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On Systematic Approach to the Concept of Form of Geological Objects

Philosophical category "form" combines two concepts - the forms of external and internal, the latter being often identified with the "structure" is an important concept in general systems theory. Along with the structure the external form serves as the main factor of system integrity. In some cases, the external form is ontologically strictly specified and acts as a kind of reality, distinct from both the systems and the environment. For example, it can be the basic forms of the landscape in relation to the space dual liquid and gaseous objects individually or form of igneous rock joint. In other cases, the form is also ontologically determined, but it is real in another sense as well - as the geometrical disconnection locus or the termination of the relationship between system elements. For example, it can be phase boundary within one and the same substance or the boundary between crystalline individuals. In the third case the form can be defined by words, symbols, and graphics. For example, this is the classification of mineral deposits on reserves.

When considering one of these mentioned forms two subtypes can be distinguished. First, it is - the shell, the nature of which is not just different from the substances contained in it, but also alien to it. Secondly - a special part of the substance itself, due to some properties or characteristics being isolated within itself the substance that acts as a limiting for its formation. Boundaries of geological bodies belong to this type of forms in most cases. In the first case, the shell has its own structure and external form, being as a rule not dependent on the substance constrained it; in this case, the shell is bounded by imposing their own form to the substance. In second case the form is entirely dependent on the intrinsic properties and the structure of a substance and it is its manifestation; here it is associated with it being a system attribute. This is a fundamental difference between the two types of external forms allowing us formulating the concept of a "body." From this perspective, the "body" can only be considered as a material which has an outer form of type 2. It is essential that the category of "bodies" with such approach does not cover just familiar geological features, but also living organisms, liquid drops in microgravity etc. In this case form, ensuring the integrity, remains inextricably linked to the body. Form violation "from the outside" causes the system response to the generalized principle of Le Chatelier-Brown.

The analysis shows that the role of external form, as a factor in the integrity of the system is currently undervalued, despite the fact that one of the elements of the exterior form - the border - is closely related to the procedures of classification, zoning, periodization, etc.