

## ON THE ROLE OF PRACTICE IN COGNITION

In 1844-1845 Marx and Engels had already shown and overcame the chief defect of all hitherto existing materialism whereby it was feckless in face of idealistic criticism and was beaten by it. This defect was its contemplation.

The substance of such contemplation was complete unawareness of the huge, determining role of material practical activity of social humans that aimed at the alteration and adaptation of natural objects to the society's needs.

The gnoseology of old materialism didn't take into account the fact that human consciousness, or thought, has the social origin, that it has emerged and developed as a moment and a product of labour social activity.

In general, old materialism, studying the relation between cognition and object, has seen only consciousness on one pole and only object – on another. In this case it makes sense to understand consciousness as no more than a higher product of nature. This answer was abstractly true, but absolutely incomplete, and therefore led old materialism to the same naturalism which dominated in sociology. Only the natural basis of human consciousness was taken into account, while its social, historical basis, – labour, – was completely ignored.

While socially organized labour was all along the closest basis of human consciousness as specifically *human*, acquiring all specific features that distinguish it from the animal psyche.

The specifics of human consciousness remained to be an unexplained fact for materialism: it was stated but wasn't understood. Its “understanding” was narrowed down to showing the initial, natural basis; therefore everything that human consciousness owes to the development of social labour activity, was attributed directly to nature, i.e. the physiological substrate of mind – brain and senses on one side, and external nature on another.

It was Marxism to be the first to explain the importance of the fact that the natural basis of consciousness itself is a product of labour. It is labour that created and

developed the human brain, senses and created all the objects for the processes of thought and understanding for every new generation.

Socially organized labour was understood by Marx and Engels as the main objective process, which forms both the object of cognition confronting the consciousness and the consciousness itself. Along with that the naturalism of old materialistic gnoseology was crushed.

Later in “Dialectics of Nature” Engels emphasizes: “It is precisely *the alteration of nature by men*, not solely nature as such, which is most essential and immediate basis of human thought, and it is in the measure that man has learned to change nature that his intelligence has increased” [1].

The problem of relation between the subject and the object of cognition, the ancient philosophical question, was raised as a historical matter for the first time.

For the first time the “*subject of cognition*”, *the human*, is understood in gnoseology not just as a still, non-historical category, not just like a physiologically determined ability to feel, percept and compile the material of perception, but as an individual formed inside a certain historically specific mode of material practical activity. Therefore, the ability to “perceive and compile” itself was understood not as an initial reference point of the cognitional process, but as a product of social labour, which bears the traits of all of its characteristics, of all of its historically achieved forms.

*The object of cognition* is also no longer understood as still, unchanging and identical throughout *the history of cognition*. This also applies to the particular moment of time – not necessarily to the “development in general”.

Properly speaking, nature itself hasn’t changed a lot throughout the actual history of humanity. But it was significantly altered by human activity. Alteration, development of nature (as an object of cognition) *was caused by human activity*, produced and understood through it. It was the way the idea of development of the nature processes was introduced to human consciousness. We are talking about the idea of nature development in general, how it takes place even *outside the boundaries of human intervention*, human practice.

It is the law of cognition: *objective understanding* of the natural process is possible only when this process is reproduced *in human practice*. Before that every theory of the objective course of events is no more than a guess, hypothesis, speculation, which can be legitimate to a greater or lesser extent. There is no guarantee of truth.

Gnoseology is not interested in the general development of an object itself, but in its alteration by the human, by human activity, by labour. When we talk about gnoseology as a science, we should take into account this exact sense of “alteration of nature”, “alteration of the object of cognition”.

This is the only way Marx’s first thesis on Feuerbach should be understood: it’s a subjective human activity that is given to cognition, not an object itself. And really: transformation of the electrical form of motion into thermal and mechanical forms was observed millions of times by Neanderthal – for example as a lightning striking the tree. At the Thales’ time the chemical form of motion transformed into thermal and vice versa before his eyes just like nowadays. But different forms of motion were perceived and understood as completely different, organically separate and non-transforming into each other until humans *learned how to reproduce* this objective process in their practical activity.

Alteration of an object becomes the object of human cognition, perception, consciousness only to the extent it is represented in practice. Understanding and consciousness, the ability to observe this process in reality transform only to this extent. This includes the ability to observe it in objects that lay outside the boundaries of the direct material impact and are only given to “perception”.

Humans still cannot fully reproduce thunder and lightning strikes. Just like for Pithecanthropus, this phenomenon remains just a perception for us. But we “perceive” it quite differently from a Pithecanthropus. *And this “differently” extends to the boundaries of our practice: how we learned to reproduce electrical processes.* Perception in the meaning of physiological act of seeing, hearing or smelling has nothing to do with it. Physiologically it is nothing different from the perception of humans of Aristotle’s age. Einstein’s perception is not quite different from the perception of Tutankhamun or even hominid human ancestors.

Gnoseology acquires historicism only along with the statement that human beings as particularly human only perceive those things in nature which we are able to reproduce in practice. This is exactly the thing that distinguishes human and animal perception. Everything else in perception they have in common: visual image, auditory sensation etc.

Everything seen by a human eye that exceeds the perception of an eagle is the result of labour. Labour created everything human in humans. Everything human-specific in perception somehow owes its existence to labour. On the top of animal perception humans perceive in nature only the things we are able to reproduce in the social process of practical activity.

Therefore improvement of cognition is directly linked to historical development of labour activity, not only to nature as it was thought by old materialism. Practice, labour, purposeful alteration of natural objects, purposeful reproduction of these objects in the labour process is the closest significant basis of consciousness, human cognition as specifically human.

Physiology of higher nervous activity of humans is no less a product of labour, its derivative that depends on it and was formed by it.

Nature gave humans exactly “the same amount of cognition” as orangutans. All human cognition on the top of that was created by humans, by their own labour.

Old materialism ignored the social labour basis of consciousness and attributed to nature things that were not created by it. Therefore the specificity of human consciousness, its difference from the animal psyche remained an unappreciated phenomenon, the fact that was revealed, but not explained.

Gnoseology made the same mistake as political economy, which tried to explicate all concrete forms from an abstract law directly, ignoring the complexity of all intermediate links. Here it ignored practice – an extremely important intermediate link between object and consciousness.

In the political economy such a way was called by Marx extremely speculative scholastics which is an obligatory addition to extreme empiricism. It was a

characteristic of old materialistic gnoseology as well. The law of consciousness stating that consciousness is a reflection of an outer independent object was abstractly true in general. It is both significant for human consciousness and the animal psyche. But this approach is unable to explain all the particular qualities of human consciousness. It explains even less the fact that the human of the XX century reflects an object differently and much deeper than the ancient, although the object remains the same from the perspective of the physiological act of seeing or listening. For example, the starry sky...

Accepting that practice is a basis for all human consciousness activity explains this fact. Marx and Engels, pointing at labour as the nearest and determining basis for all cognitive abilities, were first to show the real origins of all logical categories, of the whole “apparatus of cognition”, which old materialism has left without an explanation and therefore exposed itself for Hume and Kant’s criticism. Marx and Engels have shown that the human indeed does not read out and has no ability to read out categories (such as “causality”, etc.) from contemplation, but produces them in the object transformation activity.

All categories were understood as a logical representation of the universal properties, which any object reveals in cases of being subjected to the transformation activity of the human. All categories of logic composing in their interconnection the so-called apparatus of cognition, thinking (in their original form they are rather general representations, not categories) did not have the meaning of theoretical forms of reflection of objects how they exist outside and independently of humans – this was a subject of later interest, when philosophy has appeared. These categories had the meaning of *practically necessary forms of unmediated practical consciousness*, i.e. consciousness, which necessarily arises inside activity, aimed at the alteration of the outer world, its adaptation to human needs. It was precisely here, where physical and mental labour have not separated yet, where production of ideas was directly weaved into the material production (Marx), categories, general representations are formed as a direct manifestation of the key points of practical, objective, material activity.

And since this activity is determined by the object, since practice does not create properties of the object, but just reveals them, since the human can transform the

object to a degree, which its objective, independent from the human's will and desires nature allows, the categories represent the objective, *independent from activity* content. That is exactly because the object is not reflected directly, but through the mediation through practice, labour, the degree of its understanding is dependent on the degree of practice development. And that is why such general representations, which become in time the objects of special investigation and transform into the categories of logic, serve at the first steps as the forms of understanding, comprehension of objects that do not fall into the forms of direct practice.

Marx remarks: “But what would Hegel say if in the next world he was to learn that the *Universal* [Allgemeine] in Old German and Old Norse means nothing but the common land, and the *Particular* [Sundre, Besondere] nothing but the separate property divided off from the common land? So the logical categories are coming damn well out of “our intercourse” after all” [2].

The vaster, the more diversified the sphere of human activity – social production – becomes, the more the object is adapted to society's needs, the more objective properties it reveals to humans, the more rich and complex becomes that “network of categories” in which humans “catch” new objects given to them only in contemplation. For example, the starry sky.

In practice humans subjugate the object to themselves by subjugating to it. That is why categories are the representations of the material world's objective properties. But the material truth enters consciousness only because it is mediated by practice. Engels specifically highlighted that: “In this way, by the activity of human beings the idea of causality becomes established, the idea that one motion is the cause of another” [3].

(It is also reflected in the etymology of the Russian language. “Причина” (causa, translator's note), “причинять” (to cause, to inflict, t/n) is a more philologically complex form than “чинить” (to cause, to carry out, t/n) (justice, execution and so on), i.e. a simpler form, the underlying word originally means the human's action: «чинить = делать, производить...» (“to cause = to make, to produce”, t/n)).

It is activity that originates and proves the objective meaning of logical categories, not contemplation.

“True, the regular sequence of certain natural phenomena can by itself give rise to the idea of causality: the heat and light that come with the sun; but this affords no proof, and to that extent Hume’s scepticism was correct in saying that a regular post hoc can never establish a propter hoc” [4].

This is an important point of revolution in philosophy, the point that constitutes a crucial, qualitative distinction of Marxist gnoseology from gnoseology of old materialism, which could not move forward past the truth that consciousness is a reflection of the objective world. Clarification of this point constitutes the borderline separating the mature Marxist works from the early; it took place in the year 1845.

In philosophic and economic manuscripts Marx thoroughly analyzes this very problem – the problem of relation between consciousness and activity, the problem of their complicated dialectical interaction. There is no clear and articulated understanding in those manuscripts that material and practical activity is determinant and dominant in this pair of dialectically interacting moments.

The relation of material and spiritual moments in the human, the development of humankind is strongly stained with anthropological understanding; but it is not hard to recognize behind Hegelian and Feuerbachian terminology the understanding that consciousness, thinking is not the main and exhaustive feature that separates humans from animals.

It is not consciousness itself, but the conscious nature of activity that becomes the main category, the original category. Consciousness, which was the subject, essence of the human for old philosophy, is now reduced to the most important predicate, attribute. The active human is revealed to be the real subject, and it’s not the Feuerbach’s individual, but the whole “world of the human”, i.e. whole assembly of humankind’s abilities, which in their turn are humanized objectivity, i.e. those abilities, which have emerged and developed in the fold of objective, i.e. material activity.

Therefore, Marx has already reached an understanding in philosophic and economic manuscripts that consciousness after all is determined by the object, nature. However, this determination is not direct, but mediated by activity, moreover *conscious* activity, which “recreates the whole nature according to its own measure and law”.

This outlook is infinitely higher than an outlook of contemplative materialism, including the one of Feuerbach.

The forms of consciousness appear to be equal to the forms of nature not as a result of contemplation, but as a result of being fold up as the forms of practical consciousness, consciousness, formed whilst the human practically transforms nature according to its own inner forms, recreates objective processes in the sphere of production.

Thus, consciousness appears to be an expression and reflection of nature to the extent it is recreated by activity of the social human, “humankind”, as Marx says.

With such a historical view on consciousness, it appears to be a reflection of objective material forms. At the same time, the complicated dialectics of the process resulting in this fact is revealed here.

The practical and purposeful alteration of nature, which in general is limited by the scope of recreation of natural processes in the sphere of social production, appears to be the real universal relation of the human to the outside world, in the fold of which and on the base of which consciousness develops itself.

Consciousness is understood as a moment of practical relation to nature, as a specific form of activity, subjugated in its development to practice as the universal form of activity. Labour and practice appear to be that universal relation that in limits of human society, surely, contains inside all the origins and ends, originates from itself and returns to itself, and represents that form of the universality, the infinity, which Hegel liked to illustrate as a circle. Consciousness in this sense does not represent such universal relation, but stands as a specific moment of humankind self-motion. Besides, it bears the universality within, reflects it in itself, appears to be the necessary moment, without which practice cannot occur as

human practice, cannot close in a circle, in the form of universality, self-motion, always pushing its limits and transforming every step forward to the basis of further, more intensive and expansive extension.

It is important to highlight this point. Vulgar materialistic interpretation of relation between practice and cognition metaphysically opposes these things and retains their abstract simple relation on the whole way of research, although they diffuse into each other and only in their dialectical unity constitute what Marxism calls practice.

Practice is not the alteration of nature. Practice is a purposeful alteration of nature. It means that practice always includes consciousness, which distinguishes the human act of will from instinctive labour-like forms of animal's activity.

Practice is always guided by consciousness, which poses certain purposes for the act of will. Human practice is understood only as a purposeful practice.

The pure physical side of the practical relation to nature, just the “alteration of nature” is not different from such activity of the animal. If understood abstractly and one-sidedly, this activity is not what Marxism understands as the notion of *human practice*, practice which stands in gnoseology as a basis of cognition and a criterion of truth.

In pure metaphysical, vulgar materialistic understanding human “practice” is interpreted just as “other” for theory, absolutely opposed as just an “alteration of nature” without further definitions.

This understanding is reduced after all to understanding of practice as an accidental, blind movement, and theory is reduced to a mere recorder of what was gained by “practice”. It is Bernstein's outlook which negates the meaning of purposeful activity of consciousness. Practice as a blind movement forward – is everything, the purpose as an understanding of activity's direction – is nothing for movement.

This view logically follows the understanding that considers theory, consciousness as something that starts the motion of practice only afterwards and not as an active,

sufficient component of practice and human activity itself regardless of the object it is aimed at.

And it is impossible to get rid of this understanding in a way, as it is commonly described, that even though the theory is a reflection, that means it is secondary, derivative of practice, but Marxism “does not deny the active role of theory”...

And this is not a solution of the problem, but an empirical constatation of a fact that remains inscrutable. The contradictory definitions are not derived from their mutual, coordinating basis.

It is absolutely true that any theory, any consciousness is secondary to the object, to the objective reality. But it is hard to say unreservedly about its relation to practice, to activity mediating the object and the consciousness, the objective reality and a theory about this objective reality.

With that understanding, practice in a meaning of simple alteration of nature, purely physical side of the human activity, in other words, taken in its abstract, one-sided form and consciousness, theory, purposeful thinking activity taken just as “reflection” are the two special forms of the human activity that stand beside each other, but actually their relation is much more complicated. “Practice” is not a special form of human activity along with conscious activity.

It is a special form that contains both the physical and mental side of labour in unity.

Here is a direct analogy with how Marx understands production in its relation to distribution, exchange and consumption.

Marx points out that the main flaw of the former political-economic theories was that all of them understand “production” only as a special form of the economic life that stands beside the others. Herein lies the metaphysical nature of understanding.

Marx shows that production should be taken not in its abstract one-sided form in which all its historical characteristics fade, being inevitably attributed to distribution and exchange in which they are observed, but it should be understood

as a universal form of economy, in other words, as a dialectical unity of “production” (in its one-sided form), distribution, exchange and consumption as, in the most general terms, “an individual assumption of the nature objects internally and by a certain social form”[5].

That means the general definition of production includes exchange inside the production, distribution, consumption, “production” in the abstract sense as a special disappearing, turning into each other moments of production in general.

It is a scientific notion, an understanding of production unlike that “first cursory view” due to which “production” is a process where “the members of society adjust (create, adapt the natural objects to human needs)” and the further product movement to the customer, to an individual ends with “exchange”, “distribution” that have completely historical character unlike “production”.

For Marx “the result that we got is that production, exchange and consumption are the same things, but all of them form the whole, the differences inside the unity” [6]. And further: “Thus, a *certain* [7] production specifies a certain distribution and exchange, *a certain relation of these different moments to each other*. Of course, the production *in its one-sided form* is defined by other moments... Different moments interact with each other. It happens in any organic whole” [8].

Here Marx makes the common methodological conception regarding universal and special, special as a moment of universal.

The relation of conscious, purposeful activity and physical fulfilment, pursuing a purpose is absolutely the same. Both these moments are the moments of human practice in its universal gnoseological meaning, as a purposeful alteration of natural objects.

“Alteration of nature” is simple which means that practice in its one-sided abstract form always remains the same (in the same meaning as “production” does not have historical characteristics itself). There is no direct way to derive historically certain forms of consciousness from it.

Practice understood as a *purposeful* alteration of nature acts as a universal relation between human and nature including consciousness as a moment. Practice in its one-sided form is sufficiently defined with a purpose that is set by consciousness.

This moment is absolutised in idealism. But *purposeful activity of consciousness* is not defined *by the object immediately*, even though consciousness is a reflection of the object. Herein lies a dialectical stumbling block in gnoseology that old materialism stumbled over.

The *purposeful* nature of consciousness is defined with “practice” again. But using this conclusion we got a point of view of “interaction”, if we continue keeping a notion of practice *as a blind* alteration of nature.

The purposeful activity of consciousness defines the direction of practice, but the object defines consciousness. That is true. But how do we get the fact that both “consciousness” and “practice” mutually defining each other every time have a historical nature?

If we insist on the *contemplation* point of view, in other words, if we believe that consciousness is defined immediately by the object, it remains unclear why at one stage of development consciousness sets certain purposes and at another stage the purposes are different.

If the object is accessible for consciousness and defines it in contemplation always in the same way (the old materialism could not think otherwise presuming that consciousness is immediately defined by the object given in contemplation), then the answer to the question why consciousness shows to practice a certain way of alteration in one epoch and a different way, a different purpose of practical usage in another epoch is moved to the sphere of pure cognition and is solved in this sphere. *The purpose* that is set for practice by consciousness, thinking fully depends on the level, the deepness of theoretical understanding of the object and absolutely does not depend on practice, that supposedly fulfils purposes, pre-made by the consciousness.

Therefore, we get a point of view that XVIII century French materialism had: practice is on its own and the object reflection is on its own, and *the purposeful*

*ability* of consciousness must be attributed to an immanent characteristic of consciousness and explained by *a deepness of theoretical thought*.

That is why the French in the XVIII century perceived as a pure coincidence the fact that one idea, theory or another appears in this certain epoch and not a thousand years before or after. For example, why only in the XVIII century did consciousness set a purpose to adjust state, legal and moral rules to the “natural” human needs and demands? Only because the consciousness did not reflect, did not cogitate “natural” in human beings earlier, even though it always had a possibility to do so, and it did not do so because the theoreticians did not consider the object well enough.

The deepness of the object understanding and consequently a purpose that is set by the consciousness for “practice”, in other words, for the activity of purpose objectification, was reached based on gnoseological opposition of the consciousness and the object. Herein lies the point of view of contemplative materialism.

And there is no movement beyond this limited, although materialistic, correct point of view, if we continue considering “practice” in its one-sided form, as a pure physical side of human activity, and not as a purposeful alteration of natural objects.

Both the physical side of labour and the activity of consciousness starts from practice in this universal meaning. In this meaning practice as a unity of this different moments originates “from itself” and “returns to itself,” in other words, it is a truly universal relation between the human and nature, the laws of mankind self-motion, the main essential law, with regard to which special and individual forms of human activity are its derivatives.

In this case we are interested in splitting practice into physical and mental labour. Both these main contradictions make up human practice only in their unity. Their isolation from each other is a historical fact that became the basis for the emergence of the idealistic concepts, on the one hand, and the vulgar materialistic ones, on the other hand.

Indeed, in the class society mental and physical labour are two spheres of the division of labour which distributes the individuals with the force of the objective law that does not depend on their will. The physical side of human activity increasingly separates from the mental one and the mental labour becomes a monopoly privilege of the ruling class and is performed by the narrow circle of the intellectuals, the theoreticians *ex professo*. This includes both science and art.

It is known that the idealism interprets this situation as a fact that is supposed to prove the extra-practical origins and value of theory and consciousness in general, as a fact that is supposed to prove that all human in the activity belongs to cognition, but the physical side of activity is a mutual quality of human and animal.

And there is a good reason in real forms of practice for that illusion.

Indeed, the spontaneous division of labour caused the situation where physical labour lost its human dignity and became the means of filling the needs that laid beyond the labour process and all the human definitions of activity accumulated in the sphere of the ruling classes becoming the monopoly of the intellectuals *ex professo*.

For the first time, using a theoretical analysis Marx revealed the fact that neither physical, nor mental labour in their isolation can constitute the so-called by philosophy “activity of humankind” and both of them are aloof forms of the activity of the social human, of our “kind”.

For the first time Marx discovered that these equally alienated, forcibly imposed forms of division of labour constitute the process of alteration of nature by the social human (which Marx called social practical activity, *practice*) only eventually, only as a result of the struggle, which sense remains unclear for its participants.

Practice splits into these opposites, that are real in the class society and are mutually determined, mutually reflected. Of course, each pole of the contradiction has the right to picture itself to be dominant, because indeed they reflect each other.

Idealism saw the essence of human in consciousness, in thought. Material practical activity was considered a mere slave of consciousness. It was thought that practice regarding an object just obediently pursues purposes produced by consciousness from within, from the pure spiritual force. Practice was understood as an activity of objectification of finished, consciously determined purposes.

Vulgar materialists such as Bernstein were the theorists for the other side of the contradiction.

This theory was confident that all new content is primarily extracted by “practice” in a blind, accidental way. Theoretical consciousness only captures retroactively what practice has already obtained. According to Bernstein’s theory, consciousness does not have any influence on practice at all, hence the slogan: “motion is everything, purpose is nothing”. This negates precisely the purposeful nature of human activity, that is, its conscious nature.

Consciousness, theory are unable to introduce into “practice” anything new, anything special that “practice” would not have achieved already.

This wretched concept, of course, represents the real situation in a one-sided and scanty way. In fact it is just a surface layer of the question about the relation between theory and practice in the era of antagonistic forms of division of labour. By transforming empirics directly into a “general gnoseological relation”, vulgar materialism naturally provides the gnoseological basis for bourgeois theories and conserves a transitory relationship. It doesn’t see that neither such “practice” nor such theory fit the Marxist notion of human activity, human social practice.

Thus, on the one side there is Hegel-type idealism that considers everything human concentrated in thinking and all other forms of activity to be derived from thought. On the other hand there is vulgar materialism, which believes that everything human is obtained by the blind spontaneous motion of “practice” and thinking can only be retrospective and is not able to play any role in the motion of practice. Both these positions are the theoretical expression of the real gap, which gives basis for the development of two sides of human practice in class society as it is understood by Marxism. These sides are physical and mental labour.

Marxism claims that these two sides of practice constitute its motion only in unity. Another issue is that this unity is carried out in different ways, in different forms throughout different epochs. But there is no doubt that human practice is impossible without consciousness, nor can consciousness do its work without practice, although some epochs make this truth extremely difficult to understand.

In capitalism, the worker's machine labour is dehumanized and really becomes no different from the activity of an animal. But this fact is complemented and conditioned by the other fact that all spiritual potentials of productive activity accumulate on the other pole.

It establishes the ground for the growing illusion that everything specifically human in labour is spiritual, and physical labour is the basis and prerequisite for intellectual work only in the sense that a certain number of people are now prevented from the need of spending all their time on the satisfaction of physical needs. Hence the illusion that human (i.e. spiritual) activity begins only where animal-like, material, practical activity ends; that the physical side of activity is something that is absolutely indifferent to theorizing and the content of consciousness just like composition of the air a theorist breathes, the cut of the theoretician's dress or the shape of his nose. Physical labour appears to be an extratemporal, extra-historical premise of theorization similar to the fact of the physical existence of a theorist. Interpreted so narrowly, physical labour, direct-material activity are surely not denied by anyone of the bourgeois ideologues as the "basis and precondition" of mental labour.

Neither Plato nor Aristotle denied it in that sense. Activity of a slave, a peasant serf, a proletarian has always been assumed as a necessary basis and precondition for theoretical, artistic and all other forms of "human" activity. But this precondition was understood extra-historically as indifferent to the content of mental activity, just like the shape of the nose and the cut of costume of a theorist are indifferent to the content of a theory.

Marxist understanding of the role of labour is different, not because labour is understood simply as the "foundation" for all other forms of activity, but because Marxism understands the *content*, forms and laws of social labour as the main content represented by other forms of activity in their own way.

Marxism is based on the premise that a contemplative theoretical approach to nature is not the first for the human to use. Therefore contemplation is not the first form of direct reflection of nature, which is determined only by the object. It is a derivative of the material practical approach to the object, which determines both the bare possibility of theoretical contemplation and the boundaries of such object contemplation.

It may be argued that the starry sky was fully opened to contemplation both for the ancient Greeks and for us, and that the starry sky contemplation of Aristotle and Democritus was not mediated by the slaves in any way.

This objection is based not on Marxist, but on the vulgar understanding of practice as the basis of knowledge, on the understanding that “practice” means no more than a material transformation of external forms of an object, but not a universal gnoseological category.

A purely material transformation of the external form of the object is, of course, included into the concept of *practice*, but the latter is not limited to it.

Even abstractly understood practice can be defined as determinant for Aristotle's contemplation of stars in the sense that it created for Aristotle the opportunity to develop his intellect freely and produced free time for the play of his spiritual potentials.

This side of things cannot be ignored as well. Slave labour really mediated nature and consciousness in the limited sense that it took over the menial work, freeing the intellect for the contemplation of things having nothing in common with objects of direct physical labour.

Labour was also a mediating link between nature and Aristotle's thought in the crucial sense that it created in its bosom the thinking as an ability that could then be turned to objects other than objects of labour.

Before mental labour could be separated from physical labour it had to be firstly created within labour itself. If you analyze the ancient ideas of celestial phenomena, it will turn out that the human saw more in the sky than the animal

saw to the extent she learned to change terrestrial objects. Namely, the sun, the moon etc. were treated as cups facing the earth or as fire. These are no metaphors, it is a representation taken inseparably from an object.

Talking about atoms is more complicated. There's more mediating links, but you can still point them out. This involves understanding of the fact that all objects given to a person are three-dimensional. They are shaped, moving, etc. These truly universal properties are extended into the depths of matter. The fact that the properties of an atom are limited by thought to this extent tells us about the weaknesses of speculation.

It is important to emphasize that the ability to think once formed within labour can be used far outside its boundaries, i.e. to operate those ideas whose universal truthfulness is proven by practically changeable objects being actually universal. It means that regarding objects which remained unchanged by the human (e.g. stars), humans were able to reflect universal properties of things: numerical, geometric, mechanical, etc.

If thinking turned out to be acquiring something *outside the narrowly understood practice* it did so only to the extent it learned to alter things in practice, i.e. its content was entirely determined by practice, by labour.

“Contemplation” gave Aristotle the same picture as Pithecanthropus. The same properties practically acquired in other objects are what is *beyond that*, what is *human*. These thoughts refer also to those objects that are being contemplated. “Human” in consciousness condenses in speech and thought.

That's how *labour* mediated the contemplation of nature with Aristotle's eyes and mind.

Further it becomes more and more complex. The categories embody the richness of practice. That's why it would be futile to find the genesis of any reasoning each time. But the thought always embodies those relationships that have found themselves as universal within the boundaries of practice. These are logical relationships, logical forms of laws, categories.

Let us draw conclusions from what has been said.

1. The physical, material side of activity of social humans is always only one side of practice, being the first to determine both the possibility and the reality of the mental, spiritual side of activity. However, if taken abstractly and one-sidedly, this practice is always socially determined for its part by the *purpose* that consciousness sets for it. Therefore, practice in its general understanding cannot be defined as the unity of the various sides — mental and physical, *as a purposeful alteration of nature*.
2. Only in this interpretation practice can be regarded as a universal simple gnoseological relation of humans to nature, as the basis of cognition and a criterion of truth, as a motion that originates unconditionally from itself and returns to itself.

The limited activity of altering and adapting the natural objects to the needs of social humans is complemented by determined *purposes*, i.e. by the determined *understanding* of the direction of this activity. And, on the contrary, a limited *understanding* of the objective properties of an object is complemented by its determined use, “alteration”.

3. The material and practical alteration of the object and the understanding of this alteration in the form of the activity purpose complement and mutually determine each other, but if taken independently and metaphysically opposed to each other, they do not explain the process of self-motion of humankind, of practice. Therefore, the question “where does the “new” appear first — in consciousness or in practice?” is devoid of scientific meaning, because the basis of this question implies that “practice” is incorrectly understood as an unspiritual, blind process of transformation of the external forms of an object, an imperceptive transformation, and not an alteration that pursues a specific purpose set by the human being, that is, each time more or less conscious alteration.
4. A vulgar, flat understanding of “practice” is therefore at a loss when the classics of Marxism apply the criterion of practice to such things that, generally speaking, we are not able to alter physically. For example, astronomical

observation does not fit into such a concept of “practice”, however, it was directly included by Lenin in the concept of practice.

There is no way to conclude from the above concept the fact that practice is not the absolute criterion. Lenin points out that practice confirms or disproves the theory not absolutely, but only to the extent that we set out to test it. And vice versa, the theory can only be considered as confirmed to the extent that it is verified by practice, and no more.

In Rutkevich’s book “Practice as a basis and criterion” it is correctly noted that “if people, guided by a certain theory, do not reach their purpose, it means that *either the theory is false*, or they have to look for *an error in those deviations from the theory* that were made “on the road” [9].

Practice as a criterion of truth in general fulfills its role only on condition that before we practically intervene in the objective process, we already have some kind of theoretical idea about it, and this is exactly what we set up to test. Our theoretical ideas were true and objective to the extent the results predicted before the practice, i.e. the theoretically determined purpose, meet the real result. But only to this extent, and no more. Even after testing, I will not know if there is anything else unknown to me in the object. Still, one thing I will know for sure: what I expected in theory and got in practice in reality objectively belongs to the object.

Of course, I can blindly stumble upon some new, theoretically unforeseen result of my intervention in the objective process. But having come across it, I will still know just as little about it as before. In order to understand the result I stumbled upon and to reproduce it *willingly* and purposefully, I have to build a theoretical idea of it and to check it again. Only if I have a true (or false) *idea* of the object, I can say that this object is *practically* acquired by me.

The practical acquisition of an object *involves* understanding; that is, it can be said that someone have acquired an object practically only if the expected result was achieved.

The dialectic of the object understanding, which is limited every time, on the one hand, and of the material activity produced on the basis of this understanding

which pursues a determined purpose, is a dialectic of equally different and at the same time identical opposites, in the form of which the process of human practice motions. Here practice should be understood as *a purposeful alteration of natural objects by the social human*. It should be necessarily purposeful.

Another aspect of it is that the purposeful nature of activity is ultimately determined by the material and practical needs, that the purpose is a conscious expression of the “need” and the tendency of the material process itself. But this comes only in the end.

A person has consciousness in the process of practice at each given moment; and precisely from the moment when human beings begin to pursue a purpose predetermined in their head, their activity acquires human dignity and specificity and becomes different from the activity of animals.

Another question is that a person, pursuing a determined purpose, achieves an unexpected, unforeseen result. It is particularly evident in the field of social relations.

This fact, according to Engels (see “The Part Played by Labour” [10]), only means that in this situation people still act like animals, that this fact is the fact of development, the stage of separation of the human from the realm of unconscious, accidental activity, the stage of the transition to the realm of freedom, to the realm and the world of humans, to the realm of domination over nature.

Simple transformation of nature, without further definitions, in its abstract form, is indeed a non-historical prerequisite of consciousness, common to us with animals.

The *human* alteration of nature, that is practice, begins only when the human alters nature *purposefully*, on the basis of cognition.

Cognition that indeed emerges on the basis of blind animal activity at the beginning, becomes, for its part, the *basis* of activity and therefore turns it into human activity.

When consciousness, even the most primitive one, emerges, it functions as an increment over animal activity, which makes this activity human, i.e. it becomes

the basis of human in activity, but does not remain derivative, secondary, coming into activity only retroactively, and therefore being indifferent to the activity itself.

On the contrary, by spiritualizing activity and setting a specific purpose for it, consciousness acts back on material activity and raises it to a higher level. This achieved stage again becomes the starting point of the further motion of both practice and consciousness. And every time the stage of practice achieved by consciousness is a product of again purposeful, conscious activity.

Therefore, consciousness, the purpose-setting activity, is always the inalienable moment of human activity, even in abstraction. As soon as we get abstracted from it, we get abstracted from human practice itself, returning to the moment when there is only animal activity, only the abstract possibility of consciousness and human activity. As such, the purposeful activity is indeed the *historical* basis of the cognition's motion, unlike the activity that is merely an extra-historical, abstract basis and the possibility of the emergence, but not the development of cognition.

Only practice in this understanding can serve as the initial concept of gnoseology. Gnoseology already takes the presence of consciousness, conscious nature of activity, as a given fact. Without this prerequisite, gnoseology actually loses the subject of research. That is, as a prerequisite we take the fact that the human begins the act of material and practical alteration of an object, already possessing some, albeit limited, albeit incorrect, but conscious idea of the purpose of the alteration, of the result that she hopes to obtain through activity.

The act of human intervention in the object leads to the contradiction of the real result with the expected one. A person is forced to change the initial, original idea as much as it does not coincide with the final contemplation. And vice versa, what coincides in the expected and real representation has the right to be considered objectively true.

If there is no initial, whatever primitive, idea of the expected result, of the purpose of practical activity, there will be no motion of cognition. Because in contemplation a person would only see the evident and individual in an object, with nothing to compare and juxtapose. The contradiction between the expected and the final idea of the object would disappear, and a person at any given moment

would be wholly determined by the empiricism, i.e. she would be passive, and her consciousness, devoid of contradiction, would be identical to the consciousness of the animal; that is, nature would be the master, and the human being would be its slave. The driving force of practice as an active relation towards nature would disappear — a relation in which the human being dominates over nature, albeit to a very limited extent at first.

In “The Part Played by Labour”, Engels addresses this particular relation. “All our domination over it [over nature] consists in the fact that we, *unlike all other creatures, are able to learn its laws and apply them correctly*” [11]. Therefore, the more *conscious* practice is and the more the human is able to foresee the consequences of her intervention in the objective course of things, the more different human practice is from the activity of the animal.

And to the extent that her consciousness does not capture all the consequences — say, the social consequences of the introduction of a new productive force — the human does not act freely and humanly, but is absolutely similar in this regard to the animal, on which nature falls upon as something alien and hostile.

That’s why Marx calls the class era the prehistory of mankind, i.e. such a stage when human beings have not yet completely separated and transitioned to the realm of humans, to the realm of freedom. This is only atavism, the remnant of non-human in the human being, the remnant of the animal that she has not yet managed to overcome in her development.

## Sources

[1] Engels F. Dialectics of Nature, P. 185.

[2] A Letter from Marx to Engels 25.03.1866 in book: Letters on “The Capital”, P. 141.

[3] Engels F. Dialectics of Nature, P. 184.

[4] Same source.

[5] Marx K. A Contribution to the Critique of Political Economy, P. 198.

[6] Marx K. A Contribution to the Critique of Political Economy, P. 212.

[7] Emphasis by Ilyenkov, the next one is by Marx.

[8] Same source.

[9] Rutkevich M. N. Practice is the Foundation of Knowledge and the Criterion of the Truth (1952), P. 145.

[10] Engels F. The Part played by Labour in the Transition from Ape to Man.

[11] Engels F. Dialectics of Nature, P. 143. Emphasis by Ilyenkov.