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A Contribution to a Conversation About Meshcheriakov

(November 20, 1975)

Thinking over my plan for today's talk, I tried first to set out briefly the main theoretical conclusions that, as it seems to me, flow naturally from the enormous amount of material that has accumulated in the archives of the Sokolianskii Laboratory [at the Institute of Remedial Education]. However, as I tried to put together such a plan I quickly became convinced that I would

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Translated by Stephen D. Shenfield.

Aleksandr I. Meshcheriakov (1923–74) was a pedagogical psychologist within the Vygotskian tradition who worked on methods of educating the "deaf-blind" or "blind-deaf"—that is, people who are both blind and deaf-mute. A student of Ivan A. Sokolianskii (1889–1960), whose pioneering work in Kharkov in the 1930s gave him the reputation of "father" of this new field, Meshcheriakov continued his mentor's work after the war at the Institute of Defectology (later renamed the Institute of Remedial Education) in Moscow. In 1963 he established a boarding school for deaf-blind children in Zagorsk; the Sergiev Posad School for the Deaf-Blind remains open today and is the largest such school in the world (see www.perkins.org/news_details.php?StepTwo_ID=16/). For a scholarly discussion of Meshcheriakov's work, see David Bakhurst and Carol Padden, "The Meshcheriakov Experiment: Soviet Work on the Education of Blind-Deaf Children," *Learning and Instruction,* vol. 1, 1991, pp. 201–15 (available at http://communication.ucsd.edu/people/PADDEN/Bakhurst%20&%20Padden.pdf).—Trans.

get nothing worthwhile out of this material. I would get nothing worthwhile because the material is too rich and complex, too multifaceted. Were I to try to talk about everything I would still not manage to do so, and in the process I would risk wasting all my time on things that you in this audience would not find particularly interesting, while leaving out precisely those things that would arouse your professional interest. Especially considering that some of my conclusions would surely evoke doubts and objections and thereby lead to arguments over questions that may be of only secondary importance.

For example, take the question of the relationship between social and biological factors in the emergence of the human mind—a question that is already sufficiently confused in our literature.

It was for this reason that I decided not to tie myself in advance to any rigid plan and did not prepare a coherent lecture with each proposition resting on the preceding one and leading logically to the following one—that is, a rigorously thought-out and academically polished lecture.

It seems to me that for a first acquaintance it will be better if I confine myself to a more or less unsophisticated account of those impressions, which I gained over the twelve years that I followed the work of Meshcheriakov and of the Zagorsk boarding school for blind-deaf children. In any case, I shall *begin* with such an account in the hope that the questions it provokes will lead our conversation onto a more distinct theoretical plane. I shall probably be able to answer some questions and unable to answer others, at least today, and in this way we shall mark out the field of our mutual interests, the area of intersection of philosophical and psychological aspects, the scope of a mutually interesting dialogue between the psychologist and the philosopher.

I also want to explain why I was interested, as a philosopher, in things that A.I. [Meshcheriakov] told me when I ran into him by chance on the street (Lerner on happiness, N.K. with her question: "Generally speaking, what am I?" and so on).*

And very quickly it became clear: this work—at first glance very specialized, narrowly defectological—is actually least interesting from a narrowly defectological point of view. The reaction of Vlasova is very indicative and—most important—justified: why are people making such a fuss over the blind-deaf?

Yes, this is a paradox. At the defense of Meshcheriakov's doctoral dissertation, D.B. Elkonin (or A.V. Zaporozhets—I do not remember which) talked about a "synchrophasotron for the humanitarian sciences," while

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*The references are to Yuri Lerner and Natalya Korneyeva, two of a number of Meshcheriakov's blind-deaf students who became collaborators in his research.—Trans.

Academician N.N. Semenov—who had done a great deal to help A.I.—said that previously he had not thought that a "pure experiment" was possible in psychology—"pure" in the same sense as in chemistry or physics.

The more closely I got to know Meshcheriakov's work, the stronger grew my conviction that blind-deafness as such literally does not create a single problem—apart, of course, from purely technical problems of secondary importance—that is not also a problem for general psychology. The only circumstance specific to blind-deafness is that here all of these problems are a hundred times more acute and therefore literally force the researcher to pose them in as sharp, clear, and theoretically thought-out—that is, competent—a fashion as possible. And to pose a problem sharply and clearly is to be halfway to solving it.

And first of all Meshcheriakov was forced to pose—and then solve—the fundamental question: *what is the human mind?* What he needed, of course, was not a pedantically polished or quasi-scientific definition but a *concept*—that is to say, an understanding of the essence of the matter. In practical terms this meant sharply drawing the boundary between the mind of an animal and the mind of a human being, pinpointing where the human mind *begins,* showing what constitutes the *first, elementary form* of this mind, out of which later unfold, like an oak out of an acorn, all the riches of the developed human mind, up to its highest and most refined levels.

The initial material—encountered, fortunately, not so very often but encountered nonetheless (I myself have had occasion to observe these rare cases)—is the *complete absence of mind*. Not only of a specifically human mind, but of *mind in general*. The child born blind and deaf is a being that, strictly speaking, cannot even be called an animal. In its existence there is not even a hint of those phenomena that are studied by the zoopsychologist. There is not even an animal mind. According to all the criteria used in biology, it is something like a *plant*—that is, an organism endowed by nature with a certain set of purely vegetative functions. That is, it breathes, digests food, increases in size—and that is all. It is like a rubber plant that lives only so long as it is watered. That is exactly the picture we have here.

Life activity in the strict sense of the term is not present here, just as it is not present in any plant—in the sense that there is no *activity* in its most elementary form—in the form of *independent movement in space* to provide for the existence of this living organism, for *life,* again in the most direct and elementary sense, in the sense of the exchange of substances.

This child will starve to death without a peep if food, let us say, is located at a distance of at least ten centimeters from his mouth. He is unable to overcome these ten centimeters by moving, by shifting his body. He lacks even this elementary ability, although his sense of smell signals to him that

milk is somewhere nearby. In other words, there is an *organic need,* there is an object that can satisfy this need, but there is no ability to unite the need with the object by means of body movement. Nor therefore is there a *mind*. No mind *at all,* let alone a specifically human mind.

And this is so despite the fact that, as the subsequent course of the experiment will demonstrate, all of the so-called *internal* conditions for the emergence of mind are present. That is, there is a brain that is normal in the medical-biological sense. A brain exists as an organ for controlling bodily processes, but there is no hint of a single *functional* organ for the performance of *mental* functions—even of the most elementary kind, even in embryonic form.

In other words, the *substance* of the mind is in general *life activity,* in the sense explained above, while the brain with its innate structures is merely a biological *substratum*. By studying the *brain,* therefore, you will learn little of the *mind*—just as little as you will learn of the nature of *money* by studying the material properties of the material (gold, silver, or paper) in which the money form of value is embodied.

For the very same reason, the fantasies of certain "reckless cyberneticists" who entertain the possibility of mental phenomena emerging in an *unmoving* material body or device are absolutely absurd.

And this is a very important conclusion: the substance of mental phenomena is *life activity,* the *activity of a living organism,* understood as the independent movement of this organism in a space filled with objects, some of which are external conditions of life while others are indifferent to life. In other words, the mind, from beginning to end, is a function and derivative of the *external action of the organism*—that is, of its movements in an external space filled with objects. Thus, movements, schemas, and trajectories are not and cannot be inscribed in the structures of the brain for the simple reason that, each time, they are individual, unique, and therefore unexpected.

So the first task is to form a *mind of some kind*—that is, the mind in its elementary *animal* form. To turn the plant into an animal.

(Explain how Meshcheriakov and his colleagues did this and the paradoxical result: the deaf-blind child acquired greater vitality—in the sense of the presence of *animal* forms of activeness and mind—than his seeing and hearing peer.)

And next, the most interesting and important task: *how to turn the animal into a human being*—that is, how to make it cross the line that divides animal life activity—and the mind that corresponds thereto—from specifically *human* life activity and the specifically human *mind* that corresponds thereto.

The difference between the animal mind and the human mind marks the boundary between zoopsychology and the psychology of man. In Meshcheriakov's work this dividing line was drawn in a quite rigorous, clear,

and at the same time purely experimental fashion. Sokolianskii had already given this decisive stage a name, which A.I. accepted as a very accurate one: the stage of "primitive humanization." What is its essence?

Suppose we have an organism that displays the ability (or skill) to satisfy its organic needs (for food, for oxygen, for a temperature within a certain range) by means of independent movement in space that overcomes the gap between the organism and the objects of its organic needs—that is, of its biologically inbuilt bodily requirements. Then the entire focus of "primitive humanization" lies in *again severing* contact between them, in interposing an obstacle that this organism is in principle unable to overcome by moving its body in space—that is, by the means that is in principle accessible to any animal.

Theoretically this question takes the following form. What kind of obstacle would make the animal mode of satisfying organic needs impossible and pose the issue point-blank: *either* accomplish the transition to the *human* mode of satisfying organic needs *or else* perish?

An obstacle that would be at the same time a bridge or, so to speak, a level crossing between animal and human life activity, and therefore between the biological (animal) and the specifically human form of mind.

Such a bridge-obstacle is any object created by man for man, any artificial tool that man places between himself and an object of his organic needs.

For example—a *spoon*. A spoon is a pass into the realm of human—social—culture, into the sphere of human life activity and of the human mind.

Let us analyze more carefully what it is that occurs here.

What occurs is no more and no less than the act of the *birth of the human mind,* the mysterious act of the *birth of the soul,* the act of transforming the brain as an organ for control of the individual's own body, as an organ for control of the biological life activity of an organism of the species Homo sapiens into an organ for control of the *highly complex system of external objects* that constitutes, to use Marx's expression, the *inorganic body of man*.

Here the first, elementary, cellular form of the human mind turns out to be the *work of the hand in accordance with a schema* and along a trajectory determined *not* by biologically inbuilt requirements but by the *form and disposition of things* created by human labor, created by man for man.

In accordance with schemas and along trajectories that could and can in no way be envisioned in advance by the structure of the internal organs of the human body, including the cerebral structures of its brain.

What occurs here is not "development" in the sense of complication or improvement of the animal mode of satisfying organic needs, but the *replacement* of this mode by the *reverse* mode, the supplanting of the animal mode of life activity by the specifically human mode. Here there is

development not in the sense of the evolution of one mode into another, but in the sense of the *transformation of the old mode into its direct opposite,* a new mode in conflict with the old.

The child does not want to eat with a spoon. He resists and tries as before to thrust his snout* into the bowl, but they do not let him. Instead, they stick something in between his snout and the bowl—some sort of very inconvenient object, superfluous to the old mode, a superfluous and incomprehensible "mediating link."

And this "mediating link" requires unfamiliar actions of him, actions the schemas for which are inscribed neither in the organic need itself nor in its object (say, in porridge) but only in the form and designated purpose of a *spoon* (towel, potty, table, chair, bed, etc.).

Meshcheriakov, following Sokolianskii, liked to repeat: if you have managed to teach a child to use a spoon in human fashion, then all of the remaining human development of this child is simply a matter of technique and patience. By learning to use a spoon, he has already obtained a pass both into the world of human thinking and into the world of language—that is, into the world of Kant, Dostoevsky, and Michelangelo.

This point in Meshcheriakov's work, it seems to me, is of the most fundamental theoretical significance for many current disputes. There is probably no need for me even to enumerate these many disputes, and to do so would place a prior limit on the significance of this point—namely, the experimental proof of the thesis that the specifically human form of mind emerges only and exclusively on the basis of *artificial objects,* that is, objects created by *labor,* objects that correspondingly demand *artificial*—that is, shaped in the labor process itself—modes of action with them.

It is only here that there *first arise and take form* those "mobile functional organs" in a person's nervous system that are able to support the specifically human form of life activity and the corresponding—higher—mental functions.

I must emphasize the words: *first arise*. They do not "develop" by means of the simple complication of the functions of organs also possessed by animals. The latter are replaced and supplanted by the former; they arise on a fundamentally different foundation.

They arise on the foundation of specifically human action with specifically human objects, with objects specially created by man for man and not by nature as such.

Thus by teaching a child to use a *spoon* you teach him to act in human fashion with any other object—with a stick, with a stone, with a banana, with

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**Morda,* a word generally used in reference to animals or as an insult.—Trans.

fire. If you try to do things in reverse order you will achieve nothing.

In the given case, Meshcheriakov applied with great consistency the understanding of the human mind developed by Vygotsky and his followers and described by them in terms of a process of *internalization,* the process by which external actions—that is, actions in the space outside the skull, outside the human body—are turned into internal actions, into actions that take place inside the human body in general and inside the brain in particular.

Here, finally, was the solution to the old problem of the relation between the natural *preconditions* of specifically human life activity and of the specifically human mind and the *real conditions of existence* of this life activity and of this mind, in their fundamental opposition to all forms without exception of animal life activity and animal mind.

(In order to clarify this assertion, I would like to draw attention to one seemingly simple fact:

Let us suppose that we have gathered in a crowded room and are running out of air. We have used up the oxygen. It has become unbearably stuffy in the room.

How will our biology, with its innate mechanisms, react to this fact? Our pulse rate will rise; so will our respiration rate; and we shall try to get out of the room into some other space, into "fresh air" as fast as we can. Any animal will react in these ways.

But what do we do?

We go to the window and open a *fortochka.** Or we turn on the air conditioning. And this way of reacting to environmental conditions was not and could not be inscribed either in the external environment itself or in our physiology. It was inscribed only in the design of the *fortochka* and of the air-conditioning system.)

One thesis that is connected inextricably with such an understanding is the following. All specifically human forms of mind (all 100 percent, and not 20 percent as [psychologist Hans] Eysenck thinks, and not 80 percent as some of his opponents think, reproaching him for exaggerating the role of nature and understating that of nurture in the development of human intelligence) are determined socially and not biologically by innate structures of the brain and body of the individual of the species Homo sapiens.

I have deliberately sharpened this thesis, at the risk of setting off a burst of objections. I have done so nonetheless, for I see distinctly that without accepting it you will be able to understand absolutely nothing of the work of Sokolianskii and Meshcheriakov.

I insist on this because it is precisely here that the true theoretical dividing

*A windowpane that opens separately to allow in fresh air in winter.—Trans.

line lies between genuine—dialectical and historical—materialism and the pseudo-materialism that tries to explain phenomena of the specifically human mind by proceeding from the biologically innate structure of the brain of the individual of the species Homo sapiens. The advocates of this pseudo-materialism, of course, do not deny "external conditions" a role; they are only displeased at those who, as they put it, "exaggerate" this role.

These pseudo-materialists allegedly also "take into account" the role of "external conditions" under which specifically human forms of mind emerge and develop. But they admit them into their understanding only and precisely as *external conditions* that accelerate or, on the contrary, slow down the course of a process the program of which is allegedly inscribed "inside" a person's body and brain, in the genes.

Meshcheriakov was the most consistent opponent of all of the atavisms and relapses of such pseudo-materialism in psychology, an opponent of the explanation of phenomena of the human mind by reference to special, biologically innate characteristics of man's body and brain, an opponent of the idea of the *spontaneous development* of the human mind.

Why? Simply because in the course of his experiment this idea proved itself an utter failure, completely groundless, and—the most important thing—completely helpless. Absolutely nothing could be done here on the basis of this idea. But, on the other hand, it became a major *impediment* to progress when people deliberately or inadvertently tried to drag it into his work—that is, to suggest conclusions flowing from it as recommendations for the pedagogical process.

The question had to be tackled point-blank: at what preconditions *inside* the organism of the deaf-blind child can you grasp in order to develop these preconditions to the level and significance of specifically human mental functions?

Nothing apart from purely organic—and, moreover, purely vegetative—needs: the need for food, for oxygen, and for a temperature within a certain range (not too cold and not too hot). That is all.

The *keenest and most meticulous efforts failed to discover* such mythical "reflexes" as [Pavlov's] "freedom reflex" or "purpose reflex," the "collecting reflex," and so on, including the notorious "orienting-investigating reflex." They were simply not there.

It proved necessary actively to form all of these allegedly innate so-called "reflexes." And the only way that this could be done was to *place the child in a situation of practical interaction with an adult within and concerning the world of human objects,* objects created by man for man.

The human mind emerges when and only when we manage to organize—or, more correctly, create—the activity of the child's hand with objects that have

been created by man for man and therefore require specific actions that were not and could not be pre-inscribed in the biological structure and functions of his body in general or of his brain in particular.

The whole of the human mind (all 100 percent of it and not 80 percent or even 99 percent) emerges and develops as a function of the work of the hand in an external space filled with such objects as a spoon, a potty, a towel, a pair of pants, socks, tables and chairs, boots, stairs, windowpanes [*fortochki*], and so on.

The brain is merely the natural material that turns into an organ of specifically human life activity and mind *only* as a result of the actively formative influence of *active work by external organs of the body in an external space filled* not with natural but *with artificially created things*.

It is such—and only such—work of the hand that is the *substance* of the specifically human mind.

In the same sense in which the sole substance of value and of all its modifications such as money, profit, and rent is *labor*—and, moreover, not labor in general but a historically specific form of labor.

This was the theoretical position that alone enabled Meshcheriakov not only correctly to understand the higher, specifically human mental functions but also to create them and then develop them to their highest potential.

From this point of view, therefore, the biologically innate structure of the individual's brain and body is just as *external* a condition of the emergence and development of a specifically human mind as are things outside the body.

And the sole cause and substance that ties these external conditions into a single knot, into a single system is the *sense- and object-oriented life activity of man,* understood not naturalistically—as the biologically innate life activity of the body of an individual of the species Homo sapiens—but as a process of the production of specifically human life, of its *specific* conditions. And these conditions are 100 percent *social*—that is, they have a sociohistorical origin and existence, outside of which they are altogether absent.

Yes, of course, such an external condition as a medically normal brain must be present. In the absence of this condition there will be no mind, human or even animal. Lacking will be that *material* out of which human life activity (which arose sociohistorically) *makes* the organ of the human mind, transforming an organ for the control of processes inside the body into an organ initially for the control of the movement of this body in external space, and then also for the control of all those things and processes *outside the organic body,* in what Marx called the *external, inorganic body of man*—that is, man understood not as a biological type but as a *species being,* as a *species* in relation to any other, as a *universal* being, as the aggregate of all his social relations.

I do not know of and cannot imagine any other obvious experimental situation that would embody so completely those profoundly theoretical truths to which Marx gave expression in his *Theses on Feuerbach*—theses that are often learned in purely verbal fashion, without a full understanding of the complex and multifaceted character of the reality exposed by them, of the process by which such a specifically human form of mind as intellect or thinking is established.

I could also talk specially about such indubitably psychological problems as the problem of the relationship between intellect and will and between intellect and imagination, understood as the ability to construct an image and change that image, and the problem of the role of language in all of the mechanisms of the development of the human mind. I could talk about much else besides, even the theoretical elaboration of the problem of *consciousness in general* and of its relation to *self-consciousness*. But this will suffice for now.

In its most general form, the mind is none other than the ability of a highly organized living being to carry out its life activity in forms dictated to it not by the structure of its own body, but by the form and disposition of those other bodies that in aggregate constitute the external environment of its life activity. Therefore, the mind necessarily includes the ability to form *reflections* of the objective situation outside the animate organism, the ability to construct an objective *image* of the form and disposition of things in external space.

Such an understanding also guides us in defining the object of psychology as a science. Where—in which space—are situated those facts and events the analysis of which must be the special concern of psychology as a science, as distinct, let us say, from physiology of the human body and brain? In the space inside the skull? No. In a wider space. In that space within which the hand performs real activity in and with an object.

This was already understood very well by Hegel, who said that in the form of the *work of the hand* the "internal"—that is, the mind—"does not manifest itself but *exists*," for the hand "is what man does, for in it as an active organ of his self-affirmation man is present as an animating principle" (G.W.F. Hegel, *Sochineniia,* vol. 4 [Moscow-Leningrad, 1929], p. 168 [retranslated from Russian]).