



On the Nature of Thought: Centennial of Evald Ilyenkov

Siyaveş Azeri

IN HIS BOOK *ON IDOLS AND IDEALS*, Ilyenkov raises the question concerning the relation between human beings and machines, a problem that is also related to notions such as thinking machines (or machine-thinking) and the Artificial Intelligence. Ilyenkov states that the question of the so-called relation between human being and machine is in fact a variation of the question concerning the human-to-human relationship. In dealing with the Machine, human being is in fact dealing with another human being, say, the creator, the user, or the owner of the machine. “The ‘Man-Machine’ problem, if you delve a little deeper into it, turns out to be the problem of the relation of Man to Man, or, as the philosophers of the old school would put it, the problem of the relationship of Man to himself, although the relationship is not direct, but ‘mediated’ through the Machine” (Ilyenkov 1968, 30-31). Dealing with the question of the human-machine relationship superficially, in other words, dealing with it as a question in and by itself, in resemblance to the theological fallacy of dealing with religious questions as divine, other-worldly, and thus “purely” theological, means dismissing the human foundations of the question, and thus is a form of manifestation of fetishism—with the Machine being the fetish.

The aforementioned problem is related to the problem of the historically specific form of the social relations and the consequent self-conceptualization of human beings, the way they conceive of themselves, their humanity, personality, and skills and abilities, particularly thinking. Accordingly, the nightmarish fantasies concerning the subjugation of human beings under the Machine that have been haunting human im-

Azeri, Siyaveş. 2024. “On the Nature of Thought: Centennial of Evald Ilyenkov.”
Marxism & Sciences 3(1): iii–xxiv. <https://doi.org/10.56063/MS.2403.03100>

- Correspondence: Siyaveş Azeri, Babeş-Bolyai University.
- e-mail: siyavesazeri@gmail.com
- ORCID: 0000-0002-3765-2489
- DOI: 10.56063/MS.2403.03100
- Available online: 24.03.2024

agination for a long time are in fact forms of appearance of the relationship among people: the idea of human subsumption under the Machine and its will is a perverse form of the awareness of the subsumption of the human individual under the will of another; blaming the Machine as the source of inhumane, soulless conditions yielding to such subjugation means ignoring the real root of the problem: the inhumanity of the social relations that foster relations of domination and subjugation.

Within the historically specific social relations, that is, the capitalist relations of production, the Machine appears as the subject with human beings turning into objects; into appendages of the Machine. As Marx (1992) notes, it appears as if it is not the worker, the human individual that deploys the machine, but the contrary, it is the machine, apparently owning a soul of its own, that deploys human individuals. Human beings are deprived of their subjectivity and agency and appear as mere parts of the Machine (the system of machinery) (see chapter 15). As Ilyenkov notes, “Thus, the Machine more and more turns the Man into its own ‘talking tool,’ into the missing part of its mechanism and makes it—like all other parts—work to its fullest, to the point of wear and tear, to the point of exhaustion” (1968, 34). Consequently, the human individual disappears as a person in order to reappear as a part of the complex machinery, the “Big Machine,” and his skills, including their thinking ability, are alienated from them in order to emerge as the skills and powers of the Machine. Thus follows conceptualizing human personality, their capabilities and thinking after the image of the Machine. Instead of the human person being the highest value and the goal for another human person, the Machine becomes the highest goal, the end towards which all history is destined to move. Human person, in its turn, is transformed into a mere object, a tool or “a speaking instrument, with the help of which this great all-consuming goal is realized. A means more or less suitable for the fulfillment of an end, and no more” (Ibid., 38).

A specific aspect of the aforementioned “technocratic-ideological” outlook is the way thought/thinking is conceived of. In other words, the answer to the question “what is thought/thinking” is a derivative of one’s conception of the social relations among human individuals.

From a dialectical point of view, genuine human-thinking/thought always involves contradictions as it concerns proposing and realizing an “ideal,” in contradistinction to the real/actual—the well-known contradiction between the “is” and the “ought.” In a more general sense, every

act of thinking of any organism (capable of thinking) involves contradictions as thinking emerges only in the face of problems thus far unknown and unwitnessed, which should be surmounted if the organism is to survive. More specifically, human-thinking is a contradiction; human-thinking is thinking the non-existent in order to actualize it via actualizing thought. This does not mean attributing a mystical power to “thinking” and equating thought with chimeras. Genuine human-thinking is negating the existent by proposing a new actual—the thinkable is actual, the object of human-thought has to be real if it is to be thinkable; whatever that “comes to mind” or that is the object of human-thought is real because thinking/thought is “this-sided” [*Disseitigkeit*] (Marx 1976, 3) and its truth is a matter of praxis. The actualizability of human-thought is a manifestation of its ideality, a specificity that contrary to idealist assumptions follows from the this-worldliness or terrestriality of human-thinking, which in its turn is the source of its power and “materiality” that is expressed in the mutual transformation of the ideal into the material and the material into the ideal.

Idealisms, contrary to their appearance, tend to undermine the power of thought and limiting its reach and scope by relegating it to heavens as a strange substance; idealism is ideal-fetishism; it is the admission of the existence of the ideal independent from the individual but is a perverse form and as such it is the fetishization of thought.

The ideality of human-thinking is manifest in the (self)-image the human being reflects onto reality. In the middle ages, this image acquires the perverse, fetishistic form of the Christian ideal as the means for the realization of human essence and their salvation—the image of God as the savior of human beings from the horrors and the toil they are subject to, which in its turn is but a perverse image of the real conditions within which they exist. Under capitalism, and with the advent of the machine, thanks to “productivism” and “use-value romanticism” as forms of manifestation of capital’s prevailing logic of fetishism expressed in the dictum “production for the sake of production” as a “shadow form of capital” (Murray 2016), this ideal may take the form of the machine-illusion, with “ ‘people’ instead of looking at the Machine through the eyes of a Man and seeing in it a means and instrument of the Human Reasonable Will, look at Man from the point of view of the interests of the Machine, with the staring eyes of the Machine, and therefore see in him a non-living human individual” (Ilyenkov 1968, 41).

One of the most precise and succinctly put formulations of the dialectical contradictoriness of thinking is Hegel’s formula that “the actual

is rational, and the rational is actual” (2001, 18). As Engels notes, this formula forms the revolutionary essence of Hegel’s philosophy, as, contrary to its appearance, rather than sanctifying the existing order by rationalizing it, further points to the transitory nature of historical phenomena, that might have been “rational” and thus as much “actual” at a point in time but now, necessarily, they become irrational, hence unreal. On the one hand, Hegel’s proposition turns into its own contrary since it admits that all that is actual carries the mark of “irrationality” from the outset, meaning that “all that exists deserves to perish” (Engels 2010, 359). On the other hand, it reveals the revolutionary essence of the Hegelian philosophy as the admission of the power of thought, which contradicts reality and posits a new actuality in its stead. The Hegelian formulation conceives of truth not as a set of readymade dogmatic statements and formulae, to be crammed in one’s head or mind in form of procedures and algorithms but is a part and a constituent of cognition and its forms of realization that are subject to historical development of society, and the sciences and knowledge that are historically produced. According to Engels, this is as true as it is for the sphere of scientific cognition as it is true for the sphere of the so-called “practical” reason. “Just as cognition is unable to reach a definitive conclusion in a perfect, ideal condition of humanity, so is history; a perfect society, a perfect ‘State,’ are things which can only exist in the imagination. On the contrary, all successive historical states are only transitory stages in the endless course of development of human society” (Ibid.).

According to Ilyenkov, the power of thought is comparable to a “miracle” as it finds its “practical” expression in the action of the revolutionary masses, who while chanting the Marseillaise raising the tricolour flag of “Liberty, Equality, and Fraternity,” the ideals that had been set before humanity, in the face of the (feudal) irrational actuality, as the new forms of reason and the actual by the Enlightenment thinkers. The contradiction between the actual and the rational has been once again resolved in favour of reason/thought only to encounter a higher form of contradiction revealing “the transitory character of everything and in everything” (Ibid., 360). In Ilyenkov’s own words,

The ideal—“the rational” (“proper”/“due”/the “ought”)—turned out to be stronger than the “actual” (“existing”/the “is”), despite the fact that the “actual” was guarded by all the might of the state and the church, by the bastions of fortresses and offices, by the bayonets of soldiers and by the plumes of learned academicians, despite the fact that it was firmly entangled in the

chains of thousands of thousands of years of habits and traditions, was sanctified by traditional church morality, art and law, established in the name of God. (1968, 61)

Although the triumph of the revolution and the Ideal was not absolute, and the power of the “actuality,” incarnated in the rise of Napoleon as the new emperor, would eventually defeat the revolution and its ideals, yielding to the rebirth of hopelessness and misery on the side of the masses, the genie had got out of the bottle. One may speculate that the development of dialectics in its speculative form within the Hegelian system functioned as the philosophical counterpart to the revolution, its faith, and the rise and fall of the Ideal. Although Hegel had not drawn the aforementioned conclusions as sharply and explicitly, his system signified the logical necessity of the termination of the philosophical movement since Kant, an aspect of which had been abhorring contradictions.

Ilyenkov notes the relation between Kant’s treating of logic and his approach to the “Ideal.” With Kant logic becomes one of formality, indifferent toward the content of knowledge; the most important aspect of thought, accordingly, is non-contradictoriness and coherence of a logical series, even if it is pure absurdity (Ibid., 86). Furthermore, in his system, as much as in Fichte’s, the Ideal becomes unrealizable. “According to Kant and Fichte, the ideal is absolutely similar to the horizon line, an imaginary line of intersection of the sinful earth with the heavens of truth, which moves away exactly to the extent that it is approached... everything ultimately comes down to a painful procedure of pacifying all of one’s ‘earthly’ desires, aspirations, and needs” (Ibid., 79–80).

Kant’s fantasy of the non-contradictoriness of thought (and logic as the science of thought/thinking) marks the inevitable failure of thought and reason not only in the face of contradictions inherent in new experiences, but also in face of past experiences as reason contains not only identities but also their polar opposite, that is, differences. That being the case, Kant’s pure reason appears as the thought in the state of absolute inaction—non-contradictory thought is no thought.

This situation is reminiscent of the “Black Box” and its mystical, other-worldly silence of which Ilyenkov speaks in the “Mystery of the Black Box,” the “Sci-Fi Prelude” of the *On Idols and Ideals*. After one of the “thinking machines” called Hamlet failed in resolving the riddle, “to be or not to be,” and got into hysteria, the Automatic Civilization came up with a brilliant solution by dividing his task between two machines: the “to be” and the “not to be.” This new design would be put into work

as a prototype for handling any contradiction; in the face of such a situation a pair of machines would be deployed one being in charge of, say, A, while the other would be in charge of, say, $\sim A$. Still, in case there was a disagreement about the outcomes of the workings of the two polar machines or even in case of a misunderstanding that could develop into a contradiction, the inconsistent propositions would be submitted to the Black Box as input to be resolved and delivered by this superior machine as an output. However, the Black Box was silent; nothing would come out and the machines would then be convinced that there was in fact no contradiction and the problem had raised due to defects in their making and thus would rush to the surgical workshop for being repaired and for the dysfunctional hardware and software to be replaced. The reaction of the Black Box to all the entering contradictions and inconsistencies was a consistent silence; it was “illuminating the world with its benign wisdom. And everything went well” (Ilyenkov 1968, 20). At the beginning, there was another machine, “The Interpreter of the Great Silence,” that would interpret the silence of the Black Box for other machines. However, eventually other machines realized that they didn’t need the interpretation as they could get access to the Black Box’s silence with the use of telepathy; as soon as they would face the slightest inconsistency, they would think of the image of the Black Box and would immediately experience a relief. As time goes by, the Automatic Civilization was developing alongside the Black Box and its divine silence: any controversial issue would be easily resolved by clarifying the meaning and the names by dividing the ambiguous term into two distinct and completely unambiguous ones.

Thus, in particular, an end was put to the protracted dispute between two schools in machine historical science, one of which claimed that Man existed, and the other that Man did not exist. In accordance with the principle of the Great Silence and Economy of Thought, it was decreed that there was no Man, but there was a machine, which other machines called “man;” but this machine was so hopelessly primitive and stupid that calling it a Machine would be wrong and even insulting to genuine Machines; therefore, they decided to leave behind the name “man,” denoting with this offensive word the machine-like ancestor of machines... So they decided: “Man” (with a capital letter, as a category) did not exist, although there was “man” with a small letter, as a proper name, as an offensive nickname for a faulty machine. And everything fell into place. (Ibid., 22)

As the Automatic Civilization developed further, machines came to the point to reach the absolute limit by tending to become like the Black Box. After a moment of high tension, all became clear to every machine:

there was no need to think further. Moreover, there was no need even to say this statement out loud... And as the machines proceeded to reveal the great secret of the divine silence of the Black Box, they faced what they already knew: there was nothing in the Black Box; nothing, but air; there was the secret of the Absolute, the Ideal, and the Ultimate. Now the machines would clearly know what they were supposed to do: they should not think (Ibid., 26).

Hence, we encounter a set of simple yet vital questions: Why thinking “happens?” And with thinking understood in its alleged “universal form,” of which human-thinking and machine-thinking are supposedly specific types, comes about the question of the locus of thinking/thought: where is thought or where thinking is happening. The latter question is immediately related to the problem of the subject matter of logic with logic being conceived of as the science of the laws of thinking. This last definition, which seems to be accepted by all logicians, regardless of their being idealists or common sense philosophers, brings about another important question: “What is thinking?”

Ilyenkov argues that in a general sense, thinking cannot be defined unless all forms of thinking in their process of development are considered and analyzed; that being the case, such a definition, in Engels’ words, will not be a definition. Yet, in a strict sense, we need a preliminary definition to start working with (2018, 9).

The traditional approach considers thought/thinking as an inner, silent speech and logic—as the science of laws of thinking—the investigation of verbalized thought/thinking: thinking can and should only be investigated in the form of its verbal, external manifestation (Ibid., 10). That being the assumption, the concept is equated with a “term” or a “signifying sign” and “judgment” is equated to “utterance” with thinking considered to be identical to constructing utterances or a system of utterances. Hence, the investigation of thinking is done away with to be replaced with the investigation of language, say, “language of science,” of art, so on and so forth.

One particular problem that arises with such faulty identification is confusing the concept with the term. The difference between “concept”, on the one side, and “term” or the “signifying sign” and the like on the other, is pivotal. Concept is a specific tool, an organ of thinking as much as other tools and organs of human body; “thinking body” is a “conceptualized body” or a “bodily concept” with body understood as social body; to put it differently, thinking body is the social body; it is body in society, the only body that is capable of human-thinking.

Identifying the concept with the term, the mainstream approach that is highly inspired by empiricism and crude substance materialism reduces logic into a branch of linguistics. With such an impoverished understanding of logic, human thinking is excluded from the scope of logical analysis. “Logic here cannot be a science of real laws of real human thinking but at best turns out to be a system of rules that ‘must be’ or ‘may be’ followed but are, unfortunately, broken at every step” (Ibid., 11). Furthermore, thanks to conventionality of rules, which reduces them into a matter of mere consensus, logic loses its right to objectivity—it loses its claim to the necessity and universality of its “laws.”

Contrarily, for Hegel laws of thinking are considered to be laws or schemas of human activity with every form of activity conceived of as the manifestations of laws of thinking—logic. Hegel’s importance lies in his admission of and insistence on the importance of deeds in understanding thinking, that is, activities, external deeds, are at least as much the manifestations of thinking as speech; to be clear, they provide a more genuine image of thinking than words. Hegel’s introduction of practice into logic guarantees the objectivity of thought/thinking in two senses: genuine thought is objective as thinking concerns objects (particularly tools and artefacts); it is also objective in the sense that thought/thinking is a real activity and a material force—genuine thought is real. As Ilyenkov notes, “in Hegel practice serves as a link in the analysis of the process of cognition, and indeed as the transition to the objective truth” (Ibid., 13). In doing this Hegel anticipates Marx’s introduction of practice into the theory of knowledge, that is, practice as a philosophical category, and his quest for demonstrating the “this-sidedness” of thought. As Marx notes in the 1844 Manuscripts, a non-objective being, a thing that is not objectivized is nothing; it is non-being. So, if thinking is not objective, it is not thinking; as non-objective thinking, that is, as thinking without an object outside itself it is unthinking and is devoid of any power (1975, 337). Marx follows Hegel’s footsteps who included the objective determinations of things existing outside consciousness in logic as the science of thinking, albeit in a perverse manner as the self-manifestation and self-estrangement of mind. Still, with Hegel logic is saved from being a pure formality as he considers the objective determinations of things existing outside consciousness to be a part of logic (Ilyenkov 2018, 13). With Hegel we arrive at the idea of the historically formed and specific schema of action as the forms of human action carved in objectivity—the “ideal.” Hence, his formulation of the whole social reality as “thinking in its other-being” (Ibid.).

A materialist dialectical critique of Hegel focuses on his failure in fulfilling the task of analyzing thinking and its manifestations in the historical real sense of the term; Hegel acts like a positivist when instead of paying attention the “activity,” of which this logic provides the laws, treats the “laws of logic” as self-subsisting, universal laws from which activity emanates; or as Marx, in another context states, Hegel passes the state of his logic as the logic of the state. “[Hegel’s] problem is that in his analysis of the history of humanity the ‘activity of logic’ absorbs his attention so much that he ceases to see behind it the ‘logic of activity’” (Ibid., 14). This is the source of his idealism, of his fetishization of thinking/thought in the form of Spirit or Logic. Furthermore, in considering the external activity as a mere manifestation of thought, say of French revolution as the embodiment of Rousseau’s and Voltaire’s ideas, Hegel repeats the “ideologist’s fallacy” of considering thought and idea as something by itself, which can only be encountered and is related or yields to another thought, idea. “While interpreting ‘practice’ exclusively as thinking in its external manifestation, i.e. as an idea (concept) embodied in space and time, Hegel cannot construct the true dialectics of human activity that expresses in its concepts the true logic of events, logic of actions, logic of the historical process” (Ibid., 15). Hence, the returning home of thought to its point of origin and affirming itself as absolute knowledge and absolute, abstract mind (Marx 1975, 330–331).

By reducing all forms of spiritual and material human culture into “manifestations” of thought, Hegel deprives himself from the opportunity to ask the question concerning the source of human thinking capacity: “where does this wonderful human capacity come from?” (Ilyenkov 2018, 18). What holds in case of Hegel also holds for all types of idealisms and fetishisms: the question is concerned with the source of thinking in general; why does an intelligent or rational being, or even an animal think? What is the source of this capacity? Where does it come from? As Ilyenkov notes, Hegel’s answer to this question is “from nowhere.” “It does not ‘come from,’ does not originate, but only manifests itself, expresses itself, since it is not conditioned by anything external—it is absolute (‘divine’) capacity, creative power and energy present in human beings from birth” (Ibid.). Hegel, thus, taking thinking and its definition (not in the restricted form but definition in general) for granted recapitulates the commonsensical understanding of thinking as something taken place inside one’s mind or head and thus as a mental capability among other mental capacities. In doing this, he betrays the

revolutionary essence, “the true rational kernel” of his logic and conception of thinking, that is, its objectivity.

Thinking is the product of acting in a world populated by human artefacts; only here this special capability, human-thinking can flourish and develop. The artefacts themselves are the expressions or manifestations of former schemes of thought, which themselves are based on the schemes of activity. Thus writes Ilyenkov, “all ‘logical forms’ without exception that Hegel considers to be the immanent domain of the ‘spirit’ in fact ‘express themselves and show themselves primarily’ not in human language, as Hegel postulates, but only as constantly repeated schemes of the external—objective and objectively conditioned – human activity. These schemes are brought to consciousness in language only much later” (Ibid., 21). Thinking does not “wake up to self-consciousness;” to the contrary, consciousness, self-consciousness included, emerges only through the process of the constitution of human-thinking. Thinking in its human form is only possible in the social universe; so is consciousness—consciousness is a social relation.

Laws of logic, in other words laws of intelligent thinking are the forms and schemes of human activity in social nature with the use of tools and artefacts, which themselves are also interrelated. That is why forms and schemes of human thought matches the relation between things as laws of thinking are expressions of the real relations between objects and not a relation between signs or mere words. This is where Hegel still has something to offer in understanding the nature of sciences: that the rules, figures, signs, and the logical relations specific to each sphere of scientific knowledge-production are in fact relations between things mediated through human activity and human-to-human relationship (of course this requires turning Hegel on his feet). Hegel was aware of this but in a perverse way: the relation between things and the regularities of these relationships considered as objectifications of the Law, of the scientific law; such formulation is much more precise than understanding these regularities or “invariances” in terms of “conjectures” or mental or social constructs or phenomenologically acquired “essences.”

Thinking as an active capacity of any human being is born, comes into existence, and not ‘expressed’ as having been already present, in the immediate objective human activity that transforms the external world and that creates the objective human world (tools, products of labour, forms of relationships between individuals in acts of labour, and so on) and only after that it creates the ‘world of words’ and a specific capacity to treat words as its ‘subject matter.’ (Ibid., 22–23)

That dialectics is the science of the universal forms and laws that govern both being and thinking is just the “logically” necessary outcome of the emergence of human-thinking on the basis of human activity in social universe. Hence follows the resolution of the question concerning the relation or the identity of thought and being, of thinking and reality or the problem of the “reality of thinking” and thought. So conceived, thinking is a material necessity capable of grasping the essence of reality—the limit of thinking is the reality in its essence and not the notorious “thing-in-itself.” Furthermore, thinking and logic are not mere formal processes; the whole social universe forms its subject-matter. Such a logic is the science of the laws of thinking as it is the science of history of the forms of thinking; it is necessarily non-idealistic and non-positivistic—logic as materialist dialectics of human activity and thinking.

The retreat from a dialectical conception of thinking to a positivistic view of thought has consequences far beyond the limits of the sphere of epistemology. At the political sphere it amounts to the sanctification of the existing order and the deification of the state. By making the “ideal” into a phenomenon of the past, Hegel draws the consequence that “beautiful individuality” belongs to humanity’s childhood that has passed with no chance of a return. As Ilyenkov notes,

The contemporary person can experience the naively beautiful stage of his spiritual development only in the halls of museums, only on a day off, given to him to rest from *the hard and joyless service of the absolute spirit*. In real life, he must be either a professor of logic, or a shoemaker, or a burgomaster, or an entrepreneur and *obediently perform the functions assigned to him by the absolute idea*. A comprehensively harmoniously developed individuality in the modern world with its fractional division of labor—alas!—impossible. (1968, 112–113, emphases added)

The individual person under the capitalist relations of production is incapable of initiating any change and is hopelessly obliged to submit to the harsh reality of capital’s rule and the consequent dividing of human beings into their labour. We might lecture ourselves about the ideal yet the battle for actualizing it has been long lost.

To the extent that thinking itself is concerned, the idealist-positivistic conceptualization of thought presents it in form of a fetish either as presented by Hegel, as an inborn gift the source of which remains beyond the grasp of human understanding, or as a mechanical-algorithmic process of compiling information or data in form of signs or codes translatable into machine-language and thus an “ability” transferable into “intelligent” machines. Hence, the process of production of

knowledge and of cognition in general is conceived of in the form of an automatic mechanical procedure independent from the real, social individual. Such an impoverished understanding of thinking and genuine knowledge-production dismisses the simple yet fundamental questions concerning the nature of thought and human being's cognition of reality. "How does it happen that we directly perceive an event inside our own organism as an objective (located in external space) form of a thing, and "experience" our own internal state as something "other," as something outside ourselves? How and why do we see things outside rather than inside ourselves?" (Ibid., 212)

To put it differently, the question is that how changes on our cerebral cortex and other parts of our brain that are "internal" happenings yield the disposition of perceiving things outside the brain, outside ourselves as "external" entities? The knowledge of the working of the brain in reaction to physical, chemical, optical, and neural processes will add nothing to our understanding of the perception of external things in space and time.

This is so because "physiologists (and cybernetics) do not study mental abilities at all, but a completely different 'subject'—those material mechanisms with the help of which the corresponding active ability is realized. And mental abilities and their material mechanisms are completely different things, although inextricably linked. As different as, for example, the 'structure of a steam locomotive' and the result that a person arrives with its help, say, at the beaches of the Black Sea or meet one's relatives" (Ibid., 213).

Perception is not the formation of a mirror image of a body in another body but is a specific form of outward activity—"the transformation of visual impressions into the image of external things" (Ibid., 215). Human perception is accessing reality with the aid of imagination and other higher psychological functions. Once perception and its objectivity—externalization—as action is understood properly, the so-called "theory of reflection" can be raised on its feet: it is not the object that is reflected "in" the subject but it is the form of activity of the subject, the schemes of human action in the form of images, which are "reflected" onto the world of objects.

This specificity of human perception/cognition, which is responsible for its extensive reach and scope (in contradistinction to, say, animals), is a consequence of the human being's social existence—human beings are social animals whose organic and natural needs and desires are re-

placed by internalized social needs. “A person perceives/cognizes immeasurably more, in the world around him, because his gaze is controlled not by the organic needs of his body, but by the needs of the development of society and human culture, which he has internalized” (Ibid., 216). Social existence and cultural development are also responsible for the specificity and the extension of human thinking and intelligence in contradistinction to, say, the AI and the so-called intelligent machines and machine-thinking. The wealth of human thinking and intelligence is not a function of the quantity of the data available to them; furthermore, it is not distinguished, as alleged by Kaplan, from machine intelligence by the functioning with limited data all the time (2016, 5–6), or by the ability for adaptation on the basis of “insufficient knowledge and resources” (Wang 2008, 371). These views recapitulate at best, the Hegelian stance that leaves the question concerning the source of human intelligence unanswered. Human intelligence, as much as its thought and cognition, owing to its social makeup, is, virtually speaking, independent from “sensory data” or “input.” That being the case, human vision, cognition, thinking and intelligence is “impersonal.”

To understand how and why human vision and cognition have become impersonal and disinterested toward “crude” individual bodily needs, i.e., to understand the emergence of “contemplation,” of theoretical thought as a real, material force, we should consider the process of the emergence of individual sciences. Idealistic answer to the problem of the reality of thought or contemplation that explains it by reference to spiritual powers or the higher nature of human being that is allegedly irrelevant to the material human world is a non-answer—“it is a statement of fact passed off as an explanation” (Ilyenkov 1968, 218). The solution to the enigma is the material world itself; it is not the individual needs but the social organism that is the consequence of human beings collective labour, which is responsible for the emergence such needs and “curiosity” or “interests,” that turns the human vision toward the farthest of the galaxies. “The human psyche was the product and consequence of the vital activity of this organism. It created the human-thinking brain and the human-seeing eye” (Ibid., 219).

A human individual is capable of cognizing, literally speaking, with a million eyes, of doing with a million hands and of thinking with the use of million brains; contradictory as it may seem, one’s individuality and specificity as a human person is based on such social capability, of seeing with the eyes of another without becoming another—the capability that Ilyenkov calls “imagination.” Imagination is the product of such

“collective” cognition: the ability to see through the eyes of another person without turning into them. Imagination is a fully historical product that “develops only in the course of handling objects created by man for man, with products and objects of creative human labour” (Ibid., 220).

Highly formalized, repeatable, algorithmic-procedural actions do not need imagination and its creative contribution to action; such automated processes can, in principle, be replaced hundred percent by machines. This is much true for the material life as it is for the “spiritual” life. Under the capitalist relations of production, however, thinking is reduced to such algorithmic procedures and the human person (or the so-called human mind) is conceived of after the image of the machine. Such dehumanizing image also has devastating implications in the way the educational system is organized: the fantasy of “inculcating ‘mind’ into a person in the form of a system of precisely and rigorously formulated ‘rules’ or operational schemas—in the form of a ‘logic’ ” (Ilyenkov 2007, 10) the aim of which is not fostering independent thinkers—persons—but mediocre minds incapable of handling contradictions, i.e., incapable of handling tools and thinking intelligently, replaceable by machines—not, say, mathematicians but calculators “performing auxiliary operations but not engaged in the development of mathematical science” (Ibid., 36).

Through such a reduction, true human spiritual powers such as thinking and imagining are conceptualized as mechanical-algorithmic processes with the machine being the incarnation of capital as a social relation. Hence, the perverse relation between capital and human beings with the former assuming the role of the subject while the latter is submerged to the level of the mere object—the dead appears as alive and the living as dead—fetishism.

The consequent objectivization and pacification of human persons and the prevalence of mediocrity immediately affect the “scientific” image of reality as scientific inquiry and conceptualization is realized through active transformation of nature, which in its turn is subject to and determined by the *social form* of human activity. “Forms of thinking and forms of contemplation (that is, forms of imagination) arise only on the basis of ‘humanized’ (that is, processed, remade by labour) nature” (Ilyenkov 1968, 259). The consequent objectivization of nature and its conceptualization as a mere source of raw material utilized for the purpose of valorization of capital is yet another reflection of the aforementioned dehumanization of human persons through objectivization and pacification. Sciences are tools of “anthropomorphization” of nature.

Real anthropomorphization of nature is not a product of “mere fantasy,” but is the consequence of social labour, which is responsible for humanization of nature as much as naturalization of humans. Humanization of nature means carving social goals into nature—socialized nature. Within dehumanizing social relations, social nature as much as social humanity is necessarily dehumanized—unsocial nature and unsocial sociality.

This situation, in its turn, reveals the essential unethicity and immorality of the capitalist social relations, their dehumanizing effect and their intrinsic fascistic tendencies; the fantasy of the thinking machine is a manifestation of such dehumanizing tendency—transference of agency from the human person to the machine, which is another manifestation of the intrinsic contradictoriness of the capitalist relations of production: “I want to force the machine to treat me ‘humanly,’ as a person, declaring myself a non-human, a thing, a partial part of a large machine, a part that agrees to any actions that the machine dictates to me” (Ibid., 282). As long as the conditions remain inhumane fetishism and the consequent denouncement of agency is an inevitability. The fantasy of a “thinking machine” that owns agency is cultivated and flourishes on the same soil from which religious perversion sprouts.

Humans, depending on the level of abstraction and the specific context, may be identified with anything from a stone, for being subject to gravity and mechanical laws, to a giraffe, because of being a mammal, to a calculator, when making calculations. The fact that humans can be identified with each and every of these objects is a showcase that they are not identical to any of them. This, in its turn, is the manifestation of the universality of the concept of human being which is a consequence of its sociality (Ibid., 285–286). Real, concrete personality emerges to the extent that the individual is subsumed under the universal concept of Human, the social species-being. In this sense, every individual is an “individual universality” or “universal individuality” (Ibid., 289). Personality of such universal individuality is a social phenomenon or a social relation; the person is what society has made out of it, that is, one’s conditions of living, the social relations of production with their specific historical form within which the individual is born, acts, and matures.

Any human being in principle is capable of doing anything exactly because of such universality, which makes them different from being solely a chemist, a poet, a mathematician, or a truck driver. It is in this sense that we cannot attribute any “innate” specificity or property (innate skills or talents) to a human being (Azeri 2017, 691). Thus follows

the *differentia specifica* of a “thinking being,” that is, a thinking human: “the ability to act according to the logic of another;” in other words, the ability to be intelligent; to be able to use tools and artefacts intelligently in accordance to their social significance, their ideality, in contrast to an unthinking being that acts only according to its own inherent “logic:” “The ability to handle anything in accordance with its own logic, and not in accordance with an a priori introduced scheme, not in accordance with an action stamp encoded in the hand or in the head, is precisely what makes a person a thinking being, a subject of thinking” (Ilyenkov 1968, 286). This is where anti-innatism and the communist demand of “to anybody what they need, from anybody what they can” meet the Aristotelian definition of intellect/“the thinking soul” as the “form of forms.”

The discrepancy between a human’s concept and their individual existence is the result of the limitations imposed on them by society, the social relations of production (Ibid., 289–90). This discrepancy, or the difference between the “real” individual and their concept, under capitalism, is actualized as forms of alienation. The task before us is providing the conditions that facilitates the correspondence of each individual to their concept. A specific step toward this goal is ending the division of human individuals to their labours or professions: “society has already become rich enough to allow itself to develop its culture not by turning the individual into a professionally limited, ‘partial’ person, but by maximizing the full development of all the possibilities inherent in him by nature” (Ibid., 290).

Ending the division of individual persons into their labours requires the humanization of social relations, which is possible only with demolishing the capitalist relations of production. It is on the basis of a just social order, that is, on the basis of the voluntary “association of social individuals”—communism—that reconstituting human persons as universal subjects, as the agents of their activity and of their thoughts is actualizable. Human-thinking requires agency; only agents of activity can think humanly.

~o~

The first of the two issues (that form the volume 3) of the *Marxism & Sciences* dedicated to the centennial of Evald Ilyenkov consists of invaluable contributions in forms of original articles, essays, communications, cultural works, reviews, and interviews.

Vesa Oittinen, in his communication titled “Ilyenkov and Lenin’s Dialectic” discusses Evald Ilyenkov’s interpretation of Lenin’s dialectics and dialectical method and applying it to criticize the positivistic philosophies and epistemologies prevalent in the Brezhnev era under the guise of the so-called “dialectical materialism.” He further contextualizes Ilyenkov’s attempt at and contribution to a materialist dialectics arguing that to such an end Ilyenkov follows the footsteps of Hegel in his criticism of Kant, Engels’ idea on the discrepancy between Hegel’s “revolutionary method” and “conservative system,” and Lenin’s interpretation and “appropriation” of Hegel’s revolutionary dialectics.

Alan Diaz Alva, in his article titled “The Fetish of Intelligent Machines: From Ilyenkov to the *Neue Marx Lektüre*” attempts to ground the conception of AI-driven machines as ‘intelligent machines,’ i.e., as machines endowed with seemingly human-like intelligence in the forms of objectivity that correspond to capitalist relations of production and its fetishistic nature. Alva further argues that the idea of the intelligence of the machines and the AI should not be disregarded; yet, it might be evaluated under the light of the fetishistic forms of consciousness that are rooted in capitalist production and the on-going process of objectivation of the intellectual potencies of the material process of production. Alva utilizes a detailed reconstruction of Ilyenkov’s concept of the “ideal” to form the centre of gravity of his argument which further facilitates a “dialogue” between Marxists and AI scholars. To this end, the author argues Ilyenkov’s innovative interpretation of the “reflection theory,” which contrary to “mainstream” understandings of it is not individualistic and in turn yields the possibility of a critique of tacit Cartesianism and cognitivism of some Marxist trends. Alva also critically discusses Ilyenkov’s account of fetishism arguing that he has not sufficiently emphasized the uniqueness of capitalist forms of fetishism.

David Bedford and Thomas Workman, in their article titled “Ilyenkov and the Immanence of Logic” set before themselves the task of presenting Ilyenkov’s dialectic as a radical thesis in comparison to Dewey’s take on logic of inquiry while emphasizing Ilyenkov’s ontological perspective of “a philosophy of entification.” The authors tackle with a number of fundamental questions: What aspects of “the material” are considered when prioritizing it? How does “the material” ascend into the upper echelons of human culture? What precisely does it mean for materialist aspects to permeate abstract fields like philosophy or logic? Does the primacy of the material persist over time, or does cultural in-

fluence eventually reciprocate with the material domain? The main thesis of the article is constituted around the assumption that logic is immanent to the material world, which is further contextualized in relation to Ilyenkov's ontological take in contradistinction to Dewey's epistemological account of the immanence of logic. The authors' discussion implies that logic provides a universal scheme for subjective activity of transformation of nature and a universal scheme for changing any natural or socio-historical material linked to the objective requirements of this activity; this point is in agreement with Lenin's identification of logic, dialectics, and the theory of knowledge while resonates Engels' understanding of dialectics as the science of the laws of motion in nature and society.

Corinna Lotz and Paul Feldman, in their article titled "From Abstract to Concrete: The State as an Unquiet Ideal" aim for developing a Marxist theory of the state with the help of Ilyenkov's theory of the "Ideal" that conceives of the state in terms of "universal image-patterns." The authors also utilize Ilyenkov's methodological approach to Marx's concepts of the abstract and the ideal, as developed in his *The Dialectics of the Abstract and the Concrete in Marx's Capital*. A main claim at the heart of this article is that the state "is both a psychological/mental phenomenon as well as an external 'object'—or rather, a physical and psychological force and power that exists both within and outside individuals in the forms of social being and social consciousness. The state exists through its manifold institutions which exercise power. In this sense it is both concept and category." To further clarify their position, the authors set before themselves the task of explaining major theoretical issues, ranging from Ilyenkov's interpretation of Hegel's concept of Sublation (*Aufheben*), to the history of the concept of the "Ideal" in Western philosophical tradition, the history of Marxist state theory, the history of neoliberalism both in theory and practice, the history of the development of the British state, and, to conclude, they aim to make an intervention in the perennial Marxist debate on the status and transformation of the state and property relations in a post-revolutionary society.

Maxim Morozov, in his article titled "Evald Ilyenkov and Marek Siemek on Turning Marxism into A Science" focuses on the problem of disconnection between theory and reality utilizing the claim that the Soviet thinker Evald Ilyenkov and the Polish thinker Marek Siemek departed from a similar starting point aiming for developing a methodology that transforms Marxism into a science. Morozov further criticizes

the failure of Marxisms in providing a comprehensive understanding of methodology owing to restoring to individual quotations from Marx and Engels isolated from their specific contexts. This means disregarding the dialectical relationship between theory and practice and arriving at a conceptualization of thought reminiscent of that pre-critical philosophical tradition, which in its turn amounts to overlooking fundamental epistemological questions. The consequent political position derived from such a theoretical stance, according to Mozorov, will also be inevitably problematic. Hence, Mozorov sets before himself the goal of contributing to a theory of knowledge that surmounts the disconnection between theory and practice on the basis of a materialist dialectical method. To this end, the author pertains to Ilyenkov and Siemek's contributions to the materialist dialectics that are rooted in their sophisticated elaborations on the German Classical Philosophy.

Emanuel Almborg contributes to this issue of the *Marxism & Sciences* with three interconnected works. Almborg's 2016 documentary, *Talking Hands*, which focuses on the Zagorsk "experiment"—the project under the directorship of the prominent Soviet psychologist and pedagogue Alexander Meshcheryakov devised for developing a systematic educational program for deaf-blind children—is published under the category of "Cultural Works."

Evald Ilyenkov collaborated with Meshcheryakov and actively took part in the Zagorsk experiment while relentlessly trying to promote the project. The documentary draws on the original footage that would be discovered some years later and the communications between Emanuel Almborg and Alexander Suvorov, one of the former students of the Zagorsk school, who is also an extraordinary psychologist. Almborg would write the script in collaboration with Suvorov. The documentary contains invaluable insight about Ilyenkov's pedagogical theories, his idea of the constitution of human mind and the interrelation between the two, and the fundamental role of education in the process of humanization.

In the same section, the second chapter of Almborg's doctoral dissertation, which carries the title "From Disability to Performativity – Reflections on the Process behind Talking Hands" has been published alongside the documentary. In this chapter, Almborg discusses the process of the making of the documentary and the ideas behind it.

We also have the privilege of publishing the first chapter of Emanuel Almborg's doctoral dissertation, titled "The Free Association of Abilities and Needs" in the Essays section. Almborg elaborates the idea that the

“Zagorsk experiment” is central to understanding communism in its non-official, “independent” form that is represented in the works of prominent figures such as Evald Ilyenkov alongside Alexander Meshcheryakov and Lev Vygotsky. Almborg views the Zagorsk project as the materialization of the communist statement, “from each according to his ability, to each according to his needs.” Accordingly, the Zagorsk project forces us to deeply reflect on the meaning of terms such as “ability” and “need” that Marx places at the heart of communism while describing the communist society as the facilitator of “all-around development of the individual” as a free person that has overcome capitalist exploitation and alienation.

The Reviews section of this issue includes a collective contribution titled “The Absent Educator: Following the Development of Deaf-Blind Children in *Talking Hands*” by Alsu Battalova, Ivan Kashcheev, Nikolai Kravchenko, Najma Layali, Sofya Matveeva, Anatolii Stepanov, my former undergraduate students and mentees at the School of Advanced Studies in Tyumen, Siberia whom I had the privilege to mentor and work alongside with for a few years. As it is clear from the title, this is a review of Almborg’s aforementioned documentary where the authors discuss the concepts of humanness, its relation to education, the formation of human mind and the ideal goal of the educator as getting out of the road of development of the student in the context of the relationship between Alexander Suvorov and Evald Ilyenkov as presented in the documentary.

The interviewees of this issue that include both prominent figures and younger generation scholars are Arto Artinian, David Bakhurst, Pham Minh Duc, Sascha Freyberg, Isabel Jacobs, Martin Küpper, Kyrill Potapov, and Monika Woźniak. The interviewees answered a set of questions posed by me concerning the reasons for the reviving and/or growing interest in Evald Ilyenkov’s ideas, the significance of Ilyenkov’s philosophical stance, the actuality of his point of view and approach, and the thread, that keeps Ilyenkov’s reflections on different issues and in different spheres together.

Last but not least; we have added a new category to our journal beginning from this issue: “From the Archives.” This section of the current issue includes an archival work by Karl Korsch, which is originally in German and has been translated into English for the first time by two of our comeditors, Sascha Freyberg and Joost Kircz. The published text is titled “Karl Korsch ‘Albert Einstein: Causality. Lecture at the Marxist Workers School 1930;’” it consists of the notes made by Korsch during a

talk given by Albert Einstein to German workers in 1930 at the *Marxistische Arbeiterschule* Berlin (acronym: MASCH, Marxist workers school). Korsch writes at the beginning of his notes that “Einstein explains that he wants to tell the audience something about the laws of nature... We have all been taught that everything in nature is lawful, that there is nothing problematic about it. You only need to re-establish an initial state in the same way, then the same sequence will result. Such experiences give rise to the idea that perhaps everything else that happens in the world could follow the same pattern as a clock.”

The translation is accompanied by an introductory commentary on Korsch’s lecture notes, which has been written by Sascha Freyberg and Joost Kircz. Freyberg and Kircz elaborate on the context of the lecture, introduce the *Marxistische Arbeiterschule*, some of Korsch’s ideas, the relation between Einstein and the *Marxistische Arbeiterschule*, and finally the importance of the lecture and Korsch’s notes. They discuss that Einstein was concerned with the idea of causality and its fate in the face of the emergence of quantum mechanics, where, in contradistinction to classical mechanics, we do not deal with real objects but “with ‘states’ of a ‘system’ in N-dimensional vector space (aka Hilbert space) with the wave function pictured as “being spread out in a many dimensional ‘flat,’ Euclidian, space and hence an attribute (e.g. spin, polarisation, place of a particle) having no firm value.”

The authors further discuss,

It is interesting to note that Einstein in his lecture stresses the ‘subjective’ element in scientific theory. It is not sufficient to just observe, we also act in the process, at least via our tools of understanding. This is in correspondence with the Lenin quote which was put on the covers of the MASCH programs: *Ohne revolutionäre Theorie, keine revolutionäre Bewegung* (“Without revolutionary theory, no revolutionary movement,” see fig. 1).

The commentary ends with a succinct analysis of the significance of the ideas raised in the lecture and the notes in the present-day scientific context and its political implications.

Acknowledgements

This work was supported by the project “Philosophy in Late Socialist Europe: Theoretical Practices in the Face of Polycrisis” funded by European Union—Nextgeneration EU and Romanian Government, under National Recovery and Resilience Plan for Romania, contract no. 760044//23.05.2023, cod PNRR-C9-I8-CF104/15.11.2022, through the

Romanian Ministry of Research, Innovation and Digitalization, within Component 9, Investment I8.

REFERENCES

- Azeri, Siyaves. 2017. "The Historical Possibility and Necessity of (Ilyenkov's) Anti-Innatism." *Theory & Psychology* (27) 5: 683–702.
- Engels, Frederick. 2010. Ludwig Feuerbach and the End of Classical German Philosophy. In *Marx Engels Collected Works (MECW) Vol. 26*. 353–398. Lawrence & Wishart.
- Hegel, Georg Wilhelm Friedrich. 2001. *Philosophy of Right*. Translated by S. W Dyde. Kitchener: Batoche Books.
- Ilyenkov, Evald. 1968. *Об идолах и идеалах* [On Idols and Ideals]. *Reading Ilyenkov—Texts Internet Archive*. <http://caute.ru/ilyenkov/texts/iddl/index.html>
- _____. 2007. "Our Schools Must Teach How to Think!" *Journal of Russian and East European Psychology* (45) 4: 9–49.
- _____. 2018. *Intelligent Materialism: Essays on Hegel and Dialectics*. Translated by E. V. Pavlov. Boston: Brill.
- Kaplan, Jerry. 2016. *Artificial Intelligence: What Everyone Needs to Know*. Oxford: Oxford University Press.
- Marx, Karl. 1975. *Economic and Philosophic Manuscripts of 1844*. In *Marx Engels Collected Works (MECW) Vol. 3*. 229–347. Moscow: Progress.
- _____. 1992. *Capital*. Vol. 1. Translated by B. Fowkes. London: Penguin.
- _____. 1976. "Theses on Feuerbach." In *Marx Engels Collected Works (MECW) Vol. 5*. 3–5. Moscow: Progress.
- Murray, Patrick. 2016. *The Mismeasure of Wealth: Essays on Marx and Social Form*. Boston: Brill.
- Wang, Pei. 2008. "What Do You Mean by 'AI'?" In *Artificial General Intelligence*, Edited by Ben Goertzel and Cassio Pennachin, 362–373. Berlin: Springer.

Biography

Siyaveş Azeri is an associate professor of philosophy at the Faculty of Theatre and Film, Babeş-Bolyai University in Cluj-Napoca, Romania. Azeri is the primary investigator of the project "Philosophy in Late Socialist Europe: Theoretical Practices in the Face of Polycrisis" (F104/15.11.2022), which is funded by the European Resilience Fund. He is also the Co-Editor in Chief of the journal *Marxism & Sciences* and an associate of the "Theses Twelve: Mardin Value-form Circle." Azeri writes on a large gamut of subjects in different international journals and books. His areas of interest include Marxian materialism, the critique of epistemology, the problem of consciousness, philosophical psychology, Kant's transcendentalism and Hume's empiricism.