹

In his famous sentence, Aristotle uses the word *arche*, “origin,” so he means a fundamental dimension that works throughout the entire history of philosophy.² Still, it is not clear what the source of the *continuity* of this *arche* is. Indeed, Aristotle does not specify the object, phenomenon, or substratum that is able to provoke intellectual astonishment.³ The only suitable hypothesis I can offer here in this brief digression is that philosophical texts, which are often inspired by intellectual astonishment, can themselves be judged by the effect of astonishment they produce in their readers. The materiality of the philosophical text is itself nothing other than the durability of the astonishment it produces across generations. The persistence of an astonishment-effect is what makes a text classic.

Here is the first claim of this essay: if classic texts are those that overwhelm the reader with a feeling of genuine astonishment, then the short treatise “Cosmology of the Spirit” by the Soviet philosopher Evald Ilyenkov (1924–79) is truly a philosophical classic.⁴ Written in the early 1950s and less internationally known than Ilyenkov’s other works, this text has an unfortunate history. After some of these other works had been translated into German, English, and Italian between the 1960s and the ’80s, Ilyenkov fell out of theoretical fashion, and only recently have intellectual historians and philosophers begun to rediscover his work.⁵ As a result, the text of “Cosmology” was not translated into other languages until quite recently.⁶

It what follows, I would like to indicate the intellectual and historical background of “Cosmology,” as well as its relation to Russian cosmism, that extravagant movement of the first half of the twentieth century. Then I will present the speculative and communist argument of “Cosmology” and its philosophical implications. Finally, I will provide several interpretations of this text, and compare Ilyenkov’s cosmology with
A film still from Richard and Nikolai Viktorov's 1981 Soviet movie To the Stars by Hard Ways, in which a female creature created in space tries to live on earth and has special (and sometimes dangerous) powers.
contemporary currents of speculative philosophy. Although this comparison will show some striking similarities and differences that make Ilyenkov’s text entirely relevant to current debates, today’s speculative thought lacks the “communist drive” displayed by the late-Soviet thinker.

2. Cosmism and Cosmology

Evald Ilyenkov was an exemplary representative of Soviet Marxist philosophy in its nondogmatic and, as they used to say, “creative” aspect. In an intellectual context not known for indulging individual theoretical “peculiarities,” Ilyenkov was an outstanding exception. For the most part, his work was a bright, shining expression or reinterpretation of inherited Soviet discourse on dialectics, historical materialism, and so-called “activity theory” (i.e., the theory that subordinates all social, political, and cultural phenomena to elaborated schemata derived from the analysis of labor and praxis). But “Cosmology of the Spirit” is something more than this. Revealing a number of theoretical “anomalies,” this posthumously published early text puts Ilyenkov’s thought in an absolutely fascinating and astonishing perspective.³⁷

As mentioned above, a considerable international scholarship around Ilyenkov’s legacy has emerged in recent decades. This research covers various later aspects of his thought – his reading of Das Kapital, his elaborations on dialectical logic and the concept of the “ideal,” as well as his contributions to activity theory, which became a broad international methodological platform. However, there are only a few works and commentaries about this particular early essay – or, as Ilyenkov himself defined its genre, this “phantasmagoria.”³⁸

Regarding the immediate circumstances surrounding the writing of “Cosmology,” intellectual historians and biographers emphasize the influence of one of Ilyenkov’s most important friends in the 1950s, the scientist and self-taught speculative thinker Pobisk Kuznetsov (1924–2000).³⁹ Everything about Kuznetsov was peculiar, starting with his first name: “Pobisk” is not a typical Russian name, but an acronym of the sentence “[P]okolenie [O]kytjabrskikh [B]ortsov [I] [S]troitelei [K]ommunizma,” i.e., “A Generation of the October Revolution Fighters and Builders of Communism.” Kuznetsov was an interdisciplinary scholar with a wide range of interests – from biology, chemistry, and physics to engineering, economics, and systems theory. He also spent time in a labor camp late in Stalin’s regime for organizing an unsanctioned discussion group where students addressed an ambitious question at the intersection of evolutionary biology and philosophy: What is the function or goal of life at the scale of the universe? In the course of his talks with Kuznetsov, Ilyenkov convinced him to write the entry on “Life” for the Encyclopedia of Philosophy that Ilyenkov coedited in the 1950s and ’60s.

Kuznetsov considered the function of life to be “anti-entropic.” Life brings higher forms of organization, creating an order from “chaos.” Entropy is a measure of the dispersal of energy; the Second Law of Thermodynamics states that in closed systems, entropy can only increase, which eventually leads to a final dispersal of energy and ultimately the “death” of the system. Accordingly, “anti-entropic” refers to the capacity of some forms of matter (such as life) to counterbalance the increase of entropy. In the 1950s, Kuznetsov also wrote about the problem of the “thermal death of the universe” – its entropic collapse – with reference to Engels’s discussion of this question in his Dialectics of Nature. He also linked the “thermal death” problem to the anti-entropic function of life, hinting at a possible way out of this predicament.¹⁰

Kuznetsov was not alone in generating ideas about the anti-entropic function of life. His work was part of a broader Soviet debate in the 1950s and ’60s about the meaning and final goal of both humanity and communism in the universe. Participants in this debate were aware that similar questions had been discussed in texts by earlier cosmists, albeit without much reference to the communist horizon. For example, another friend of Ilyenkov, the sci-fi writer and scientist Igor Zabelin, expressed similar views about the anti-entropic function of life in his book Chelovek i chelovechestvo: Etudy Optimisma (The Human and humanity: Optimistic essays), published in 1970. Zabelin critically notes a striking detail in the work of the pioneering cosmist Nikolai Fedorov. Fedorov’s famous idea of the “resurrection” of humanity, Zabelin claims, seems to concern only men, whom the founder of cosmism calls “fathers” and “sons.” It seems that women – at least according to the verbal formula of Fedorov, who speaks only of the “resurrection of the fathers” by “sons” – are excluded from this process.¹¹ For Fedorov, sociobiological reproduction involving both sexes should be replaced by a technologically enabled literal “resurrection” that is opposed to the “lust of childbearing.” Zabelin, quite reasonably, condemns Fedorov as a “misogynist” (today we would see this attitude as a sexist expression of patriarchy). At the same time, Zabelin approvingly quotes a later cosmist, Konstantin Tsiolkovsky, who had also discussed the “anti-entropic process” in the universe. This
dialectical materialism), matter was understood as a "hypothesis." As an ensemble of its "forms of movement," i.e., as an ascending hierarchy of development, from the lowest forms, which are covered by the realms of physics, chemistry, and biology, to its highest forms, which are the human brain and intelligence, which in turn shape matter's "social" form. Each lower form supports the emergence of the higher ones. But then what is the function of the highest form of matter if it does not have anything above it? – this question shapes the field of Ilyenkov's hypothesis.

These views on the movement of various forms of matter were derived from Engels's *Dialectics of Nature*, to which Ilyenkov refers in his text many times. Actually, though, *Dialectics of Nature* has a bad reputation in the history of Marxist philosophy; it is regarded as the source of the brutal "dialectical laws" that constituted Soviet diamat. However, the text is in fact very insightful and at times ascends to heights of speculative thought that Marx himself would probably have never dared.

The second point in Ilyenkov's argument evolves from the first: since the universe is infinite in space, its development, paradoxically, is already finished, and everything already exists, including the highest forms of intelligent life. Of course, the dialectics of development nonetheless continues to unfold, in specific parts and zones of the universe that have not yet achieved higher forms of matter's organization. But if we take matter as a whole, as infinite substance, thinking life is always there. Thus, suggests Ilyenkov, when considered in its totality, matter can be grasped as Spinoza's substance, eternal and unchangeable. One of the rare commentators on "Cosmology" notes on this point that Spinoza had exactly the same "famous picture of the Universe as a homeostasis, which as a totality remains unchanged although all its constituent parts incessantly move like pieces in a kaleidoscope."

But it seems to be even more complicated than this, as the homeostasis, for Ilyenkov, is restored through its opposite: a catastrophe of a specific kind that excludes, perhaps, contemplative and untroubled Spinozan views about substance.

In Spinoza, substance, interpreted as matter, possesses at least two attributes: thought and extension. In contrast to this, "vulgar" materialism says that intellect and thought emerge from a dialectical movement of matter, i.e., matter is necessary for the emergence of thought, but never vice versa. In this picture, the existence of thought is contingent, not necessary; it is thus "the product of a fortuitous combination of circumstances," as Ilyenkov sums up this view. But a subtler materialism would, in a dialectical movement, also claim the converse – that thought is
Soviet astronauts at a TV studio in 1963 (from left to right): Pavel Popovich, Yuri Gagarin, Valentina Tereshkova, Valery Bykovsky, Andrian Nikolayev, and Gherman Titov. Photo: Wikimedia Commons.
necessary for matter. “Matter cannot exist without thought,” writes Ilyenkov.17

At this point in his argument, Ilyenkov lingers over the question of how these assumptions can change our philosophical understanding of thinking itself. According to the general understanding of this question in Soviet diatmet, thought is the supreme form of matter’s development. But Ilyenkov is more specific, emphasizing that thought is the final stage of this development. There are no higher forms of matter than thought. Indeed, if higher forms of matter could exist, this would mean that they are inaccessible to thinking, being a kind of Kantian inconceivable “noumenon”; a kind of fideism could be built on these higher forms, pointing to the existence of an unknowable God. For Hegel, notes Ilyenkov, suprahuman Reason is still comprehensible, as it is based on the same logic as the human mind and so is still a form of thought.

Ilyenkov argues that there is only one way of understanding this cosmic “situation”: as a cyclical movement from the lowest forms of matter to the highest (“the thinking brain”) and back, to their decomposition into the lowest forms of matter (biological, chemical, and physical). If we admit the limit of the highest development of matter, writes Ilyenkov, we should also admit its lowest, most primitive level, where matter contains only the simplest qualities. Borrowing ideas from the discipline of physics as it existed at the time (in the 1950s), Ilyenkov associates this lowest form of matter not with particles – atoms, electrons, etc. – but rather with a “field” as the minimal form of the existence of matter.18

The idea of the limits of the development of matter (the highest limit and the lowest limit), as well as the assumption that thought is necessarily an attribute of matter (and let the record show that a truly decisive argument for this necessity remains to be discovered), constitute the two main speculative frameworks on which Ilyenkov builds his cosmology, which he reservedly calls a “hypothesis.” The third premise connects the previous two: it is the assumption that this cyclical development of the universe passes through a phase involving the complete destruction of matter – through a galaxy-scale “fire.” This premise reflects both the “spirit” of dialectical negation, known since Heraclitus, as well as theories of the “big bang” and the so-called “thermal death of the universe,” which presumably precedes the final explosion.

This universal destruction will inevitably involve the destruction of humanity, endowed with the faculty of thought. At this point, Ilyenkov’s speculative drive accelerates even more. As we remember, he started from the premise that thought is a necessary attribute of matter. But how is this necessity of thought effectuated? How does it prove itself? Here we enter the proper realm of Ilyenkov’s cosmology. The elements that Ilyenkov introduced at previous points in his argument come together into an astonishing narrative.

As he himself acknowledges, this narrative is a rather “poetic fantasy.” However, he still grounds his argument in the authority of dialectical materialism, mostly referring to Engels’s Dialectics of Nature, which also raised questions about the end of the universe due to its thermal death – definitely not what one expects from the optimistic coauthor of the Communist Manifesto! Engels devotes several pages to the issue of thermal death and suggests that the movement of matter will overcome the entropic threshold in an as-yet-unknown way. Here Engels also discusses the ideas of Rudolf Clausius, a nineteenth-century German physicist and mathematician who was the first to introduce the concept of entropy based on the Second Law of Thermodynamics. Engels notes that “only a miracle” can neutralize entropy.19

What Engels called a “miracle” will, in Ilyenkov’s hypothesis, turn into a gesture of self-destruction on the part of communist reason. When thermal death is imminent, the sun and other stars will gradually cool down. But with scientific-technological progress, argues Ilyenkov, humanity will be able to access a new and more powerful source of energy, as well as the capacity to restructure matter itself. This will lead to humanity’s increasing autonomy from the material conditions of its existence, including from the most fundamental laws, such as the law of the cosmic growth of entropy. However, these new powers will not save humanity from a lethal cosmic standstill: “This turns out to be the absolute boundary in which all conditions under which the thinking spirit can exist, inevitably disappear.”20 We have arrived at the most striking part of Ilyenkov’s cosmological narrative.

He claims that contemporary science still cannot explain the transition from the thermal death of the universe to the big bang, since the law of entropy only suggests that the collapse of the universe will bring it to a “zero outcome” – absolute homeostasis at the lowest point.21 The universe needs a special intervention to rechannel the energy that was radiated during the cycle of matter’s development into a new “global fire.”22 The question of what (or who) sets the universe on fire is crucial. According to Ilyenkov, it is the cosmological function of thought to provide the conditions to “relaunch” the universe, which is collapsing due to thermal death.23 It is human intelligence which, having
achieved the highest potency, has to launch the big bang. This is how thought proves in reality that it is a necessary attribute of matter. As Ilyenkov writes:

In concrete terms, one can imagine it like this: At some peak point of their development, thinking beings, executing their cosmological duty and sacrificing themselves, produce a conscious cosmic catastrophe – provoking a process, a reverse “thermal dying” of cosmic matter; that is, provoking a process leading to the rebirth of dying worlds by means of a cosmic cloud of incandescent gas and vapors. In simple terms, thought turns out to be a necessary mediating link, thanks only to which the fiery “rejuvenation” of universal matter becomes possible; it proves to be this direct “efficient cause” that leads to the instant activation of endless reserves of interconnected motion, in a similar manner to how it currently initiates a chain reaction, artificially destroying a small quantity of the core of radioactive material ... This being said, thought remains a historically transitional episode in the development of the universe, a derivative (“secondary”) product of the development of matter, but a product that is absolutely necessary: a consequence that simultaneously becomes the condition for the existence of infinite matter.24

Especially touching here are phrases like “in concrete terms” or “in simple terms,” which contrast with the universal scale and singularity of the event. After proposing such a mind-blowing hypothesis, Ilyenkov is very careful to repeat that this narrative does not break with any of the principles of dialectical materialism. For Ilyenkov, this science-inspired speculation, based on contemporary physics, also matches with the classic philosophy of Spinoza and his notion of the attribute; an “attribute” designates something that is strictly necessary for the infinite existence of substance (i.e., matter, from a dialectical-materialist point of view). As Ilyenkov notes, if the thinking brain, as the highest form of matter, were only contingent and “useless,” it would be, in Spinoza’s technical language, merely a “mode” (modus) and not an “attribute.”

Ilyenkov’s hypothesis also undermines any religious or idealistic teleology that ascribes to human (or nonhuman) intelligence the goal of self-perfection or absolute knowledge. The real goal, notes Ilyenkov sarcastically, is “endlessly greater” than “those pathetic fantasies.”

Finally, there is one more important point in this narrative, which appears rather marginal in the text but remains crucial for its interpretation. The political condition that Ilyenkov mentions in his text, as something obvious, is communism, or a “classless society”:

Millions of years will pass, thousands of generations will be born and go to their graves, a genuine human system will be established on Earth, with the conditions for activity – a classless society, spiritual and material culture will abundantly blossom, with the aid of, and on the basis of, which humankind can only fulfill its great sacrificial duty before nature ... For us, for people living at the dawn of human prosperity, the struggle for this future will remain the only real form of service to the highest aims of the thinking spirit.27

What was obvious for Ilyenkov is far from obvious to us now, in a so-called “postcommunist” time that is much more pessimistic about social progress. Ilyenkov’s hypothesis now appears as more conditional and more dramatic: if humanity is unable to achieve communism, then collective human intelligence will not achieve its highest stage of power either, as it will be undermined by the capitalist system, which is as far as one can get from any self-sacrificial or otherwise sublime motivation. If, to follow the assumptions of Ilyenkov’s phantasmagoria, the final thermal death of the universe is imminent, and even the materialist ontology will crack, then thought ceases to be an attribute of matter, degrading into a contingent outcome of its local development. Thus, “Cosmology of the Spirit” proclaims the necessity of communism from the point of view of the universe’s immanent logic of becoming. In Ilyenkov’s text, communism turns out to be a much more serious historical and cosmic event, not limited to the scale of the planet. If the world still exists, this is because it was shaped by a previous cycle of the ontological machine whose necessary cog is fully actualized communist reason.

4. “Cosmology” as Mythology, Symptom, and Exercise in Communist Subjectivity
How can a contemporary – presumably “enlightened,” critical, and, perhaps, ironic – reader approach “Cosmology of the Spirit”? Of course, Ilyenkov was aware that it was “too much” even in the context of the post-Stalinist USSR of the 1950s, and so he emphasizes his reservations throughout the text, as well as his adherence to official dialectical materialism. He also presents his argument as a hypothesis (one he was reluctant to publish in his lifetime). But nor did he repudiate this early text – the way
Richard and Nikolai Viktorov, To the Stars by Hard Ways, 1981.
Lukács rejected History and Class Consciousness, for example – since he continued to share it with his students and close friends throughout his life. That is why the text – with its enormous, almost “mad” claims – deserves attention. I will outline several interpretations in arguing for the contemporary relevance of the “Cosmology.”

One could say that this text expresses archaic, premodern contents wrapped in the language of classic philosophy, science, and dialectical materialism. The indicator of this mythic content is, especially, the theme of heroic self-sacrifice and “global fire,” a familiar Promethean motif. When I sent this text to Boris Groys, he offered a much more radical reading of its paganism, calling “Cosmology” “a revival of the Aztec religion” of Quetzalcoatl, who “sets himself on fire to reverse the entropic process.” Of course, Ilyenkov would probably have welcomed such a comparison with a healthy dose of good philosophical laughter, provoked, as it is, by the enormous claims of his text which appears, to the contemporary reader, to be a self-deconstructing entity.

However, as we recalled at the outset, Aristotle already noted that the mythical is also philosophical to some degree and in some sense, as it is based on the same effect of astonishment and wonder. To classify the genre and intention of “Cosmology,” one could also mention here the paradoxical idea of the “mythology of reason.” The mythology of reason was one of the themes of the 1796/97 essay The Oldest Systematic Program of German Idealism, which lacks an author name but was presumably written by a young Hegel, Schelling, or Hölderlin. This “mythology” conveys the emerging contents of German idealism by way of sensory images and narratives that aim to be directly accessible to the masses. Similarly, Ilyenkov’s hypothesis could be called a “communist mythology of reason” that conveys, in a dramatic narrative, the condensed meanings of the communist project.

Another critical and rather reductive way of approaching the text would be to read it as a psychological symptom of its author, given the tragic personal circumstances that led Ilyenkov to commit suicide at the end of the 1970s. This reading would make this text seem like a primordial suicidal fantasy sprinkled with communism and dialectical materialism. It could also be read as a politico-ideological symptom generated by the short-lived gap between the post-Stalinist moment and the disenchantment of late socialism. This gap combined both the optimism of socialist expansion, backed by the real position of the USSR after WWII as a global superpower, and a melancholy at the transience and fragility of “real communism.” We could say that Ilyenkov’s text prefigures the USSR’s future collapse as a cosmic catastrophe.

In a more general way, the text could also be regarded as a condensed symptom of real communism as a philosophically articulated historical totality, if we recall Boris Groys’s seminal book The Communist Postscript; this book presented the USSR as a purely linguistic being, where language, detached from its instrumentalization at the hands of the market, was the sole medium of society, expanding the “forces of the paradox” to a cosmic scale – an expansion which is vividly expressed in Ilyenkov’s text. The visionary narrative of the future cosmic catastrophe and self-extinction of communist humanity can also be linked to the theory that – against “sweet” and idealizing utopian representations – endows real communism with the force of radical negativity that is also expressed in “Cosmology.”

A subtle and important aspect of Ilyenkov’s argument is that the singular event of relaunching the universe through the action of a superintelligence depends on the realization of communism. Otherwise, the unfolding of all scientific and technical powers of thought will be blocked and suppressed by the narrow interest of a capitalist system operating in stubborn disregard for the fortunes of the universe, which it subordinates to short-term profit. Against the backdrop of contemporary debates on the so-called “Anthropocene,” this part of Ilyenkov’s argument is especially relevant. In contrast to Ilyenkov and other Soviet thinkers and writers of the 1950s, the Anthropocene theorists seem to claim the opposite – i.e., that life itself generates the entropic process, which destroys the planet precisely when it achieves human and intelligent form. But this interpretation is only possible because of the contemporary eclipse of past historical opportunities (together with such texts as “Cosmology”). The crucial condition of the anti-entropic process, according to Ilyenkov, is not only the biologically and intellectually enabled self-organization of matter, but also the “real movement” of communism. Thus “Cosmology,” pointing out the missed opportunity of communism, works well with the left critique of the Anthropocene which argues that this notion rather masks a “Capitalocene,” the destructive and toxic effects of full capitalist domination itself and not of abstract thinking life or humanity.

A late-Foucauldian interpretation is also possible here. It would similarly link the text to the totality of real communism, presenting it as an “exercise” in building the communist subject, which this text expresses and performs. Indeed, as noted by Foucault and such scholars as Pierre Hadot, the physics and material ontology of the
universe can have a strictly ethical and political function. For example, the Stoics regarded physics and cosmology as more than just forms of knowledge or discourse; they were also a meditative exercise, a practice that detached the subject from his or her immediate narrow environment and allowed them to ascend to the contemplation of the whole world. This contemplative ascension presents everyday passions and affects as insignificant, compared to the greatness of celestial bodies; one of the frequent topics of such meditations was the imagining of a global catastrophe — in order to strengthen the subject’s capacity for self-mastery in extreme conditions.32

Ilyenkov’s text is indeed just such an exercise. If it had been published and used in Soviet times, it could definitely have had a mobilizing effect — as a paradoxical meditation on the transience of all things in the world, including the most valuable things, such as communism and the very existence of humanity. Even after the collapse of real communism, when the contemporary political subject is plunged into a miserable combination of neoliberalism, neo-imperialism, and neo-nationalism (not to say neofascism), this text is able to produce both a calming and an invigorating effect.

V. Ilyenkov’s Communist Hypothesis and Today’s Speculative Thought

For a deeper understanding of the different layers and the philosophical wager of the “Cosmology,” I will offer two additional ways of reading it, which I can only briefly elucidate by way of conclusion.

The first way is to read this text immanently, in view of Ilyenkov’s later, more mature work.33 I can briefly point out at least one such connection. This connection concerns the problem of “thought” and the mode of existence of its ideal contents. In his masterwork Dialectical Logic (1974), Ilyenkov attempts to elaborate the materialist version of dialectics based on an interpretation of the philosophical classics, from Descartes, Leibniz, and Spinoza to German idealism, and then to Marx, Engels, and Lenin.34 In the chapter on Spinoza he repeats the crucial point of “Cosmology,” suggesting an understanding of thought as a necessary attribute of material substance (i.e., of nature as an infinite whole). We should stress that Ilyenkov does not mean here that finite human thought is an attribute of matter. Thought is only an attribute when it is taken in relation to the whole of substance (nature); otherwise, thought would be a contingent mode, not a necessary attribute. Spinoza distinguished between cogitatio (thought as an attribute, as a necessary and essential quality of matter, or nature as a whole) and intellectus (thought as a particular mode).

So in this technical language, the question in Ilyenkov’s “Cosmology” is about how a mode (the intellectus of the human species) can become an infinite attribute through a singular event. However, in this later, more “standard” work, Ilyenkov does not return to this radical point of “Cosmology,” which claims that the final proof of the necessity of thought is demonstrated by thought’s capacity to rescue the universe from entropic death. In his earlier text, Ilyenkov definitely goes beyond the philosophical paradigm of his time, anticipating the contemporary philosophical logic that assigns to the event the capacity to generate truths and retroactively assert their necessity.

Of course, today the philosophy of Alain Badiou exemplifies the elaboration of such a function of the event. In an interesting parallel with the “twisted” Spinozism of the “Cosmology,” Badiou discovers in his reading of Spinoza’s ontology an “implicit and paradoxical Spinozism” that allows for the concept of the event, albeit in the form of “the event torsion.”35 Badiou derives this implicit ontology from Spinoza’s admission of “infinite modes,” and their exemplary form, the intellectus infinitum (God’s infinite intellect). Spinoza refers to these types of modes only in passing, as normally he discusses modes as finite — they are things or living beings we encounter in the world. According to Badiou, the admission of infinite modes produces a problematic contamination of infinite modes by a fundamentally different concept, i.e., attributes, which are infinite by definition. This highlights the general problem of the obscure relations between the infinite and the finite in the whole of Spinoza’s ontology. According to Badiou, this inconsistency introduces the figure of the “void,” which Spinoza explicitly forbids in his ontology. Of course, the void is understood not in naturalistic terms (as a “vacuum”) but as a name for the inconsistency, the incommensurability, or the hidden exclusion that is a meta-ontological precondition for the event. However, in his published work Badiou only hints at “the event torsion” in relation to Spinoza, not explaining how it could be conceived. If one dared to formulate, in the technical language of Spinoza, a similar theme in “Cosmology,” one could say that Ilyenkov’s self-destruction of communist humanity for the sake of saving matter (i.e., substance) is an event that responds to the same problem, since it suggests a transition from thought, understood as a finite mode (as collective human intelligence), to thought as an infinite mode (as the collective intelligence at the stage of full communism). Thought thus becomes a necessary and infinite attribute of matter (substance) in the singular event of the
Ilyenkov’s event presents a cosmic short-circuit between the finite and the infinite, which, one could hypothetically say, radically changes or supplements Spinoza’s ontology.

The second way to indicate the relevance of the “Cosmology” for today’s situation is to compare the speculative drive of Ilyenkov’s text to contemporary “speculative” orientations in philosophy, by which I mean – very loosely – “new materialism,” “speculative realism” (or “new realism”), etc. Here I will only take one thread from an exemplary and strong work in this field, Quentin Meillassoux’s After Finitude. The core argument of this text is that contemporary thought is bound by a hidden “correlationism” shaped by Kant’s philosophy, which prohibits any speculation about the external world and its ontology per se, if this world is detached from correlation with a transcendental subject, or later, from correlation with a human subject. But instead of a pre-Kantian metaphysics based on the principle of sufficient reason as a ground for the existence of particular objects in the world, Meillassoux suggests a speculative version of ontology based on only one necessity: the “necessity of contingency.” This hypothesis, according to Meillassoux, still enables “stability” in the phenomenal world; it does not turn it into absolute “chaos,” though this “chaos” always remains at the ontological horizon. And if there is no “sufficient reason,” this ontology can only be built on “facticity” or “factiality,” which somehow elevates positivist “facts” into a speculative concept. Summarizing his argument, Meillassoux writes:

Instead of laughing or smiling at questions like “Where do we come from?”, “Why do we exist?”, we should ponder instead the remarkable fact that the replies “From nothing. For nothing” really are answers, thereby realizing that these really were questions – and excellent ones at that. There is no longer a mystery, not because there is no longer a problem, but because there is no longer a reason “[reason” in the sense of metaphysical “sufficient reason,” “ground”).

This ontological perspective, of course, rejects any historical or cosmic teleology based on questions like “For what purpose?” or “What is the final goal of something?” There have already been a number of criticisms of Meillassoux’s hypothesis, but the standpoint of Ilyenkov’s “Cosmology” allows us to develop, perhaps, a more radical one.

Indeed, “Cosmology” provides us with a powerful counterpoint to speculative realism, even while being no less speculative, and no more metaphysically “naive.” Meillassoux’s argument revolves around a prehuman and factual “arche-fossil” from the distant past; according to Meillassoux, this arche-fossil proves that in this bygone era, the correlation between subject and object did not yet exist. Ilyenkov’s thought strives for a posthuman singularity following the event of communist reason’s self-destruction in the distant future (or “hyper-future”) – a scenario intended to demonstrate that in reality the correlation between thought and matter was, actually, a weak one, always already not enough, and only the action of the communist subject upon the global “object” – the universe – finally both fulfills and overcomes correlation. Meillassoux, also ascending to the cosmological scale, attempts to ground speculative thought in pure contingency and hence in the contingency of thought itself, suggesting, literally, “a world that can dispense with thought.”

Ilyenkov argues for a necessity that dramatically reveals itself only through an event. This event is an outcome of both the development of forms of matter and the cosmic struggle for communism. “Cosmology” presents the idea of communism as the fundamental condition for achieving the level of intelligence (or “thought”) that would retroactively constitute its own necessity as an “attribute of matter” and fulfill its function of relaunching the ontological machine of the universe. Praising the “necessity of contingency,” Meillassoux promises – with humble but rationally argued slogans like “From nothing. For nothing” – only a new (and rather liberal) Enlightenment that would subvert any new fideism or religiosity that might emerge from the correlationist skepticism about the powers of rational thought. For his part, Ilyenkov – as if he were desperately throwing “a message in a bottle” from his time – suggests that thought is a “contingent necessity” in the universe. From a contemporary perspective, we can already discern what Ilyenkov implied as obvious, i.e., that the event-based necessity of thought is subject to the achievement of communism. The ontological status of communism thus shifts from being imagined as a “final” social state of happiness and joy, or as an open-ended process of emancipation without any teleology, to the tragic cosmological function of “vanishing mediator” – since otherwise the universe collapses into an eternal black hole.
Alexei Penzin received his PhD from the Institute of Philosophy of the Russian Academy of Sciences, Moscow, where he remains as a Research Associate. He is currently teaching at the University of Wolverhampton, UK. Penzin is a member of the collective Chto Delat (What is to be done?). His research has been published in the journals Rethinking Marxism, Mediations, South Atlantic Quarterly, and Manifesta Journal, among others. He coedited the English translation of the book Art and Production (Pluto Press, 2017) by Boris Arvatov, one of the key theorists of the Soviet avant-garde. Currently, he is preparing his book Against the Continuum: Sleep and Subjectivity in Capitalist Modernity for Bloomsbury Academic.

As we will see, the theme of myth – or rather a “mythology of reason” – will play a role in understanding our theme.


3 Aristotle does, however, mention “self-moving marionettes,” “solstices,” and “the incommensurability of the diagonal of a square with the side” as examples of objects that can provoke astonishment (Metaphysics A, 2, 983 a 19–85).

4 According to David Bakhurst, “Ilyenkov was important in the revival of Russian Marxist philosophy after the dark days of Stalinism. In the early 1960s, he produced significant work in two main areas. First he wrote at length on Marx’s dialectical method ...” Second, Ilyenkov developed a distinct solution to what he called ‘the problem of the ideal;’ that is, the problem of the place of the non-material in the natural world. ... After the insightful writings of the early 1960s, Ilyenkov’s inspiration diminished as the political climate became more oppressive ...”. David Bakhurst, “Meaning, Normativity, and the Life of the Mind,” Language & Communication 17, no. 1 (January 1997): 33–51. For more on Ilyenkov, see the Marxist Internet Archive https://www.marxists.org/archive/ilyenkov/.

5 See the work of David Bakhurst, Vesa Oittinen, Alex Levant, Andrei Maidansky, and Sergei Mareyev.

6 The first English translation of “Cosmology of the Spirit” was recently published in a special issue of the journal Stasis (vol. 5, no. 2, 2017) http://stasisjournal.net/images/Stasis_v05_no2/eng/stasis_v05_no2_06.pdf.

7 “Cosmology of the Spirit” (Космология духа) was first published in Russian in 1988, in the journal Science and Religion.

8 Among these few works and commentaries, see, for example, a chapter on “Cosmology” written by Ilyenkov’s friend and student Sergei Mareyev (Sergei Mareyev, “Cosmology of Mind,” Studies in East European Thought 57, no. 3–4 (2005): 249–59). See also the deeply informed commentary of Giuliano Vivaldi, the translator of the English version of “Cosmology” published in Stasis; his commentary assembles rare sources and provides a rich context for the genealogy of the work (Giuliano Vivaldi, “A Commentary on Evald Ilyenkov’s Cosmology of the Spirit,” Stasis 5, no. 2, 2017).

9 See Mareyev, “Cosmology of Mind.”


11 Of course, in Fedorov’s key text, The Philosophy of Common Task, women definitely play a part in the resurrection process, but this part is determined by stereotypical and patriarchal gender roles – men “hunt” for remnants of past generations, while women “give birth” to them by collecting and revitalizing them in special laboratories. However, the symbolic register of the text does not acknowledge even this – actually, essential – contribution.

12 Officially, Fedorov’s legacy was not welcome in the USSR, and his books were not in print during the Soviet era.


14 This book was unfinished and remained unpublished during Engels’s lifetime. It was published in 1925 under the direction of David Riazanov at the Moscow Marx-Engels Institute.


16 Ilyenkov, “Cosmology of the Spirit,” 166.

17 Ibid. Italics in the original.

18 Ibid., 171.

Ilyenkov, “Cosmology of the Spirit,” 177.

Ibid., 187.

Ibid., 176. This stance is definitely an implicit projection of Lenin’s interventionist politics into the realm of cosmological and ontological speculation. Lenin honed this approach in debates with Bolshevik representatives of the so-called “economist” tendency, starting with his famous text “What Is To Be Done?” (1902). The “economists” defended the idea that the conditions for the revolutionary subjectivation of the proletariat are determined by objective economic development and its natural laws. In opposition to this, Lenin emphasized the subjective intervention of party intellectuals, who have to bring radical consciousness to the working class.

While the big bang theory remains a prevailing paradigm in physics today, the theory of the thermal death or “heat death” of the universe that emerged in the mid-nineteenth century and was integral to Engels’s Dialectics of Nature is not considered so influential. For example, the work of Russian-Belgian physicist Ilya Prigogine (1917–2003), which rethinks thermodynamics and introduces the capacity of matter to “self-organize” (and not only in its biological form), proposes a new perspective on thermal death; however, Prigogine’s theories operate on the level of specific and closed systems, not on the universe as a whole, thus abandoning a crucial component of Ilyenkov’s thermal death hypothesis.

Ilyenkov, “Cosmology of the Spirit,” 185, 188.

Ibid., 184–85.

Ibid., 188.

Ibid., 189–90. Italics added.

For evidence of this, see the book Ilyenkov: zhit’ filosofiei (Evald Ilyenkov: To live by philosophy) by Ilyenkov’s younger colleague and friend Sergei Mareyev (Moscow: Akademitcheski Projet, 2014), 156–71.