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Ontology of the Virus

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Abstract:
The paper describes the mutual correlation between the complex systems and the simple ones through the prism of the micro based entities like viruses. The carbon based biochemical beings in their capacity of complex systems are in a constant coexistence with viruses representing the simplest biological system, which unintendedly may destroy their host. On the other hand, the digital viruses also operate in an environment, where they can spread causing the same consequences for the complex system they use as a host. The article explicitly shows what are the similarities between the two entities, which can cause the same ontological outcomes, although they belong to different evolutionary paradigms.

Keywords: System, Virus, Ontology, Self-Reflection, Evolution

Some of the adepts believing in the proposition that the meaning-bringing construct of our inner Self is actually hiding in its own intelligent manifestation and not so much within the expression of some kind of consciousness, obviously, do not take into account a very important postulate of dialectic logic, namely – that the infinitely enormous phenomena and the infinitely microscopic ones can in fact be organized in an identical way, which is equally successful and which makes them similar. What makes us to focus exactly on this type of logical construction is the fact that it involves only and only the reflection of the instrumental ("on hand") world on the way of thinking as well as on the reflection of the intelligent ability in general. For those like Yuval Harari[1] who doubt it that consciousness and its anthropic-oriented version – the self-consciousness – do exist, the above sounds like a fiction, but actually the reflection on the own intelligent ability is the most solid proof that the intelligent person proceeds to the condition of self-consciousness. The latest has the ability to reflect on itself as well as on the other minds, and on the self-reflective ability of the others as externalized towards the Self objects, which possess a cognitive subjectivity.

In this regard, the preconditioning for some universal cosmic self-reflecting informational network as a manifestation of the idea about the infinitely enormous self-reflecting entity could be transferred as well into the micro-world, which also has found a way to self-organize and distinguish itself from the otherness, with no need to transpose itself into the transcendent "reality" of information, but rather by meeting the instrumental definition of consciousness. Such microscopic biological units are viruses. The fact they possess a biological activity as well as they manage somehow to reproduce, without being able to do this intentionally, makes them no less interesting from the point of view of the transhuman Universe, which is being evolutionary routed with the predetermined inevitability by all those, who claim that the intelligence is possible with no availability of consciousness (self-consciousness). Having in mind that the biological

[1] See, Harari, Y. N., Homo Deus: A Brief History of Tomorrow, Harper Ed., 2017

virus can replicate in a certain carbon environment, while the digital one can do the same but within a silicon medium, and also not forgetting that their activity is deprived from intentionality, except if the collateral effect of their activity – namely the destruction of their host – can be admitted as a kind of foretaken intent, we could make a conclusion that according to the transhuman ontology both entities do possess an intelligence, even it is characterized with a very low level of both self-organisation and interaction with the others of its kind. Thus, we wonder if the effect of its existence (no matter which kind of viruses we refer to) does not rang much higher in the intelligible hierarchy of the informational matrix as its capability to destroy other very large self-organized units within itself could be perceived as much more solid manifestation of consciousness from the effectiveness point of view which is the meaningful pillar of each system.

The strong affecting power of the virus – from both contagious and virulent point of view – shapes a new value for the being within the informational matrix. This ability, without being determined by a special causality, assigns a new system category, which deduces the counterproductivity as an antipode of the self-organisation within a system of higher state. With other words, the fact, that even the most perfectly organized causal system can easily become an object of rapid destruction by a not so capable for self-organising entity, which indeed "knows" where and how to strike and destroy the perfect at first glance system, means, that by the nature of its expression, both consciousness and intelligence are not phaenomena, which could mutually exclude or confirm themselves, and that only their cumulative being can guarantee the sustainability of a biological or an informational system. And since mind is the entity, which secures the integrity of the intelligence, we can surely claim, that not even the highly mutagenic virus or the extremely developed intelligent informational system are possible and self-sufficient without the solder, called "mind".

Having in mind the genetic sequencing of the virus, proliferating in carbon environment, we know that it depletes its living horizon by reaching of a certain consistention in the medium, where it spreads out. This is a fact not only by biological, but also by economic systems as well. It means that the principal of evolution, manifested even in its primordial and immediate effect – the mutation of the virus – is routed in each system. The only blurred moment here is related to the concept "routed", which brings about the question who routed it? The answer, which metaphysics gives is simple – the creator. Moreover, who is the creator is not so much a metaphysics related question from the causality point of view. The conclusion we could draw up from the above is that the simpler is a system, the easier it evolves and the easier it survives. While the more complicated it is, the harder it changes and the easier it can collapse. We can find examples about this statement not only by biological systems, but also even by the most sophisticated public institutions. Roman Empire e.g. collapses just when its level of self-organization is at supreme level and it comprises of extremely huge number of subsystems, which more and more fail to synchronize with the initial overall organizational paradigm. Thus, this complexity slows down and impedes its reactive function, which allows to the barbarian virus to take it over and destroy it by attacking each of empire's subsystems, which by itself consequently will destroy the whole structure, not having this initially as a purpose. At the end of its existence, the Roman Empire produces an enormous quantity of information and conceptual terminology from the contemporary point of view, but it dies because it misses the tenable integrity of the whole, which philosophers could name "a spirit".

In connection with the point previously mentioned, each informationally based system, claiming for self-sufficiency, could not exist if it misses the element of self-reflection. The latest assures the proactivity in the world-observing situation as well as the opportunity for a successful probable forecasting of relevant being-oriented scenarios. The more proactive is the system, the rarer it needs to act reactively.

It is highly likely, that the virus, in its capacity of a simply structured system, is not aware what ontological algorithms it is taking part of, but this does not mean that having in mind the previous, its effectiveness would have been diminished. It means indeed, that its activity can and must be predicted by each more complicated system, even if the virus has no idea about the entire masterplan, which embraces it.

However, here it goes the big question – why does the evolutionary process exist and what is its ultimate purpose? According to Charles Darwin, each biochemical structure is eager to evolve, which is also being confirmed by the theory of systems. In addition, why then the evolution, as well as the revolution, eat their children? Why is it necessary the evolution's product to eliminate its premise? These questions will be a subject of further clarification in some of our other papers, while here we will try to shed some light on the question how the complex and clumsy systems do comprehend the existence of the flexible and simple self-organizing structures like viruses, e.g.

Each complex system aims to a higher state of organisation[1] in order to enhance its effectiveness and to eliminate the challenges for its security. The effectiveness of complex systems by itself does not so often depend on its protective capabilities, if we admit that the system is self-sufficient. An example for such a system could be the Universe or God. However, in the imperfect from the entropic point of view world, where people live, no system is self-sufficient in the thermodynamic meaning. This is valid even for informational systems, which normally do not fall at such a great extend into a multisource dependability. Having in mind the latest, the security threads, which above all the simply organized systems can create for more complicated ones, often could be ignored from the perspective about the limited damages, which they can cause. When the simple system though is capable for relatively long period to limit the effectiveness of a more complicated one, the more complex system can lose the race with some other similarly complex one and thus it will collapse. This biological principal is being observed by the public systems too, where the level of entropy is so high, that the energy needed for their further perfection, exceeds their own resource for production of energy. In such cases, absolutely in a logical manner, such systems collapse. That is why it is so important the security threads, coming from systems with simpler informational matrix to be timely identified as well as a relevant counterstrike to be addressed their way. If such counteraction is inadequate or insufficient, the entropy level within the complex system will further accelerate, while the unhealthy energy outlay will increase. These two factors significantly enhance the probability for a collapse of the complex system. Good news is, that when/if the complex system collapses, its remains will, according to the principle of energy conservation, comparatively quickly self-organise in a multitude of simpler but more stable systems, which however very easily could be dominated and consequently acquired by other more complexly organized proactive systems. In a thermodynamic meaning, the informational matrix, which pretends for self-sufficiency, will again be stable, but the smaller and the simpler systems, which still possess comparatively high level of self-reflection, inherited by their

[1] See, Bohm, D., Thought as a System, Routledge, 2004

residence within the previous complex system, would have fall into a state of frustration by their own Self. Moreover, when the affair in question is about feelings, among which undoubtedly lies the frustration; it appears they dominate above the ordinary intellectual stability of the system, which due to its simplicity is with a reduced level of self-reflectiveness. Thus, the simpler structured systems are pushed to the choice between the conservation of their relative thermodynamic stability in their current condition – rejecting the complications related to self-reflection – and the attempt again to transcend into a higher state of organisation, which surely is much more difficult, because it requires more energy to otherwise retain the stalking entropy.

Most of the simpler systems prefer to conserve or even further, gradually to decrease the level of their complexity as well as to reduce the energy outlay having in mind their short-term horizon of existence. Other such systems though choose to complicate their subsystems, taking the chance of a brief energy shortage in the name of a long-term higher state of self-organisation. And if the first hypothesis inevitably leads the systems (in the stellar meaning) to the fate of every star belonging to a lower spectral type, the second one at least provides the opportunity the system to be perceived as a supergiant.

In the due course of thoughts, it appears it is much more appropriate from thermodynamic perspective a complexly organized system never to allow reactive actions in regard to its essence and as a whole – never to allow a transition to a lower state, because the energy it will need to maintain its complex and continuously complicating status will always be less, even if it is significant, versus the one, which such a system might need in order to restore its more complicated condition, if the very system has already allowed a downgrade to a much more simple paradigm.

Thus, since the virus e.g., has not succeeded to transform itself into a more complex system during the millions of evolutionary years, in spite its multiple mutations, it does not need to worry about the omission of its historical biological chances to accumulate and invest the acquired during its living horizon energy. Only if we could imagine what it would be a self-organizing, volitional and intentionally defined intelligent virus the hair of our Homo sapient being bristles up. Having in mind that the history of evolution misses the First Conditional, we only could contently rub our hands that such a life form has not endangered up until now the complex biochemical system of Homo sapiens and his intentional informational networks. Would it be so by viruses, which threaten posthumans though – it is about for us to find out?

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