

The organization of the material systems in accordance with the objectual philosophy

The systemic organization principle (SOP) postulates that a MS generation with strictly ordered organization levels is included inside a finite¹ generating set. The lower limit of this generation (the systems with an unit analytic level) is given even by the free elements (which are non-coupled within systems) of the generating set, and the upper limit consists in the most complex system which can be included into the finite generating set. A first remark which needs to be made is that the generating set must be a finite one, because it must be an object itself, namely, to be ranged within a finite spatial domain.

Comment 1: A material object, for example, an universe, is finite even due to the fact that it is an object. Within this object with a finite spatial domain, all the subsystems which make-up the universe will be finite as well, and these subsystems are competing one another for reaching to this finite resource - the internal spatial domain occupied by the Universe. The NAMS generation, which is the only (abiotic) MS generation known by the mankind nowadays, is one of the elements of this universe, but the spatial domain owned by this generation is very limited as compared to the domain occupied by the universe. We can make a picture about the proportion of the spatial domain owned by the NAMS generation by taking into consideration a similar case: the domain occupied by the biosystems' generation as compared to the total domain of the support AB (our planet). Nowadays, it is well-known that the terrestrial biosphere occupies only a small part of the planet's peripheral media, a layer with a thickness of about ± 10 km as compared to the theoretical surface of the Earth with a radius of about 6400 km.

The first law of the formation of the natural MS states that the formation of some systems is possible only under favourable conditions of the environment (the reference medium, made-up from elements of the generating set, or from systems which were already formed with these elements). These conditions are:

1. Presence into the spatial formation area of a new MS of the elements required for its formation (elements of the immergent structural fluxes), in proper quantities and placed at short enough distances (sufficient concentration ratios);
2. Density of the energy fluxes found inside the medium to be less-valued than the density of the energy fluxes re-circulated between the elements of the system after its formation;
3. If the energy flux demand of a system element has an invariant spatial distribution which is also anisotropic against an elementary internal RS, the reference medium must allow the relative motions R and T of these elements during the synthesis stage of a new system (this latter condition exclude the S-type media as a reference medium).

MS organization, as well as the position held by the abstract systems placed outside the organisms (EAS) within this organization, is displayed in the figure 1, where we can see the organization levels of the systems generations according to the method used in chapter 1, in which the organization levels of the systems belonging to a structural chain are connected through the structural implication operator[\rightarrow].

It is worth noticing that each generation of systems is included into a specific medium type. As we have seen in the annex X.11 from *Introduction into the Objectual Philosophy*, the biosystems generation (BMS) has the water as a generating medium, a L_A -type species belonging to the set $\{NM\}$. At the same time, one of the organism media on Earth (the human social medium) was the source of the artificial material system generations (AMS), as well as the external abstract system generations (EAS), contained by the external ISS.

Comment 2: We have to specify that the artificial systems are not the exclusive privilege of the human community, being also generated by other species of OGM, such as corals, insects (termites, ants, bees etc.), as well as mammals and birds. But, we have to mention that the artificial systems generated by these OGM

¹ The *generation* term comes even from the term of *generating set* (defined in chapter 1), whose elements are the basis of all MS which make-up the systems generation.

species mostly belong to the first and second rank artificial RBS, whereas the artificial systems generated by the social human medium are much more varied.

The systemic organization principle (SOP) also states that the NAMS generation must have a generating medium, which we called it the *proximate fundamental medium* (PFM) with its synonym - *primary fundamental medium*), medium which in its turn, belongs to another generation of abiotic material systems, that is the primary abiotic material systems (PAMS). Similarly with the situation from the NAMS generation, where the natural media (NM), by means of spheroidal (isotropic) condensation give birth to the astronomical bodies (AB), and PFM, by means of the same spheroidal condensation can also produce gigantic astronomical bodies - the universes (UN) - which in their turn, can generate systems of universes (SU) and so on.

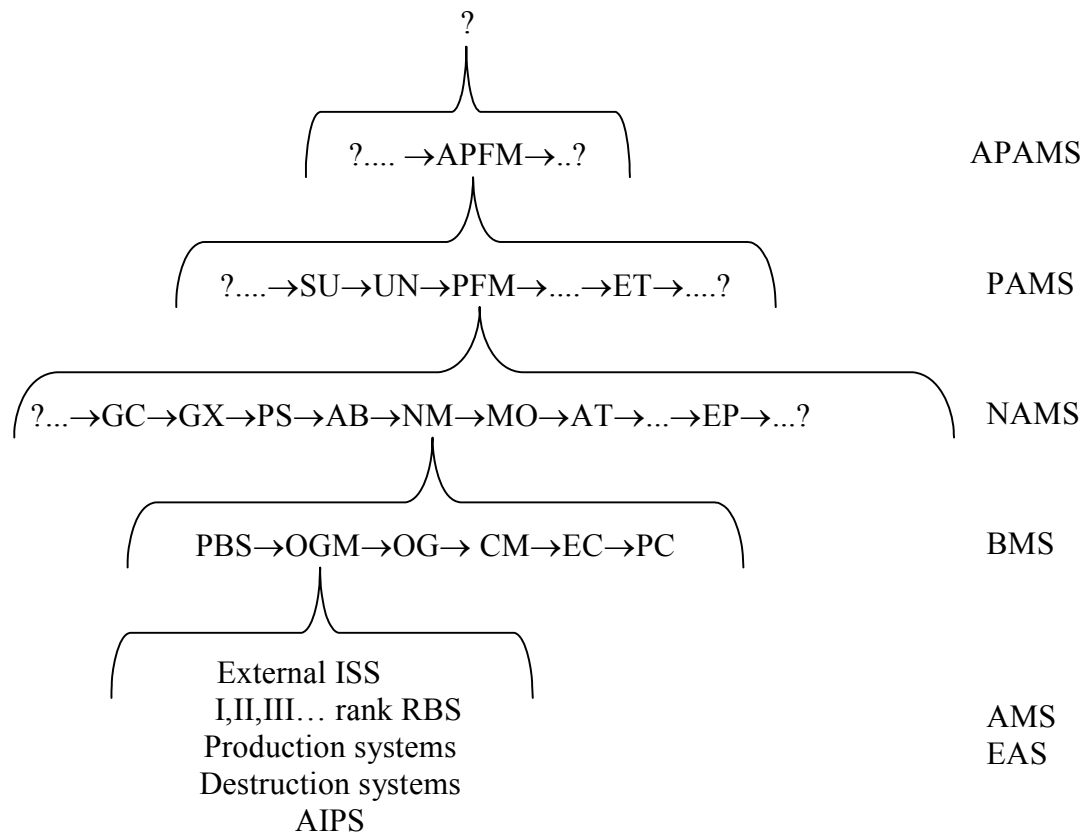


Fig. 1

We are reminding the abbreviations which were used, starting from the below section of the figure:

- EAS - external abstract systems contained by the external ISS
- AIPS - artificial information processing systems;
- AMS - artificial material systems;
- RBS - real bounding surfaces;
- BMS - biotic material systems;
- PBS - planetary biosphere;
- OGM - organism media (organism populations to which the human society belongs to);
- OG - organisms (the human being belongs to this class);

- CM - cellular media (tissues, bacteria);
- EC - eukaryotic cells;
- PC - prokaryotic cells;
- NAMS - natural abiotic material system generation;
- GC - galaxy clusters or media made-up from galaxies;
- GX - galaxies;
- PS - planetary systems;
- AB - astronomical bodies;
- NM - natural media;
- MO - molecule;
- AT - atoms;
- EP - electrical particles;
- PAMS - generation of proximate (or primary) abiotic material systems;
- PFM - proximate fundamental media;
- UN - universes;
- SU – systems of universes;
- ET - etherons, material systems components for the PFM formation;
- APAMS - generation of anteproximate abiotic material systems;
- APFM - anteproximate fundamental media;

The reader may notice by looking at the figure 1 that, according to the objectual philosophy, the generations of abiotic material systems are not ended at the NAMS level, but they keep going with other generations of material systems, whose existence will be confirmed or denied only by the future scientists.

Comment 3: Obviously, this organization form proposed by the objectual philosophy can be disputed (and maybe, it will be strongly disputed), because it contradicts most of the official science, starting from the cosmology up to the structure of the nuclear particles. Within the objectual philosophy, the main rule was that the real and safe information is only the one which is provided by the multiple experiments performed in many locations worldwide, and whose results were always the same. However, the interpretation of these results is always questionable, mainly because there is no free access to the primary results, but only to their interpretations, but these are deeply subjective and they may either contain errors or may be manipulative. As long as this situation exists, there is also the possibility that a certain group of interests to claim that they are right. The arrogance climax is represented even by a mass-media statement which claims that „there is no democracy in physics”, which obviously means that where there is no democracy, the dictatorship prevails.

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