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Experimental Philosophy

(E.V. Ilyenkov and A.I. Meshcheriakov)

Evald Vasil'evich Ilyenkov was only two months younger than Aleksandr Ivanovich Meshcheriakov—a doctor of psychological sciences and posthumous winner (with his teacher Ivan Afanas'evich Sokolianskii) of the USSR State Prize in 1980 for their work to set up a system for training and educating deaf and blind children. Ilyenkov outlived Meshcheriakov by less than four and a half years. These men were the closest of friends. Ilyenkov not only followed Meshcheriakov's work but participated in it in an extremely active way. After the latter died, Ilyenkov directed and completed the training of four of Mescheriakov's deaf and blind students in the department of psychology of Lomonosov Moscow State University. The author of this article was one of these students.

The article that follows analyzes precisely what aspect of science brought Ilyenkov and Meshcheriakov together, although they worked in such seemingly different fields that have nothing in common. At the end of this article an attempt is made to define the prospects for the practice of educational psychology, if at some future time it were to be based on Ilyenkov's ideas of spiritual health and harmonious personal development.

The concept of optimism in educational psychology

The individual was always at the center of Ilyenkov's theoretical work. He was interested in a whole set of extremely complex and extensive philosophical

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problems the standpoint of the theory of individuality.* Ilyenkov's (major) scientific accomplishment was the provision of a theoretical rationale for the idea of the comprehensive and harmonious development of the individual—a rationale so comprehensive that one can confidently speak of it having been he who laid the theoretical foundation of psychology and educational theory oriented specifically on the formation of each person as an individual, that is, as a universal, truly rational being.

The idea of "the hundred percent" (to use Ilyenkov's favorite phrase) lifetime shaping of the individual was first expressed by Helvetius in the eighteenth century. Marx and Engels provided a theoretical rationale for the need for universal—comprehensive and harmonious—development of the individual, but focused on more, so to speak, macrosocial conditions of such development, one of which they acknowledged to be the presence of leisure time. From this followed the well-known demand that the workday be shortened, not only to eight, but—in the (admittedly remote) future—even to four hours. It was supposed that free time would be spent on what, to distinguish it from socially essential labor, Marx and Engels, in their book [German Ideology], termed "amateur activity," and Marx in the first volume of Das Kapital described as "exercise of physical and intellectual powers." In other words, it was hypothesized that free time would be devoted to creative activity and not simply idle pastimes.

Throughout his life Ilyenkov struggled with the questions of the nature of individuality and of its universal component and of how this universality manifests itself. In his search for answers to these questions, Ilyenkov relied on the Marxist conception of "the essential nature of the human being" (or more precisely, of "humanity").

As early as 1844, Marx distinguished between the biological species, as a set of separate creatures each attempting to maintain his own separate existence and to produce descendants, and the human race, as something that cannot be reduced to this set of separate creatures, a meta-individual whole. The race is a holistic system, a "set" (Ilyenkov corrected this term to "ensemble") of "all the social relationships" arising in the process of and in relation to productive activity. Only to the extent that an individual participates in this "ensemble," does he become a human being, that is, a member of the race (in this theoretical context race can be taken to mean society) and not just a biological creature. Thus, one is born a person but has to become a human being, and becomes one to precisely the extent that one participates in the process of human, that is, productive activity.

^{*}Russian psychological tradition makes no clear distinction between the words for "personality" and "individuality" in the term "lichnost'." Here the word "individual" has been used because the author is talking about ontology and self-actualization rather than the kind of thing usually covered in U.S. personality theory.—Trans.

In Marx, the term "production" is a synonym for human activity in general. "Production" is not so much work at a plant or factory as it is activity to transform nature as a whole, universally, and including the transformer himself. Production is universal, creative, and in no way "fragmentary," monotonous, machine-like factory work. Production is all of the "vital activity" of the human "organism," of humanity as a whole. It is understood that such universal vital activity includes not only material production of the means of survival, that is, everything necessary for the physical survival of humanity, but also the spiritual and mental production of ideas (philosophical, scientific, artistic, and religious) and psychological and educational production of the producers themselves—human beings, individuals.

Thus Ilyenkov emphasizes that the individual is a human individual and should not be confused with the biological individual. Biological individuality becomes human individuality as a result of the process of "productive processing" and "self-transformation," that is, education, training, and more or less active participation in human life.

I would add to this that, insofar aseach of us is included in the "ensemble of all social relationships" even before we are born, *in utero*, social factors influence and determine our life from the very moment of conception. From the very beginning we are participants in this ensemble, but for the time being unconscious participants like all the animals that, in one way or another, have been recruited by humanity to participate in its activities. Thus, we should make one more stipulation; a human individual is not any participant in the "ensemble of social relationships," but only an active, more or less conscious participant. But what sort of participant he is may to a significant extent be predetermined by social factors even before the participant sees the light of day.

For example, I was born in 1953 in Kyrgyzstan, where, as in all the other Soviet republics, the consequences of World War II were felt more intensely and for longer than in the capitals. While people were not actually starving, inadequate nutrition was widespread. My mother experienced true starvation during the war and the early postwar period. This could not help but have a negative physiological effect on her and the doctors hypothesize that while I was *in utero*, I underwent some kind of mutation associated with impairment of my mother's metabolism—a mutation that ultimately caused me to be deaf and blind. I was born with a weakened nervous system, and because of that, as I developed without suffering any particular illness, I was first found to be blind and then to have severely impaired hearing. Possibly, my loss of vision and hearing was gradual, starting from the moment I was born, with my loss of vision progressing more rapidly. Thus, a macrosocial factor—the war, predetermined my destiny before I was born.

An even more obvious case of "predetermination" occurs when children

are poisoned by drugs used to treat certain severe early illnesses. To my knowledge a large number of deaf and blind people lose vision and hearing as infants as a result of such drug poisoning. Drugs are also a social factor because they are not found ready made in nature but produced by the pharmaceutical industry.

In general, especially in the twentieth century, it is becoming more and more difficult to clearly separate the "biological" from the "social." With increasing frequency, "biological" problems turn out to be the consequence of social ones, as in the examples cited. The "socialization" of the biological has continued to intensify and has snowballed during the past century. Thus, the problem of socialization still exists, but it is socialization (which as we have seen is not always benevolent) of the biological organism and not of the human individual. However, one aspect or another of the destiny of the individual as a human being (i.e., as Ilyenkov tirelessly pointed out an entity that is "one hundred percent social") rather than a biological being is, in principle, predetermined through such socialization.

Because the human in human being is of social and not biological, species-determined origin, we must blame ourselves, and only ourselves but the imperfect organization of our human race, for breakdowns in "human production," for "production defects" resulting from the educational psychological process. Ilyenkov insisted on this throughout his life and insisted on it vehemently, with real ardor and passion. He insisted that people are not born talented but become so, and if everyone does not become so, that is not to be blamed on mother nature's unfairness but on the irresponsibility and other defects of father-society, who turns talent into a privilege for 20 percent or even 6 percent of its members. The important thing is not the "statistical reliability of innate talent," the monstrous fact of the existence of the privilege of "innate talent," which has been statistically established but never explained. The important thing is our own responsibility for this fact.

Ilyenkov focuses on the social nature of individuality not because he underestimates the significance of "biological factors," but rather because he opposes, in principle, all attempts to shift responsibility for what makes a child part of the "ensemble of all social relationships," for the nature of this ensemble, and for what individuals obtain when they join it. The important thing is not the ratio between the biological and the social, but the extent of human responsibility for themselves and each other. As a convinced humanist, Ilyenkov categorically insisted on the maximum level, on "one hundred percent" responsibility of humanity for itself, for every "possessor and authorized member of common human culture."

Antihumanists agree with humanists that the "privilege of innate talent"

should be destroyed. However this is the only thing they agree on.

Antihumanists, especially fascists of all stripes, attempt to destroy the "privilege of innate talent" by replacing it with overall grayness, and physically annihilating the talented minority. As early as 1844 Marx warned that vulgar "crude communism," as a society of enviers, would inevitably come to destroy all that is not possible for everyone to possess in equal measure. Thus vulgar communism "abstracts itself from talent." Stalin, Hitler, Mussolini, Mao Zedong and others of that ilk have clearly demonstrated how this "abstraction" works in practice. As the Strugatskii brothers so aptly remarked, "Where grayness reigns, the black comes to power." And this is to be expected, only the black can protect the gray from the fact that the bright exist—a fact that is unbearable to gray enviers.

On the contrary, humanists try to destroy the "privilege of innate talent" by making everyone bright. Everyone should be talented. Each and every one. And if a society is unable to facilitate this, if a society directly opposes this—then that society does not have the right to exist. And any attempt to "explain" the existence of the "privilege of innate talent" with reference to the unfairness of God, or any other reason that is beyond our control—any attempt of that type—is an apology, a defense, a rationalization of the existing social—and nothing other than social—unfairness, irresponsibility, and inhumanity. We must not deny responsibility by shifting the blame. We must not seek scapegoats or invent ideological "garbage dumps" into which we throw all the problems whose existence we are forced to acknowledge, but that we do not wish to solve.

Acknowledgment of the human and social nature of individuality with all its talents means acknowledgment of the social, human responsibility for the "privilege of talent." But once it is society's responsibility, then creation of conditions that will "transform" every living person into an individual," creation of a "hundred percent talented population" depends on you and me and not on someone else.

This is the source of the optimistic view of history, which believes that with time society may become different, and not so unfair with regard to the "untalented" majority of its members.

This is also the source of optimism in educational psychology, which believes that talented individuals can and must be developed through training.

Ilyenkov believed that if talented human beings are to be developed they have to be made capable of independently learning everything they need or want to know because, after all, it is not possible to know and be able to do everything that the human race as a whole knows and is able to do. And in order to be able to learn, one needs to know how to be spiritually and physically healthy.

According to Ilyenkov, to be spiritually healthy means, first of all, to be able to think dialectically at the level of the best thinkers of humanity, that is, to master classical philosophy; second, to be able to see beauty, that is, "harmony," and the integrity of the world, to achieve which he taught the artistic classics; third, to be able to humanely, kindly, and responsibly relate to oneself and other people throughout the entire world. In other words, to be spiritually healthy means to be a thinking, aesthetically sensitive, and ethical being. The classical formula for spiritual health is threefold "truth, goodness, and beauty." I prefer a different order of these elements: goodness, beauty, and truth. I believe truth should be moved from first to last place because inhumane and distorted truth is not truth. Otherwise, we get skepticism, the religion of cold, heartless "truth," for the sake of which we sacrifice humane considerations ("sentimentality") and beauty, the harmony and integrity of the world, and the human being in the world. Ilyenkov writes (for example, in the article "Humanism and Science") that skepticism is what "gave us the atom bomb and other similar 'delights."

As for physical health, this refers to the ability to treat one's own body humanely and with medical knowledge, keep it clean and exercise in a variety of ways so that it does not wither away (one wants to say rust) because of disuse. One has to drive, to stress one's body, of course rationally and not to

In brief, being spiritually and mentally healthy means to be universal, human, and not just biological; it means to be a human individual, not just a biological being.

By the way, in practice Ilyenkov treated "physical capabilities" and "mental abilities" the same way. He used logic identical to that just described for physical capabilities, that is, they are not born but developed. After all we are not capable in general, but capable of one or another action. To perform this action we need to learn it. We even need to learn how to perform elementary physical functions as human beings: we evacuate not wherever we happen to be, but in a special place; we put food in our mouths, not with our paws, but using special manmade tools; we brush our teeth with toothpaste and a brush, we wash with soap and dry ourselves with a towel; we protect ourselves from cold and rain. If these things need to be learned, how much more learning then is involved in developing mental abilities and talents. And although the equation of physical and mental abilities is of course popular and somewhat simplified, if we look at the big picture and forget the "details," it is very meaningful. The "details" are obvious: of course, physical capacities are realized not by a disembodied mind but by the body, and virtually every body if trained can have such capacities.

Ilyenkov was convinced that spiritual and physical health were accessible to everyone. But other people were not convinced by theoretical arguments alone. After all it is true that actual practice is the source, the goal, and the criterion of truth! What was needed was an incontrovertible argument from the practice of educational psychology. And Ilyenkov saw the work of Sokolianskii and Meshcheriakov as just such an argument.

The law of graduated guidance

Ilyenkov studied with Aleksandr Ivanovich Meshcheriakov at the School of Philosophy of Moscow State University. Ilyenkov was in the Department of Philosophy and Meshcheriakov in the Department of Psychology, which subsequently, mainly through the efforts of A.N. Leontiev, became a separate school. I do not know if Meshcheriakov and Ilyenkov knew each other as students. But it is certain that they met and became friends in the mid-1960s, when both of their scientific interests had crystallized.

At first Ilyenkov merely visited the experimental group in the I.A. Sokolianskii Laboratory for Training and Study of Deaf and Blind Children of the Special Education Scientific Research Institute under the auspices of the USSR Academy of Psychology (after the death of Ivan Afanas' evich, this laboratory was headed by Meshcheriakov). This experimental group still exists and it is where they teach the most difficult cases that cannot be handled at the Zagorsk (currently Sergiev-Posadskii) facility. In 1971 this was the site of an experiment to train four of Meshcheriakov's deaf and blind pupils at Moscow University's Department of Psychology.

On May 24, 1968, Meshcheriakov brought Ilyenkov to Zagorsk, where the author of this article met him. After that Ilyenkov almost invariably accompanied Meshcheriakov on his trips to Zagorsk. Not infrequently the former would come without the latter, bringing colleagues, including some from abroad. When the four selected pupils were brought to Moscow to the experimental group, both Meshcheriakov and Ilyenkov came to see us almost daily, chatted with us, took walks with us, and spoiled us in any way they could. They were extremely fond of us. After Meshcheriakov died on October 30, 1974, Ilyenkov unofficially took over our training and concerned himself with making arrangements for our future work and personal lives, fretting about us himself and pestering other people. Thus after Meshcheriakov's death we were called "Ilyenkov's kids" with no less justification than Meshcheriakov's students.

More than any of the other students, it was I who became close with Ilyenkov. Meshcheriakov had strongly encouraged our friendship. Even when I was a pupil at the Zagorsk institution, he told me in a private chat that he wanted me

to become friends with Ilyenkov. I was standing with Meshcheriakov in the semi-dark hallway at the door of Director Apraushev's office. Meshcheriakov, placing his left hand on my shoulder, with his right hand confidentially told me about Ilyenkov, what a great, wise, and good man he was. He told me not to feel shy about going to him with my problems, the creative stirrings that were already beginning to occupy me, emphasizing that there were many questions that he himself could not answer and that Ilyenkov alone would be able to address. In that conversation Meshcheriakov told me essentially the same thing that, ten years earlier, my mother had already told me regarding school in general: "Study, my son! I have already given you everything I could, only school can give you more. You must study more and better than a boy who can see." So Meshcheriakov literally passed me on to Ilyenkov, who was closer than a father to me, and with his love and spiritual and emotional generosity determined my whole future life, despite certain "father and son" conflicts. (I wrote about these conflicts at the end of my poem "Focus of Pain," published in the journal Filosofskie issledovanie [1994, no. 1] and the article "Optimists" of which this article is a revised version.)

In his work with deaf and blind children Ilyenkov was especially taken with Sokolianskii's and Meshcheriakov's main educational psychological discovery—the law or principle of graduated shared activity. Approaching this matter as a theoretician, Ilyenkov understood and emphasized that this law is not only a "method" that exists alongside innumerable other methods, but is the very essence, the disclosure of the deepest secret of the process of interiorization, discovered by Soviet psychologist L.S. Vygotsky.

Interiorization is the embodiment in a child in his own activities of the human forms of behavior he sees in the social milieu into which he is born, as opposed to being given or "built in" to his genetic, anatomical, physiological structures. The child must learn the forms of specific human activity from scratch; he most make the alien and external his own, internal. A literal translation into Russian of the term "interiorization" is "growing from the outside in." Ilyenkov opposed the interiorization of specific human activity to exteriorization development from the inside out—purportedly contained in genetically programmed behavioral patterns. Understood in this way, exteriorization was based on an idea that was anathema to Ilyenkov, that is, educational psychological pessimism. Meshcheriakov and Ilyenkov identified such exteriorization with the idea of "individual self-development," which also involves realization (as physiological maturation occurs) of life programs written into the genes. Without explicitly disputing this interpretation of the terms "exteriorization" and "self-development," Meshcheriakov and Ilyenkov invariably included them in ironic quotation marks.

Here it would seem that they, in their polemic ardor, went somewhat too far and put themselves in a rather difficult and self-contradictory position. This "excess" was immediately detected by the four deaf and blind students, who raised an inappropriate, completely childish protest against it. On the one hand, Meshcheriakov, Ilyenkov, and their adherents in this area assiduously tried to protect children from excessive zeal on the part of adult "guides." On the other hand, they placed excessive emphasis on "directed development," on "shaping," even "sculpting" a human being.

At one of the "roundtables" conducted by the editorial board of the Molodoi kommunist [Young Communist] magazine, I spoke out against the infatuation with sculptural analogies in the discussion of individual development. One of those who had spoken had overstressed the fact that "directed development" is a kind of sculpting of a human being, exactly like making an actual sculpture. This was phrased too blatantly, tactlessly, and brazenly for me and I "blew up"; after all, a living person, including a child, differs in principle from plasticine, clay, or marble. My protest was purely emotional. I had not yet matured enough for theoretical argument. I still remember with resentment, how in response to a protest I made on one or another point, saying, "That's no way to treat a human being!" one of the teachers replied maliciously, "Don't tell me you're a human being." I protested against the popular saying that "the acorn shouldn't teach the oak," against denial of the child's human dignity, implying he has to grow up before he can be listened to. I insisted that a child is a human being from the very start, and is always a human being, and one with a very good memory, especially for slights, and that it is a mistake to think the child will forgive and forget, that he will grow up and learn about life and even say thank you for such treatment. A child will never thank anyone for lack of respect, and the problem of "difficult children" is precisely the problem of children's protest against denial of their human dignity. Age, in itself, is never an adequate basis for respect or lack of respect. Respect must be earned. One is respected for something in particular, and in this children and adults are equal. At the same time, I did not dispute the idea that everything human in the human being must be formed, starting from scratch. I listed by name those people to whom I was sincerely grateful and specified why. I spoke not against "directed development," or "education" per se, but against the demeaning, excessively "popular" vulgar likening of these complex processes to any sort of "sculpting." And Ilyenkov acknowledged that I was right. But I rejected all his attempts to smooth over and "explain" such a blatant denial of the child's participation in any way in his own formation. After all Ilyenkov himself, somewhat later, uncompromisingly cut off my attempts to explain that what I had "wanted to say" or "had in mind" in something I had written was nothing like the heresy that Ilyenkov attributed to me. "The reader cares only about what you said, not what you wanted to say!" And I, in turn, acknowledged that he was right.

I will return a little later to the concepts of "exteriorization" and "self-development," but now I want to discuss the essence of the law of graduated shared activity.

From birth or early childhood, deaf blind children display no complex behavioral patterns at all. This is a fact noted by many researchers, who, in concert, liken the deaf and blind child not even to animals but to some sort of half-animals half-plants. Sokolianskii and Meshcheriakov [also acknowledge] this well-known fact. They explain this fact very simply: no activity is observed because there is no activity. The activity of the deaf and blind has to be shaped. It will not appear "by itself," because there is simply nothing "to make it develop." And while the special contribution made by L.S. Vygotsky's school was discovery of the fact of "interiorization," the special contribution of Sokolianskii and Meshcheriakov was the exact, incontrovertible, convincing revelation of the mechanism of interiorization.

Meshcheriakov describes this as follows. First the teacher puts a spoon of food into the child's mouth and turns it at once. Then he puts the spoon in the mouth but does not turn it, simply letting it remain in the mouth of the child, whose task is to lick the food off. Then he does not insert the spoon in the mouth, but brings it up to the lips touching them in various places, so that the child must "catch hold of it." Then he attempts to evoke a search or orienting reaction to the smell and temperature of the food, which is brought close to the mouth without touching it.

To use Ilyenkov's expression, this is how "zoological activity" is shaped. It now can be used to form a basis for shaping human activity, for teaching the child to eat with a spoon by himself. In the distinction between zoological and human activity, Meshcheriakov and Ilyenkov are in complete agreement with the Vygotsky school, which considers the criteria of human activity, as opposed to zoological activity, to be the fact that the human being, as distinct from the animal, uses objects not present in a usable form in nature, but specially made to serve one or another purpose, whether this is a spoon, speech, or some sort of special language or code. Use of such tools was specifically and experimentally studied by P.Ia. Gal'perin, on whose work Meshcheriakov's concept of the shaping of human activity and law of action shared by child and teacher were directly based.

The spoon is placed in the child's hand, and the teacher takes the child's hand in his own, and using the hand with the spoon clutched in it, tries to pick up some food from the bowl. . . . The teacher guides the child's hand. This is the first step in the shared action of teacher and child.

Ilyenkov, who observed this procedure a number of times, held his breath and watched: first the child's hand resisted; then it became "guidable," obedient, passive, "permitting itself to be guided." And finally . . . it came to life! The child tried, albeit awkwardly, to manage the spoon himself! At this dramatic moment, the heart of the philosopher stood still as he observed the miracle of the birth of human activity. If only the teacher would notice! If only he would weaken the force of his guidance, if only he would give the child the opportunity to attempt independence! If only he does not extinguish the first—and last, if it is extinguished—spark of human activity in the child! If it is extinguished—the child might forever remain merely "guidable." If only!

Hooray! The teacher has noticed! He has weakened the force of his guiding effort! From this moment the activity becomes not merely joint, but shared. And soon the need for any "guiding effort" will be gone, the child will be able to do it himself.

This is the way it was with everything. With all the innumerable "trivial details." And the philosopher tried to figure out what he had observed. Was it a virtuoso, but "narrowly specialized," method of special education? In no sense. He had observed the principle underlying the birth and development of any kind of human activity, at all stages of the learning of anything at all, mastery of any subject: first together, then by oneself. This is how it goes with everyone, and not just the deaf and blind. This is the universal law of interiorization, and not at all just a special "method." (Later, Feliks Trofimovich Mikhailov, Ilyenkov's friend and currently an academician, in his doctoral dissertation added that this is the law of all human activity, the law through which humanity realizes its collective, human essence.)

And if in "normal" schools they were as attentive to the first spark of a child's independence as they were in Meshcheriakov's school—what a high percentage of talented children they would create!

In the early 1960s, F.T. Mikhailov published a book *The Riddle of the Human Self*. At that time the concluding chapter had to be titled "In Lieu of a Solution," that is, the riddle remained unsolved. More than ten years passed. In the mid-1970s, Mikhailov confidently titled the concluding chapter of the new edition of this book *Solution*. In it he described Meshcheriakov's work.

Now we can return to the reinterpretation of the terms "exteriorization" and "self-development." I do not think that we should allow the educational psychology of pessimism to continue to have a monopoly on these terms. I understand that there are situations in science when certain terms must be sacrificed, so that each time you use them you do not have to explain and reexplain what you "have in mind." As far as I can judge from the work of Meshcheriakov and Ilyenkov, precisely this situation occurred with regard to the terms "exteriorization" and "self-development." Furthermore, Ilyenkov tried to avoid any

reinterpretations in principle. But this inevitably and inadvertently led him to place excessive unintended stress on the adult's activity, to the detriment of the active role of the developing child. And at the same time Meshcheriakov and Ilyenkov's whole way of thinking emphasizes the child's active role and priority in the sense that shaping could not take place without it. Indeed, the child's active role also has to be shaped, "it does not arise on its own," but shaping activity means to shape the capacity for self-actualization in the sense of selfcreation of something that first was unconscious and spontaneous. No one can sculpt the child in any way because the child sculpts himself with his own efforts, although the latter may be evoked and guided by the teacher. This is selfdevelopment. First, evoked and guided, and then, possibly, conscious. But, at any given moment. the child is the agent of his own development and not simply the target of influences who is indifferent to who is influencing him and how, who is sculpting him and how. The child is the colleague of the adult, although perhaps from time to time an unwilling colleague. Any sort of "developmental" "shaping" "influences" are only possible because and to the extent that the child is undergoing self-development and is sculpting and creating himself. This reinterpretation of "self-development" and "self-creation" not only does not contradict Meshcheriakov's and Ilyenkov's principal precepts, but emphasizes these precepts, placing all the stress exactly where they wanted to place it.

As for "exteriorization" then it is the necessary dialectic counterpart of "interiorization." Interiorization is simultaneously the exteriorization of the culturally given forms of human vital activity and the interiorization of these forms in individual vital activity. This is not simply "embodiment" but "reembodiment;" not simply "growth from the outside in," but at the same time the unfolding of what is already inherent in the child, in external, increasingly more confident, more capable actions. The child interiorizing the culture in himself, immediately exteriorizes himself in a new, higher embodiment of his individuality, a new higher level of self-development from which he can only progress. This progression does not replace the need for guidance; on the contrary, it presupposes it; but the fact is that the child himself progresses under directive guidance, he is not pushed along without any participation on his part. The child is always a collaborator, a colleague, the main ally of the adult guide, without whose own activity no kind of guidance is possible—as there is simply nothing to guide.

In general, in accordance with the fundamental laws of dialectics, opposites presuppose each other and are transformed into each other, each one being implemented or realized through the other. Interiorization and exteriorization, guided development and self-development are not exceptions. One is only possible because of the other. And indeed it is not a case of one and the

other, but, in full accord with Ilyenkov's philosophy, the two are identical: one and the same process; what is induced through guidance and is produced by the child's own efforts; development and self-development; interiorization and exteriorization; . . . discovery and self-discovery but discovery not of what was implicit in one's parents' genes, but of what was implicit in shared activity with an adult. (Meshcheriakov liked to use the following mathematical formula to emphasize that what is graduated is the adult activity or guidance: at the start adult activity equals 1 and at the end 0; at the start the child's activity equals 0 and at the end 1.)

Of course, I am not arrogant enough to try to teach dialectics to Ilyenkov, who was a professional expert, and at such a high level that while he was still alive the Americans said he was the only person who really knew what dialectics was (this comment nearly cost him his party membership). However, in an attempt to make theoretical sense of my own work with children, I cannot get along without these terms, especially "self-development." From the very beginning I have confronted the following problem: I would have been happy to share with the children the sum total of all the cultural treasures I have within me, but nothing doing, they would not take my fabulous gift. How could I give so that they would accept? In general, under what conditions are such gifts accepted? Here I had to understand that the decisive condition was the child's own activity, in other words the child's self-development. Otherwise, it would be very easy to live: just put your treasure in an "empty safe." Given that the child is a "safe," I am willing to agree that it is empty at the very beginning, but this is a safe that is so cunningly made that it only fills itself. This is a fact with which I had to contend no matter how enthusiastic and impatient I was to bestow my treasures on the little ones. So, I had to significantly lower the level of my claims, to stop pestering the children, and try not to bestow too much, lest they refuse the little that they were willing to take.

The basis of mutual understanding

As Ilyenkov suggests, you have to master a well-defined theoretical system in order to appreciate the law of shared graduated activity. This is not given to everyone. But there is something that is obvious to everyone. The first thing that strikes any seeing and hearing person when he meets not only a deaf and blind person but a blind one is the question of how, without seeing, and even more without either seeing or hearing, is this person able to perceive the world around him? How is it possible to get along without vision and hearing? How is it possible in this state to have knowledge of the world or to take any action in this world?

Sensory deficits, that is, damage to one or more sense organs, are experienced by the victim and those around him, first and foremost as a severe limitation on ability to orient oneself. It is completely natural that the main emphasis here is placed on gnoseological problems. The most important treatment of this set of problems is contained in the book by Olga Ivanovna Skorokhovaia and this can be seen in its title, *How I Perceive, Imagine, and Understand the World Around Me*, that is, "How I can know the world without vision and hearing."

After all, the main issue in philosophy is precisely the issue of whether, in principle, the world can be known and the related question of the existence of the world before, outside of, and independent of the existence of a "knower," that is, the question of the objective existence of the world. This set of problems is absolutely not specific to the deaf and blind, but it is extremely clear in their case and thus may be solved with a particular precision that is not "compulsory" when applied to those who can see and hear.

First, we need to renounce an approach involving pure information processing. It is no wonder that discussion of "information channels" and "information units" evoked unconcealed irony in Meshcheriakov, Ilyenkov, and their friends. Let the cobblers of cybernetics stick to their boots, and not extrapolate beyond their machines. No matter how advanced and how widely used these machines are they will never succeed in being substitutes, much less replacements, for philosophy and psychology. Information processing theory will never replace the theory of knowledge for the simple reason that cognitive processes are not based on "information" at all.

We are speaking here about the basis for understanding of the world and mutual understanding among people. The basis of this is the image, that is, the holistic, integral (and thus concrete) representation of objective reality rather than the formalistic concept of information, which is indifferent to content. Meshcheriakov told the journalist Karl Efimovich Levitin that "those who like to count bytes are eliminating the main thing through their abstraction—what the known signifies to the knower. No matter what the subject is, no matter what significance it has for a person, the "byte" is always the same. A machine, a piece of soulless metal does not care, but a living person cannot help but care. Thus, the "byte"—the unit of information cannot possibly be the unit of cognition. Both Ilyenkov and Meshcheriakov categorically insisted that this must not be a quantitative but rather a qualitative unit. A unit like the one Vygotsky had in mind when he justified the concept of "unit" for the psychological processes. He drew an analogy to the water molecule, but definitely not to the hydrogen and oxygen atoms that comprise this molecule. The appropriate unit of analysis is the smallest unit at which analysis is possible without risk of losing the object of analysis, that is, the simplest structure retaining all the qualities, all the specific details of the analyzed object. If we analyze and simplify further, we lose these specific details and receive in exchange something completely new that is analogous not to a molecule but to the atoms comprising it.

A subject is only aware of knowledge significant to him, and becomes aware through the process of active interaction with the object known, which is by no means reducible to swallowing information. It was analysis of the interaction of the deaf and blind with objects that convinced Ilyenkov that Spinoza was right in principle when he defined thinking as the movement of a thinking body along the contours of any other body. In this understanding of the process of thinking, it is clear how "the touching hand" is not merely one of many "psychological functions," but the primary one, the substance (in the most precise Spinozan sense) of the mind in general. (It is interesting to compare Spinoza's definition of thinking to the definition of mind provided by A.N. Leontiev: the mind is the ability of a living body to represent through its states the existing reality surrounding, external to and independent of it. Spinoza, in Ethics, also speaks of the states of a thinking body as corresponding to the states of the bodies among which and along whose contours the thinking body acts.) Thus, Ilyenkov emphasizes, the child must develop a mind, become a thinking being even before he starts to speak.

In light of the above, the fact that Ilyenkov truly had thinking hands will not seem simply an eccentricity of the thinker. He was a talented weaver and shortly before his death enthusiastically introduced me to the technology of his weaving craft, showing me all his tools and explaining their role. From various different radios he built himself a radio set of such high quality that the sound quality of his system astonished visitors from East Germany.

At one of the annual memorial seminars devoted to Ilyenkov, they spoke of the monolithic nature of his Marxist worldview. Be that as it may, nevertheless underlying Ilyenkov's Marxism was Spinozaism; as one can see in *Dialectic Logic*. Ilyenkov believed that the "great Spinozists" included Kant, [Georg W. F.] Hegel, [Ludwig] Feuerbach, and Marx himself—not that they were imitators, but in the process of creating their own philosophies, they creatively transformed Spinoza's ideas. Spinozism for them truly played the role of substrate or foundation.

The image arises through manipulation of objects and is the decisive condition for its success. Thus the image must be as accurate and appropriate as possible. And although before the start of shared activity the child still does not possess an image—insofar as the image will first appear or be shaped through this activity—the child's independent performance of this action would

not be possible without a preliminary, quite accurate and detailed orientation similar to an image. This means that the shaping of the image must precede the shaping of a (motor) skill; otherwise the skill would never form and could not be reinforced. The child will not be able to manage a spoon until he has an image of the entire objective situation; the spoon itself, the table he is sitting at, the chair on which he sits, and the plate of food on the table. The child is compelled to create this image for himself when the adult "guides" his hand, that is, under pressure of the adult's "guiding force." In trying to do something himself, the child is oriented to the objective situation willy-nilly, and only when he develops an accurate representation of the whole situation and, at the same time, of ways of operating on it, erroneous and correct, leading to and failing to lead to the goal, only then and not earlier will he become capable of acting in this objective situation independently and correctly, without, as they say, getting lost in broad daylight. The image and the skill are "conceived" at the same time through the same process, under the pressure of the same "guiding force." But the final "birth" of the image must occur before the final "birth" of the skill because the birth of the image is an essential condition for the birth of the skill. In this sense, the image is primary compared to the skill or the action.

For any action to be successful, the corresponding image must be accurate and complete regardless of its sensory substrate and of which sense organ (visual, auditory, tactile, or something else) is predominantly used to generate the image. It is not a matter of particular sense organs but through whatever method possible to orient oneself to the objective situation, and thus being able to act confidently in it. The "method" and the "image" are impossible without one other. The method gives rise to and shapes the image, and then, on the basis of the final image, is finally incorporated into the individual's arsenal of life skills.

Meshcheriakov specially studied the issue of the importance of the sensory substrate of the image, when, for example, a child who has just become blind is shifted to instruction based on touch. Meshcheriakov posed the question as follows: what do images embodied in one or another sensory substrate—visual, auditory, tactile—have in common? His final conclusion delighted Ilyenkov. Images formed in different sensory substrates, Meshcheriakov was convinced, have absolutely nothing in common, except the fact that they are each completely appropriate to their object. This finding, of course gave, Ilyenkov full scientific justification for asserting that the sensory substrate of the image plays a secondary role compared with the accuracy of the image. The crux of the matter lies in the accuracy and correctness of the representation. The particular sensory organ that helped to form it is a less important detail. It is true that in a letter he once wrote to me, he said "I will not be a hypocrite and say that vision and hearing are completely unimportant things."

No one will dispute that they are not unimportant in and of themselves, but if you have been unlucky enough not to have them, you can orient yourself without them in the objective world completely appropriately, no worse and sometimes better than those who can see and hear—that is the main thing. Vision and hearing are "unimportant details" compared with the "crux of the matter," that is, compared with the ability in principle to orient oneself accurately and actually without them; but in and of themselves they are very important. This is the dialectic of the "crux of the matter" and the "details." (Ilyenkov's work literally lights up this juxtaposition of the "crux of the matter" and the "details.")

Precisely the same logic, I think, is applicable to the individual as a whole. Among all of us as individuals, there is absolutely nothing in common aside from one thing—our appropriateness to common human culture. I already noted F.T. Mikhailov's remark to the effect that we do not "assimilate" and do not "adapt to," but rather create culture and our individual, personal versions of it. This is the foundation of our human uniqueness, originality, and singularity—it is human and not physiological or anything else. But the fact that we can in some way understand and simply tolerate each other and that we find some way of communicating means that all these different personal versions of culture must have something in common and this commonality is their greater or lesser appropriateness to the "primary source." It seems to me that this, aside from everything else, is a wonderful argument in favor of mutual tolerance.

The universal and specific in the case of the deaf and blind

So, whether you are deaf and blind or seeing and hearing is not so terribly important compared to the common human essence of perception or the development of mental vital activity overall. The principle of graduated "guidance, graduated "adult activity" is essential to the engendering and development of action in children who have normal senses, as well as for the deaf and blind. Thinking, understood by Spinoza as the capacity of the thinking body to act in accordance with the form, the contour (and, Ilyenkov adds, the logic, that is, in accordance with the nature, essence, and laws of existence) of any other body, retains its fundamental nature whether or not one is in perfect working order or totally lacks vision and hearing. As was noted above, this understanding of thinking coincides with A.N. Leontiev's ideas. This resonance between Spinoza and Leontiev and Ilyenkov is, of course, not surprising. Finally, the accuracy of one's orientation to the world around him, the appropriateness of the image to the object of the subject's activity is essential and obvious for the hearing and seeing as well as for the deaf and blind.

Are there not many coincidences here? In the opinions of Ilyenkov, Leontiev,

Meshcheriakov, and those who share their views, there are more than enough to justify the conclusion that Ilyenkov formulates somewhat paradoxically as follows: in the deaf and blind we are not dealing with an exceptional case, but with a case that is exceptionally convenient for the study of universal laws. The only thing specific about the deaf and blind is the fact that the essence of the process of shaping and developing the human mind is laid bare to an extreme degree and is not encumbered with details that mislead us at every step, as is the case with people with normal senses. And since the deaf blind child develops, especially at the beginning, somewhat more slowly than the seeing and hearing child, then the essence ("just think!" exclaimed Leontiev) of mental development can be observed "as if with the aid of a slow motion film" (Leontiev's comparison).

And here, if you will, in his enthusiasm for facilitating fundamental psychological research, Leontiev, in my opinion went overboard, forgetting completely the tragedy of the child whose development was so "conveniently" delayed. At the very start of my own work with deaf and blind children I was shocked by the snail's pace of their development. Ilyenkov, it is true, stipulated that this was only true at the very beginning, and that subsequently development constantly accelerated, reaching and even outstripping (in its groundedness and quality) the development of the seeing and hearing. Still, this slowness of development is seen as something natural... after all they are deaf and blind ... more than once Leontiev or Ilyenkov reproached people with normal senses: if the deaf and blind can develop no worse than you and even at approximately the same rate, what totally unused colossal developmental reserves you must have!

Yes, the disabled are the disabled and compared with the norm their potential is, of course, limited. Today, instead of the disabled, it is fashionable to refer to "people with limited developmental potential." You see, "disabled" sounds so crude. But this is what is known as out of the frying pan into the fire. They wanted to soften it and it sounds even worse. According to elementary logic, if there are "people with limited developmental potential," then there most be "people with unlimited developmental potential." Who are they? The Lord God in person? The excessively soft-hearted seeing and hearing have unwittingly deified themselves. Indeed, of course, everyone's potential is limited in one way or another, and replacing the term "disabled" with "people with limited developmental potential" in essence erases any distinction between disability and health, pathology and the norm.

As for Ilyenkov's hopes for accelerated development, they, alas, do not come true in actuality. On the contrary, the very slow development at the start not infrequently later stops altogether. This is a fact, and Ilyenkov knew it to be a fact. However, he explained it with reference to the theoretical incompe-

tence of the practitioners—the Zagorsk teachers—the majority of whom, indeed, had no true understanding of Sokolianskii's and Meshcheriakov's methodology. For them the law of shared graduated activity was no more than a technique suitable only at the very first stages of training.

My mother remembered that when they started to prepare me for the university: one of the teachers at Zagorsk even tried to persuade her to oppose this step, saying that I would become too smart and understand the whole depth of my deprivation, and that life would become a burden. And this was a teacher who was fond of me. . . .

Today reality severely tests this attitude that minimum development is best (for the extremely physically disabled). There is no work that can be done at home. Industrial facilities for the blind and deaf, as in the rest of our industry, are all fitted with assembly lines. In the Sergiev-Posadskii facility one can remain a child one's whole life, and children want to go home to their parents. They fail to understand that in today's catastrophic economic situation, there will not be anything for them to do but be a burden to their parents, with the support of a paltry pension for the disabled.

I tried to explain to one twenty-year-old deaf and blind girl that the best thing for her to do now was to wait for the opening of the dormitory and work facilities that were being built for deaf and blind adults. At least there she would be fed and clothed in some fashion and she would have other people she could communicate with, while at home she would be confined by four walls, almost in solitary confinement. She did not understand. . . .

In the January 1995 issue of the journal Nasha zhizn' [Our Life] (the major publication of the All-Russian Society of the Blind), there is an article by E. Volokhina titled "The Life of Iuliia Vinogradova." In her time Iuliia Vinogradova, once a student of Sokolianskii and then Meshcheriakov, astonished the world with her talent for sculpture. In his articles on the educational theory of Sokolianskii and Meshcheriakov, Ilyenkov spoke of her as of another one of their triumphs. In the late 1970s, Iuliia returned home to her mother in Chudovo and took over management of the household. Her mother died. And although Iuliia lived with relatives, life was very difficult for her. She was isolated and would have been glad to return to the children's home, but there was to place for her. She regretted her return home as an irremediable mistake. When I spoke with the girl who wanted to go home, I referred to this article, but it did no good! There are many like Iuliia Vinogradova who have had and will have cause to regret their prolonged childhoods. And although the Sergiev facility in time will have space for 200 people—100 children and 100 adults—this will in no way solve all the problems. According to very incomplete data, there are 5,000 deaf and blind children and a similar number of adults in Russia, and considering the worsening ecological and social situation, the trend is for these numbers to increase.

There is only one way out—to accelerate these children's development to the highest level possible, so that they are able to understand the situation in the life of society and find at least some sort of position in it. Either let them all spend their whole lives rusting away in a closed institution, or advance all who are capable of it to the highest possible level of development. Currently the situation is such that both choices are unrealistic. The first can simply not be afforded, and the second requires a return to the principles underlying Sokolianskii's and Meshcheriakov's methodological tenets and further development of the concepts of shaping the individual at all stages of development, not only at the initial ones. This goal is virtually unrealizable; it would require an enormous amount of scientific and research work, constant attention, and the support of psychology in general, which existed during Meshcheriakov's time, but which we lost with his death and that of his friends—especially Ilyenkov and Leontiev. To implement this choice, we would need to turn the Sergiev-Posadskii institution into an "educational psychology synchrophasotron." Or build another, alternative "synchrophasotron!"

By the way, as can easily be guessed, the deaf and blind do not have a monopoly on the problem of endless childhood, the problem of infantilism; these phenomena are not specific to us. The same situation has taken shape throughout Russian education, indeed, throughout all of Russian, post-Soviet society. It is merely that for the deaf and blind this problem is particularly acute, extremely severe, literally presenting him with the alternatives of to be or not to be.

Today there is no one who would be as maximally concerned with the fate of deaf and blind children as were Sokolianskii, Meshcheriakov, Ilyenkov, and Leontiev. The latter three ignored a huge number of "formalities" and "details" for the sake of our higher education: we were not made to wait until we had formally completed secondary school and gotten our diplomas; we took the university entrance examination outside of the general competition; we were exempted from mathematics and foreign language; we were taught separately from the healthy students in order to attain, not formal, but actual qualitative equality with the nondisabled ones. Thus, while categorically insisting on the universality, in principle, of the laws governing our mental development, our specific needs were fully considered, the "details" were never neglected. Our spiritual parents understood very well that the "details," while insignificant in a general theoretical context, were extremely, extremely significant in the process of living development. We are all equal in our appropriateness to universal human culture, but this appropriateness is realized by each of us in an individual and singular way. It is this singular individual variance of development, in the context of complete appropriateness to its universal human essence, that Ilyenkov had in mind when he defined the individual as "human uniqueness."

When, it seemed as if the fears of my teachers would prove justified, and I truly fell into despair, realizing my deprivation (for the time being only creative) compared to those who see and hear, Ilyenkov wrote me a letter in which, with brilliant accuracy, he dialectically juxtaposed the "details" with the crux of universal human truth. "You have accurately and precisely understood that the problems you are confronting contain absolutely nothing specific to the deaf and blind. I know you, I know that you do not want any empty consolations, that you are deaf to them. . . . I understand that being deaf and blind does not create a single, even the most microscopic, problem that is not a universal problem. Blindness and deafness just exacerbates them—nothing more."

All my subsequent life has been spent on interpreting and decoding this dialectic between the specific "details" and the "universal essence of the truth." Analyzing my own experience, which, indeed, seems extremely difficult to the point of tragedy, I have worked out the following formulation. There does not exist and cannot be any special "deaf and blind" problems—otherwise, we, the deaf and blind, would be different creatures in principle, not human beings. However, the experience of blindness and deafness confronts us with the starkest possible statement of universal human problems, disclosing their universal human nature. And this extremely stark statement of the problems we share with all people—creates all the specific details of deafness and blindness. The methods we must use to solve universal human problems are also specific; however, these specific methods of solution, dictated by the specific conditions of being deaf and blind, also lay bare the universal human principles of solution. In a word, in the deaf and blind dialectic the general and specific combine and are equated, as Ilyenkov emphasized in his works in the most diverse contexts, and there occurs not merely unity, but identity and full correspondence between the opposites. For this reason our spiritual parents— Meshcheriakov, Ilyenkov, and Leontiev, unconditionally agreed with [Maxim] Gorky, who, in one of his letters to Skorokhodovaia called work with deaf and blind children "experimental philosophy." Indeed, both the success and the breakdown of this work depends directly on the philosophic position espoused by the people who perform it. And Ilyenkov constantly emphasized this direct dependence of practice on theory.

A dotted line into the future

Today the training and education of deaf and blind children has ceased to be "experimental philosophy." And yet, Ilyenkov's work as a whole poses the

challenge of turning the entire practice of educational psychology, both of healthy children and those with handicaps, into "experimental philosophy."

In personal conversations, Ilyenkov more than once told me that, indeed, he felt that philosophy, psychology, and educational theory are by no means three different sciences, but three levels of the same science. In the final analysis these sciences can only solve the problem of developing a harmonious, spiritually and physically healthy individual by working together. While they remain three separate disciplines, our educational psychology cart will not budge from the spot, just as in [Ivan] Krylov's fable about the swan, the crab, and the pike. The philosophical swan will attempt to fly, the psychological crab to walk backward, and the pike to eat the children alive.

What is needed is not simply a revision of educational curricula to conform with the principle of moving from the abstract to the concrete, and of identifying the logical in the historical. These are "details." The crux of the matter lies in restructuring the entire educational psychological process in accordance with the final goal—the shaping of a harmonious individual. And here what we must first seek in Ilyenkov is the distinction between universal and special capacities. We have already discussed this. In short, the universal or the general capacities are those that, taken together, make it possible to learn everything that one needs or wishes to learn.

Such capacities, are, first of all, the capacity for dialectic thought; second, the capacity of the imagination, aesthetically developed to the intuitive level; third, the capacity to relate to oneself and other people in a human, ethical, and humane way, and the capacity to treat oneself and others, no matter who they may be, as exemplars of the highest value; fourth and finally, the capacity to maintain one's physical well-being at a physical performance capacity on the highest level possible, within the limits imposed by disability or anything else. This is what must define our curriculum from the birth of the child to his physical and emotional maturity, when, possessing all the capacities listed, he ultimately becomes capable of determining his own destiny.

The shaping of special capacities must also be specially fostered in school, but their place must be subordinate to that of the universal capacities. The main thing is to teach the child to learn, and thus, to the extent possible in the given historical circumstances, to create a person who is himself the master of his fate. And what precisely he needs or wants to learn in particular, in one or another special area, he himself will decide, and we are committed to helping him, providing a choice and making the necessary special knowledge available.

The subordinate nature of such special lessons must be acknowledged by making them optional. However, facilitated shaping of universal capacities must be compulsory for everyone. Currently, the opposite situation exists in the schools: children are burdened with special details, which, since they are not needed are soon forgotten. All the texts are written by specialists in one or another area, and, in essence, are targeted at other specialists and not at children. The memory is overloaded with knowledge for knowledge's sake. Knowledge becomes a value in itself; but a child has to be taught that knowledge is nothing more or less than a *means* to solve his own *personal* problems, problems in his own life that *personally affect him*.

I, like many others, would have tried to keep a respectful distance between myself and philosophy, staying as far away as possible, as I keep a more than extremely respectful distance from mathematics. However, my friendship with Ilyenkov convinced me that philosophy has the most direct relationship to life, and particularly to my own life, that philosophy is precisely the science of solving problems and the science of conscious dialectic thinking. And I became so carried away with this idea, that while I was still a student I began to rely on dialectics in my everyday concerns and my daily relations with the people around me, especially with regard to who, how much, and what I could believe in or trust. While still a student, thanks to Ilyenkov, I was convinced that only dialectics would allow me to truly clarify my relations with those around me, not on the basis of mutual slights but on the basis of friendship and love. And I never became disillusioned with this idea, although the first thing I learned was that coping with the dialectics of one's own life, as opposed to someone else's, is one of the most difficult things there is.

There is no point in fencing the entire educational psychological garden without solving the problem of motivating the child's activities. It is essential that the child be as active as possible because no one can create any kind of culture for him, although alone, without guidance and directive help, he will not manage either. To generate the maximum level of activity, we must get the child himself to want, to passionately desire to develop a culture, to create his individual version of it, so that building this culture becomes a need and he becomes fervently involved in this process.

Thus the motivation must be aesthetic and creative. "Purely" creative is not enough: it could become antihuman according to the principle that science (or art) requires sacrifice.

Ilyenkov insists on the "equality" of all three capacities supporting spiritual health—thinking, imagination, and ethics. In his works *On the Specific Features of Art* and *On the Aesthetic Nature of Fantasy*, he formulates the position that neither science, nor art, nor ethics "can occupy a subordinate position," insofar as this would inexorably lead to absolutization, to deification of science (skepticism), or art (the theory of "art for art's sake"), or ethics (Kant's categorical imperative). And then the highest value cannot help but be

not the living person in whom the three universal capacities are developed equally, but rather a God who is the embodiment of one of these in isolation.

Thus, science, art, and ethics must be equal collaborators in the matter of developing the universal capacities (thinking, imagination, and ethics) up to the normal level, that is, the highest level attained, by humanity. All three are equally important because all three must be normally developed in each individual. Mutually supplementing and presupposing each other, all three capacities, under conditions of balanced, equal, normal development, completely eliminate the risk that any one of them will be used for antihumanistic purposes. But if there is hypertrophy of one of these capacities (even ethics) at the expense of the other, it is not just that there is a danger of antihumanistic use of the hypertrophied capacity but that such use is unavoidable as soon as this capacity "exceeds its authority," that is, is elevated to the rank of deity. . . .

However, when normally developed, all three capacities acting together (never separately) represent a completely reliable system of checks and balances and confer totally reliable immunity from any relapses into zoological lack of reason or misanthropic insanity. And the problem of subordination, the problem of which of the three equally important capacities should be the highest attribute if the two others disagree, is eliminated by itself. Neither scientific nor artistic creativity can help but be humane, and humanity cannot help but be wise and aesthetically sensitive. The problem engendered by the alienated, professionally based limitations (compounded by self-satisfaction) of each of these capacities, disappears as the reason for it disappears—as the alienation is eliminated.

Professional limitation (Ilyenkov many times expressed himself more bluntly "professional cretinism") results from a well-defined system of division of labor. It is not possible to get along without any division of labor because no one "in particular" can know and do everything that humanity as a whole currently knows and is able to do, much less what it will know and do in the future. But a system, based on ever more fragmented "division" of human universality into innumerable professions is doomed, but not because someone made up a fairy tale about Communism and was determined, no matter what, to turn this fairy tale into reality. It is simply the case that this system is flawed in its foundation, and, because of this flaw, will give rise to increasing threats to human existence and all of nature that has been recruited to participate in human activities. This system is leading and inevitably will continue to lead humanity to the edge of the abyss, at which point the alternatives will seem extremely simple and harsh: either fall into the abyss of nonexistence or come to your senses at the edge and begin an actually and not just potentially rational way of life. There will be no third alternative. And there will be no salvation if humanity's alienation from its universal essence is not eliminated,

without transforming the system of division of labor so that it is based on conscious collaboration of truly rational beings rather than the chaotic interaction of "blinded specialists" (Ilyenkov's phrase). The only choice is insanity and death or the rational transformation (but not distortion) of interactions among humans and between humanity and nature.

And it is not important what to call this truly rational society that will arise (if it succeeds in arising) as the only alternative to the growing thermonuclear, bacteriological, ecological, and every other sort of madness. We will not argue about words. If you do not want to call this Communism (and I personally do not, considering that in the current political lexicon, this term has become a synonym for fascism, and after our bloody experience with the dictatorship of the proletariat, could have become nothing else), call it humanism. If for some reason the term humanism bothers you, use Erich Fromm's term and call it "participatory democracy" (which Fromm sets in opposition to today's widespread representative democracy that does nothing to impede any sort of fascism or totalitarianism). What is the difference? As long as reason triumphs over madness.

I would be glad to follow Maxim Gorky and call such a synthesis of philosophy, psychology, and educational theory, setting as its special goal the solution of the problem of how each of us can become truly rational creatures, "experimental philosophy. Or follow K.D. Ushinskii and B.M. Bim-Bad and call it "educational anthropology." Or even imitate Steiner and call it "anthroposophy." Or, finally, following my own educational psychological practice and its theoretical interpretation, I would be happy to call it "shared education."

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