

Synthesizing Realism: Time to collect the Philosopher's Stones

The previous straight-line model of determinism did not allow the existence of individual objects in nature: the connection of any point in the world with all other points was supposed to provide instant and complete separation-leveling of any local deviation from the general equilibrium. Determinist philosophers were deprived of the formal right to argue about the properties of local separateness in nature, not to mention local autonomy. Due to the expanded interpretation of determinism (with the addition of the theory of ring or vortex determinism), sufficient ontological grounds for a balanced, devoid of large-scale fundamental distortions, consideration of various aspects of private existence, movement and development of *individual natural formations* appeared for the first time.

According to the experience of human observations, the world around us exists precisely in the form of a multitude of such separate, quasi-stable material formations scattered in space, developing in accordance with their own special internal laws and capable of entering into various kinds of interactions with each other. And philosophy has finally received formal ontological access to a detailed study of the world of individual objects in all their diversity. Therefore, this consideration, it should be emphasized, has not just some local-special meaning. Taking this into account, for the first time in the entire long-suffering history of philosophy, it finally becomes possible to begin the construction of a completely healthy comprehensive philosophical system aimed at representing the entire diversity of the content of human existence in all its actual completeness and adequacy, at synthesizing grains of constructive philosophical knowledge scattered over a multitude of sophisticated works. As the ancients said, "In a healthy body - a healthy mind". In our case, this means that only on the basis of the finally found healthy ontology, it became possible to create a healthy philosophy.

The author plans to begin the study of this world with the most common aspects for all natural formations, and then gradually move on to individual particulars, such as a living organism, an animal with instinct and thinking, a person and society, individual and social consciousness.

The principal advantage of the proposed approach should be recognized that we now do not need to fall into the extreme of subjectivism to explain various aspects of human activity and the fact of its relative autonomy, isolation from the outside world. On the other hand, there is no need to fall into the extreme of reductive materialism in order to recognize the objective existence of the external world and the fact of a certain representability-presentability of the real properties of the latter in the inner world of a person, the fact of a certain provocation of human experiences, perceptions and representations by events of the real world.

All of the above quite peacefully coexists and harmoniously intertwines within the framework of the proposed unified teaching aimed at the synthesis of constructive philosophical knowledge. Thus, this teaching, in addition to other advantages, which have already been mentioned and will be discussed later, provides purely practical convenience: the whole reality is placed without infringing and disfiguring distortions in one "bottle".

The adoption of the principle of vortex determinism allows us to talk quite reasonably about the relative autonomy of the existence, development and movement of individual material formations. We also now have the opportunity (and full formal right) to consider the question of the nuances of the relationship of these separate independent entities with each other and with

the rest of the world. At the same time, the entire complex of events occurring in our natural environment completely fits into the framework of the methodology accompanying this approach. Thus, for the first time, we have complete ontological grounds for a fundamental conversation about the problems of *private being of the individual material formations* composing this world.

It is important to note that the idea of mutual causal autonomy of a separate natural formation and the world external to it inevitably contributes to the emergence of ontological, and after it, globally philosophical parallelism. In fact, there are justified reasons to consider these two autonomous entities as independently developing components of one material world (something resembling the life of frames on a WEB page). It may be recalled that the elements of the corresponding methodology were developed at one time by F. J. Schelling.

There is also now every reason to agree with G. Spencer that the main task of philosophy is to create a synthesis of knowledge of the laws of the external world and the subjective existence of a person.

Every separate material formation is surrounded by other material formations and, due to its incomplete closeness, inevitably interacts with them and enters into exchange relations. The causal vortex sitting in the bowels of each object tries to spread its special determination outside, while receiving a certain response (passive or active resistance) and at the same time, it perceives the elements of determination from the outside - from external formations and their system aggregates of different levels, also passively or actively reacting to these elements. Thus, there are immanent internal and exchange external determinations. As a result, the superposition of the fields of internal and external determination leads to the fact that the development-movement-behavior of our individual formation at each moment of time is subject to the final result of their algebraic addition. Therefore, for example, it is sometimes so difficult to isolate internal and external, immanent and introduced, subjective and objective elements in the behavior of a particular person. In fact, we are talking about the private existence of a separate entity in the conditions of complex double determinism. The situation with two determinisms inevitably generates a bicausal picture of private existence-being, which requires the coordinated use of two different research methodologies, two parallel scientific disciplines for its correct interpretation. We are talking about something like Schelling's "parallelism" of natural philosophy and transcendental philosophy. In our case, it will be a parallelism of the private immanent being of a separate natural formation and the general being of the actual external natural environment. A separate object is the owner of a double being: being-in-itself and being-out. There are two special worlds here, a double parallel ontology.

A special case occurs when the material formation under consideration is included as an element, fragment or component in an aggregate system formation, in which its own special system vortex determinism operates. In this case, the development-movement-behavior of our education obeys the final superposition of *three fields: its own internal, general external and specific system*. For example, working in a team, a person is simultaneously forced to obey his own motives, specific rules of the team, and general external circumstances.

Among other things, one should be aware that in nature there are no absolutely unilateral effects of one formation on another. The influencing party always, in turn, experiences a reciprocal

(passive or active) influence from the object of its own influence, at least in the form of weak resistance, for example, through a demonstration of elasticity or friction. For this reason, knives and cutters, even from the hardest material, become blunt over time. So any of our arguments about unilateral influences are more or less crude model simplifications of the fundamental *situation of interaction*.

The Doctrine of Interaction

As soon as we have discovered the causal basis for the fact of the existence of individual material objects, the following question immediately arises – about the causal justification and a detailed description of the interaction between these individual objects. This should become the foundation for the formation of a healthy synthesizing philosophy, the basis for the construction of all further philosophical constructions.

If, in a situation of confrontation between the external and internal worlds, one takes the position and point of view of the objective external world, then a separate material formation can be represented, according to a well-known methodology, in the form of a "black box" with specific "inputs" and "outputs" and should be investigated according to the appropriate methodology.

If, in this situation, we take the position and point of view of a separate entity, in particular, a person with developed thinking, then the external world appears in the form of a continuum that is frightening with its infinite length and depth, in which it is only possible to find some *landmarks* nearby and more or less successfully place some *milestones*.

As a rule, in any act of interaction with external objects, not the entire object is involved, but only some separate area of it that is relevant only for this act. When two separate formations interact directly with each other (this type of interaction can be called binary), each side involves its own specific area in the act of contact. Together, these two contacting areas (plus, perhaps, a fragment of the environment or third bodies involved in the process) form a contact zone. For example, a person touches the ground with his feet when walking, grabs objects with his hands. Through the medium of the full sum of such contact zones, this separate entity carries out, if you look at it, its connection with the outside world. The rest of the natural formation remains closed to "external relations". This situation can be studied in detail using the concept of a relatively separate system. The impact on such a system from the rest of the Universe can be carried out, according to this concept, only through the "inputs" of the system, and its impact on the Universe - only through the "outputs" of the system.

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There is little evidence of the parallel coexistence of two worlds - external and internal. In the existence of any separate formation, one or another specific connection between these worlds is realized. Therefore, it is necessary to consider the problem of the relationship between these two worlds, the problem of transition from one world to another. In connection with the latter, there is a guess about the presence of a kind of "gateways" through which this transition and the broadcast of specific detections of the same events in two different worlds are carried out.

It is clear that the processes in the contact zone develop in strict accordance with the special properties of the regions involved in the contact zone. For an adequate interpretation of the situation, an unconditional account of these special properties is required. For example, when two bodies collide, the involved area of one of them has sufficient hardness, and the other has sufficient plasticity, the shape of the first is imprinted in the second.

The above is also true for a special situation when the human sensory system enters the contact zone. Its special properties to a certain extent determine the essence of sensory contact and its final results, which then form the basis of the act of cognition.

As we have already stated above, the vortex form of determinism provides in nature an element of stability, autonomy of the existence and development of individual entities. In the conditions of an external active or even aggressive environment, stability acquires the meaning of resistance to external influences. In inanimate nature, the latter manifests itself in the form of passive resistance, while in living nature it has the form of active resistance or avoidance of contact.

Stability can be both static, when education retains its structure, form, content, and system integrity, and dynamic, when education retains the parameters of its initial movement-development.

In the thermodynamic aspect, the vortex form of determinism ensures the emergence and existence of a *non-entropic factor* in the Universe, which, in fact, saves the Universe from the *thermodynamic death* that some theorists predicted.

It is worth noting that a certain stability is also characteristic of the areas of the surrounding world adjacent to this formation. This is especially true for living organisms that equip their living place and their habitat. But to an unsurpassed extent, this is characteristic of a person who has distinguished himself from the rest of the animal world by the ability to actively transform the external environment to suit his tasks and interests. At the same time, a person forms an *expanded system* with a cultured part of the adjacent external world, and his relationships with external entities included in this system are built on the principle of *direct and feedback*.

It should be emphasized that a detailed study of the category of interaction is especially important in the study of the process of *ensuring the vital activity* of organisms, the process of human development of the surrounding nature and the process of *cognition* of the latter. We will gradually approach these things, but for now our attention will be focused on the general properties of the interacting formations.

To begin with, we will focus our attention on the elementary case represented in nature - the **binary (between two) interaction**. More complex situations can be investigated later with the involvement of the superposition principle and with the transition to the methodology of systems theory. Here we will consider several simple cases of binary relationships, which reveal in sufficient detail the essence of the problem of interest to us. These are the cases:

- 1) A binary relation between two separate formations. Here, in particular, aspects of the relationship between a person and an object in his environment, interpersonal relationships are revealed;
- 2) The binary relationship between a separate entity and an integral complex-a system of entities. Here lies the key to an adequate identification of the nuances of the relationships of such entities as a person and the system of formations of the nearby external world that includes him, the individual and society. If we then take into account the entire total complex of the individual's relationships with all the various systemic social communities relevant to him, we will be able to adequately reflect all the richness of the shades of an individual's life in a real social environment;
- 3) Binary relation between integral complexes-systems of formations.

The famous Soviet scientist Rubinstein S. L. rightly noted: "The effect of any external influence depends not only on the body from which this influence comes, but also on the body that is exposed to this influence." In order to better understand the essence of this situation, it is useful to refer to such a means of the apparatus of scientific logic as Venn diagrams for the purpose of its visual imaginative representation. Below is a series of such diagrams illustrating the act of interaction between two entities.

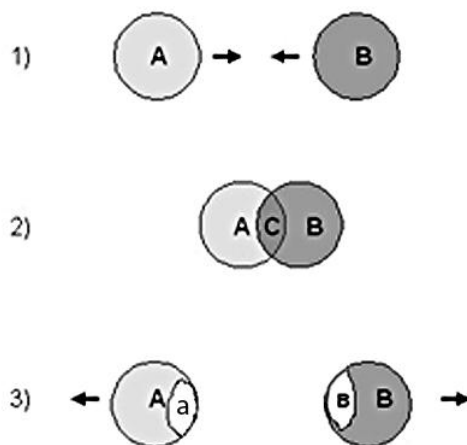


Fig. 1

In Fig. 1, two formations A and B are depicted in circles: 1) before the act of interaction; 2) during the act of interaction; 3) after the act of interaction.

It is shown here that the act of direct interaction is actually not entirely A and B, but their certain areas facing each other, which together form a **contact zone C** during the act of interaction. After the act of interaction, a **trace of contact (a and b)** remains in each of the formations.

Several important points that characterize the interaction situation clearly emerge from the diagram.

Firstly, the formations interact only through the medium of a special *contact zone*, in which, in fact, the main exchange of mutual influences takes place. This zone should become an object of close attention for philosophers, since the result itself, the effect of interaction, largely depends on its special properties-qualities. For example, if moving billiard balls act as formations, then the direction and speed of their further movement (after impact) depend very significantly on the choice of their point of contact. If it is a person and an object of cognition, it is important to take into account the ratio of the studied properties of the object and the corresponding capabilities of the human sensory organs in contact with it. If two people act in this capacity, then to assess the degree of consistency of their actions, it is important to take into account their potential for effective information exchange, in particular, the possibilities of their communication language (the subject of analytical philosophy).

Secondly, the trace remaining in each formation after the act of interaction cannot be recognized as the result of the unilateral influence of one formation on another. This is not a trace of an external body at all, but rather a *trace of an act of interaction*, and both sides take part in its formation. Thus, any trace has a *subjective and objective content*, internal and external components. It is impossible to isolate purely internal or purely external content in the trace. One can only guess about their presence and make indirect judgments. In this regard, the incorrectness of Lenin's "theory of reflection", which actually absolutizes the objective content of the trace, immediately becomes obvious.

If you slap a hammer on several objects made of different materials, the dent marks are also different: differences in the properties of materials play a role here. However, in the mass of these dents, you can guess the presence of something common to them all, invariant. This will be just a certain *objective content of the trace* that is related to the objective properties-the qualities of our hammer (in general, the formation that provokes the act of interaction and the appearance of this trace as a result). We repeat, it is impossible to identify this objective content in its pure form, but it is possible, by generalizing the totality of different traces, to form an *approximate indirect idea* of it. By comparing the traces of different objects left in the same material, it is also possible to indirectly conduct a comparative analysis of the objective properties of these objects.

The trace, by its nature, is an integral internal part of the undergoing body. Therefore, there are grounds to speak about the internal (subjective) nature (content) of the trace for the undergoing body. However, on the other hand, the fact of the birth of the trace and its form are *provoked* by the presence of an external object in the act of interaction. Participation in the act of interaction of an external object with other properties leads to the fact that an element of *qualitative novelty* appears in the final meeting. Thus, there is a mechanism for transferring a number of qualities from one body to another as a result of the exchange nature of the interaction. In general, the interaction can be accompanied by the exchange and transfer of matter, field, energy, momentum, form, information, which ensures the appearance of both qualitative and *quantitative novelty* elements in the trace.

The ratio of the scales A and a is a characteristic of stability-the variability of the private existence of this formation. The smaller the place in A is occupied by a , the more stable, inert

education is, less susceptible to external influence, more focused on internal immanent mechanisms of development-movement.

If the formation **A** came into contact with another formation **B** (for example, a measuring device) only with its own area **a**, then it is possible to make judgments based on the results of an indirect analysis of the trace **b** only about this area **a**, and not about all **A**, which did not participate in this contact with many other areas of its own, and therefore did not *manifest* them, as a whole remaining *unknown* for **B** (the measuring device and the research system). In this regard, in particular, we will have to agree in many respects with I. Kant, who has studied this situation quite deeply in relation to human cognition. And there are grounds to expand his teaching about the “thing-in-itself” and “phenomenon” from the situation of cognition to the general case of the *situation of interaction* of any formations, when the latter, according to Rubinstein's expression quoted above, “reflect” or “appear” to each other as their separate areas.

If **A** is a living organism, then **B** can be understood not only as any formation that has fallen into the field of vital activity of the organism, but also as a complete set of all formations that make up its actual external environment. In this case, the totality of all traces **b** can be interpreted as a characteristic of the *habitat* of this organism. If, in the same situation, we consider the full set of traces of **a** from interactions with the actual external environment, then it can be interpreted as a trace of the total impact of the environment, as the connection of the organism with the environment, as well as the initial basis for developing an arsenal of adaptive means—the qualities of the organism. In the case when such a living organism is a person, there are grounds to talk about the *cultivated environment* of his habitat and the basis for *cultivating the person himself*, as well as the basis for his *knowledge*. It should be emphasized that *cognition is based precisely on the study of the totality of traces from interactions with formations that make up the human environment*. It is important to understand here that before a new education (or a new side of an already known education) becomes an object of knowledge, a *person makes a decision* to consider the possibility of including it in his environment. In this regard, cognition is considered not as something separate and independent, but as an *integral component of the process of mastering (assimilating)* the actual part of the surrounding world by a person. At the same time, it loses the arbitrariness and carelessness attributed to it by frivolous philosophers, it becomes a component of the human life activity system.

This interpretation leads to the conclusion, confirmed by practice, that in fact knowledge is quite strictly *limited* by the scope of the task of mastering-assimilating, therefore it has the same vector of development and the same pragmatic human goals. Thus, the part of the mind responsible for the realization of cognition is given a well-deserved specific place in the structure of human existence in this formulation of the problem: not at its head, not apart from it, but in the depths of the mechanism for *mastering-developing new areas of the environment*. But we will talk about this in more detail in our next works, when we focus on what the doctrine of expanded determinism brings to the ideas of a living organism, a person, society and the mechanism of cognition.

This is an excerpt from the work:

Kalmykov R. B. *Aspekty chastnogo bytia avtonomnyh prirodnyh obrasovaniy*. Aspects of private existence of autonomous natural formations. / Library of Philosophy and Religion <http://filosofia.ru/76425/> in Russian at 11.09.2008.

You can get acquainted with the complex of works on vortex (ring) determinism and synthesizing realism in English here:

1. Ravil Kalmykov. Closed Circuit with a Circulating Causal Factor is the Creator of All the Phenomena of Self-Organization, Autopoiesis, Synergy, Emergence, Subjectivity and Independence.
https://www.researchgate.net/publication/353119462_Closed_Circuit_with_a_Circulating_Causal_Factor_is_the_Creator_of_All_the_Phenomena_of_Self-Organization_Autopoiesis_Synergy_Emergence_Subjectivity_and_Independence
2. Ravil Kalmykov. Sir Isaac Newton and the Three Laws of Determinism.
<https://www.gsjournal.net/Science-Journals/Research%20Papers/View/2419>
3. Ravil Kalmykov. Ring Determinism: Solving the Problems of Scientific Materialism.
<https://www.gsjournal.net/Science-Journals/Research%20Papers/View/2417>
4. Ravil Kalmykov. Polyhedral Monism as Inquest of a Ring Determinism.
<http://scipeople.ru/publication/102360/>
5. Ravil Kalmykov. About Free Will with System Accuracy.doc.
<http://scipeople.ru/publication/102361/>
6. Ravil Kalmykov. The Idea of God is not Topical Henceforth.
<http://scipeople.ru/publication/102362/>
7. Ravil Kalmykov. Anatomy of Freedom.
<http://cdn.scipeople.ru/materials/34032/ANATOMY%20OF%20FREEDOM.pdf>
8. Ravil Kalmykov. Ring Determinism and Science about a Person and His Knowledge
<http://scipeople.ru/publication/129514/>
9. Ravil Kalmykov. About the Mind-Body problem.
<http://cdn.scipeople.ru/materials/34032/About%20the%20Mind-Body%20problem.doc>

Other works on this topic are awaiting translation into English, in particular "On both sides of human Experience" and "The Systemic World of Consciousness".