On the Information and Communicative Bases of the Coronavirus Pandemic

V. A. Zhebit*

All-Russian Institute for Scientific and Technical Information, Russian Academy of Sciences, Moscow, Russia

**e-mail: zhebit@rambler.ru*

Received October 19, 2021

Abstract—The concept of the information and communication nature of the COVID-19 virus is presented, based on the results of research conducted by the author in the field of social communication. Some provisions of the author's theory of information viruses and their ability to influence the human body and large masses of the population are considered. It is proposed to consider the mechanism of the influence of coronavirus on the population as intersystem communication of the resonant field type.

Keywords: COVID-19, pandemic, coronavirus, infovirus, information, communicative, systemic mind, society, vaccination, information ecology, information virology

DOI: 10.3103/S0147688221040122

THE RIDDLE OF THE PANDEMIC AND REJECTING STEREOTYPES

The world community is completing the stage of Hegel's antithesis, which personifies the rejection of the previously dominant paradigms and systems of analysis (thesis). The development of technologies has reached the level where not only the transition to new socio-economic relations is required, but also the need to build new worldview foundations (synthesis).

The emerging digital society has entered into a deep contradiction not only with the capitalist mode of production and market relations, but also with moral and ethical norms. This is evidenced by a series of economic and financial crises, the collapse of the usual social and economic models, the destruction of the institution of the family, and the spiritual degradation of capitalist society.

Civilization has come to a critical point, called a bifurcation point, the point of cardinal changes, which will be followed by a new scenario for further development [1]. The peculiarity of the moment lies in the fact that the future scenario, one of several possible and impossible ones, is unpredictable and its choice may depend, at times, on the most unexpected factor [2].

The COVID-19 virus can be considered one of these factors that appeared as if it were the result of some otherworldly intervention. Its revealed features were expressed in the fact that the outbreak of a pandemic covered all countries and continents and, in addition to the densely populated regions of the planet, the disease struck even practically unpopulated areas of the Arctic Polar Region and Antarctica. None

of the historically known biological viruses¹ reached such a scale of expansion. The COVID-19 pandemic forced the suspension of the work of organizations and enterprises in the vast majority of countries, affected the state of world markets, led to huge losses of capital and, importantly, aggravated relations in world politics.

The prevailing views to this day about the almost complete understanding of the nature of viral infections and the technological readiness of mankind to confront epidemics can be shaken by the research results that have discovered unexpected properties of pandemics and new aspects of their interactions with humans and society. One of the main mysteries of the coronavirus pandemic is the absence of logically expected positive correlations between the incidence and vaccination of the population. The quantitative growth of the population covered by vaccinations practically does not affect the dynamics of morbidity and mortality; the process develops according to some other pattern (Fig. 1).

There are attempts to explain this by a mutation of the virus, according to which each new mutation starts a new cycle of propagation and requires new vaccination measures. However, this explanation only leads to quantitative solutions based on old approaches and raises new questions.

The manifested features of the coronavirus pandemic force us to reconsider the existing ideas about

¹ Viruses (lat. *virus* poison), non-cellular life forms with their own genome and capable of reproduction only in the cells of more highly organized creatures. *Bol'shaya meditsinskaya entsiklopediya* [3].

Fig. 1. Summary data on the dynamics of incidence and vaccination from COVID-19 in the world, by week, on the morning of September 5, 2021, obtained from Johns Hopkins University (data used by the World Health Organization). Published on the website of the newspaper *Kommersant*. The upper diagram shows data on the dynamics of morbidity, the middle diagram, on the dynamics of mortality, the bottom diagram, on the dynamics of vaccination.

herd immunity, a phenomenon, based on which medicine has always been able to build forecasts of the dynamics of pandemics and calculate costs and human losses.

There is one important addition to the above. In some of the existing definitions of the concept of virus, there is an indication that the target function of all viruses is expansion. However, it should be noted that COVID-19 appears exactly at the moment when humanity is faced with the need for drastic changes on a noospheric scale, which means that the coronavirus can be that natural agent that is designed to influence the choice of a scenario for the further development of civilization.

At the Far Eastern Branch, Russian Academy of Sciences, V.I. Vernadsky called for treating the planet as a living system, and a living organism, as one knows, is able to defend its integrity, including by influencing the sources of threats [4–6]. It's no secret that such a threat is posed by human civilization with its aspiration for unlimited consumption and inability to self-restrain.

THE NATURE OF COMPUTER VIRUSES DISCOVERED THROUGH COMMUNICATION OF NUMBERS AND DIGIT

The big picture of the 2020–2021 pandemic resembles a war with variable success of the belligerents,

where each of them continuously introduces new reserves. All this indicates that the usual scientific approaches and previous experience have remained in the past and the humanity of the digitalization era will have to move on to rethinking the usual dogmas, which can be facilitated by a new look at the nature of computer viruses.²

For a long period of time, the scientific world has been trying, but cannot come to a consensus in search of the line that separates the material world from the immaterial.

With the advent of the era of electronic computers, people started talking seriously about computer programs as representatives of the information and digital world and about their ability to influence a person. The emergence of computer viruses gave rise to an understanding that the cyberspace of interaction between computer programs is the meeting place of the material and nonmaterial worlds. It should be understood that in discussions about such programs we are not talking about a symbolic record that the programmer maintains, but about some information (or rather energy) entity that appears as a result of

² Computer viruses, a type of malware that can be introduced into the code of other programs, system memory areas, and boot sectors and distribute copies of itself through various communication channels. The main purpose of the virus is to spread it. *Wikipedia*.

writing a program and which begins to live an independent life in intangible digital spaces, periodically entering into interactions with the surrounding material world.

The nonobviousness of this phenomenon requires a deep restructuring of thinking and rejection of stereotypes and dogmas imposed by the old materialistic paradigm. The first step towards this can be an understanding of the difference between the concepts of number and digit, according to which digit is only an information image in the material world of some intangible entity, number. Number can be expressed in different numerals, Arabic, Latin, Chinese, but its essence is the same and unchanged.

Any object in the material world can be considered a system, and, therefore, obeying the laws of systems. Any system, especially a complex one, is capable of information interaction with surrounding systems, and is capable of changing its state, adjusting to changing conditions in order to preserve its homeostasis [7]. These abilities are usually attributed to the properties of system mentality, which suggests that different systems have signs of specific intelligence of different levels. Entities arising as a result of the appearance of programs compiled by a programmer also possess such intelligence. In this sense, every programmer, like any other person operating with numbers, letters, geometric elements, is the creator and constructor of characters in the intangible world. Recording on an information medium or a mental representation of an object is the toolkit with which a person realizes himself as a creator of small material and nonmaterial worlds.

HUMAN INFOVIRUSES AS AN ANALOG OF COMPUTER VIRUSES

The assumptions about the existence of nonmaterial information entities were confirmed by the results of experiments related to the properties of the human subconscious. The author, who took part in such experiments, had the opportunity to verify the existence of programs similar to computer ones, but operating in the information space of a person. In his publications, the author interpreted the concept of infovirus (information virus) as a special information organism, reminiscent of a biological virus, but existing in the conditional information space of a person, using human energy and having varieties, depending on its program content [8].

In the early 2000s, in his *Teoriya kommunikatsii. Nelineinaya kommunikatsiya*, the author explained the mechanism of the emergence of infoviruses in this way.

A word or phrase, getting into a person at the conscious or subconscious levels, is included in the person's information system and begins to live as a special information being, an infovirus. It has the ability to be transmitted from organism to organism, i.e., be "infectious," and to

multiply and mutate, depending on external circumstances. It is known that such properties are possessed by software viruses that infect computers. It is assumed that a significant number of today's human diseases are caused by deviations in the work of the body as a result of infection. The human infovirus has a pronounced programming character; therefore, the consequences of its impact are psychosomatic diseases and mental deviations [2].

It should be noted that under infoviruses analysts often mean some kind of false idea, introduced into the individual or mass consciousness for the purpose of manipulation, and at the same time use this concept exclusively in a negative sense.

In human thinking, two components can be identified, thinking of the analytical (logical) type and thinking of the reflexive (reactive) type. It remains to be determined whether these components have a connection with specific physical organs, one can only conclude that these two systems of thought behave like two different personalities. It can be assumed that one of them has great analytical abilities and a low speed of action, the second has a lack of analytical abilities, but a high speed of making operational decisions based on software templates [9].

The mechanism of analytical thinking involves the processing of incoming information, comparing it with the reference, and the systematizing and summarizing of it in information data banks. The conclusions drawn from the analytical actions are used to carry out the corresponding actions. A person's analytical thinking accompanies all his actions and, possibly, participates in the regulation of his life support systems.

Reflexive thinking also has its own data banks and is also capable of controlling the organism and behavior of its carrier. It is designed for management in critical situations requiring immediate action, especially when it is vital. Reflexive thinking is not designed for analytical work that takes time; it develops commands based on an arsenal of ready-made solutions.

This type of thinking is often used in ordinary situations that do not require prompt action. However, in such cases, the commands generated can be perceived as the result of thinking aberrations. In human society, the presence of reflexive thinking in ordinary situations is a measure of the "adequacy" of a person, sometimes entailing certain consequences.

Consideration of the functions of analytical and reflexive thinking in dynamics allows one to obtain answers to questions related to the nature of information viruses.

With powerful physical or psychological influences, the body experiences a painful shock, as a result of which analytical thinking with its information data banks is turned off, thus forming certain "gaps." Simultaneously, the reception of information includes

Fig. 2. The scheme of human exposure to an object through a virus program [10].

Fig. 3. The scheme of human perception and impact on an object through virus programs [10].

Fig. 4. The communication scheme with the participation of virus programs [10].

reflexive thinking with its own information banks of templates. During this period, information enters only the memory space of reflexive thinking and does not enter the space of disconnected logical thinking.

Recording information by reflexive thinking is fundamentally different from recording by analytical thinking; in the space of reflexive thinking, parts of this information in the form of keywords or phrases become infoviruses that begin to exist as a special information being. Having penetrated into the information system of the organism, the infovirus lives in it, maintaining its existence due to the energy of its carrier. From this moment, in appropriate situations, the infovirus will work as a program command, and the strength of this command will increase with the frequency of use [9].

Since during reflexive thinking a word or phrase becomes an infovirus, the vocabulary of the incoming information is of particular importance, since reflexive thinking perceives commands literally, “as it hears.” For humans, this is the main danger from infoviruses, which can activate and control a person during periods of physical pain, fear, or mental stress.

In these states, a person has a disabled ability for analytical functions, he acts reactively and is open to the penetration of viral commands and programs. For this reason, an important role is played by the nature of the information background.

INFOVIRUS PROGRAMS AS A SUBJECT OF COMMUNICATION

Multiple virus programs present in the human information system play an important role in his life. They can be an intermediary involved in a communication interaction. Figure 2 shows a diagram of person–object communication.

A person can perceive information about an object quite close to the objective, but influence this object under the influence of virus programs, depending on their content.

Schemes are widespread when both perception and impact on an object are influenced by virus programs. In this case, the programs play the role of a communicative mediator (Fig. 3).

In such schemes, a person accepts information about an object distorted by the program and, depending on the content of the virus program, inadequately affects this object.

In person–person communication schemes the mechanism of interaction becomes more complex, since communication from both sides involves sets of virus programs, sometimes greatly complicating the results of this process (Fig. 4).

It should be recalled that virus programs are activated under certain conditions, each with its own; therefore, the presented schemes (see Figs. 2–4) reflect cases when at least one program from the available set is activated.

INFOVIRUSES IN THE SOCIAL SPACE AND MASS CONSCIOUSNESS

Studies of the regularities of the existence of large social groups and masses of the population have a long history; however, only analysis and assessment from the position of informatics made it possible to make an assumption about the existence of social information viruses targeted at large masses of the population. A number of eminent social psychologists have recognized that the manifestation of the laws of the crowd, mass psychosis, the phenomenon when an idea takes possession of the masses is the result of mass infection, which is a special type of communication. After the nature of computer viruses became known, these phenomena with due confidence can be attributed to the actions of social infoviruses.

Social infoviruses can stay in a dormant state and be activated under certain conditions. The initiator for the activation of a social infovirus can be verbal or visual information, mass media, calls from politicians,

stress, or the behavior of any individual person. Public and political figures, even when unaware of the existence of infoviruses, are well versed in audience management techniques that cause certain emotional states of the participants. Such techniques are capable of activating certain infoviruses and forcing people to think and act according to their dictation [9, 10].

If a person is put into conditions that initiate the inclusion of certain virus commands, then he can become dependent on them for a long time. It is no secret that in many countries special services have long been developing and applying programming technologies using infoviruses. Removing infoviruses (deprogramming) of a person is not an easy task, even for specialists. It is almost impossible to completely eliminate the multitude of virus programs accumulated naturally over many years.

The most accessible way to solve this problem is to create conditions for neutralizing infoviruses, in which they can exist in an inactivated state, without affecting people, these are conditions of social comfort, implying high living standards, social stability of society, and the absence of external stimulating influences.

There is one key principle to keep in mind: a person's free will exists only until the virus program is activated, after which the person either obeys it, or resists by volitional suppression, or creates a counter-program that energetically surpasses the virus [9, 10].

Society lives according to the laws congruent with the laws of the existence of the human body, which should be understood almost literally. Society, like the human body, has both logical and reflexive thinking. The state organism is governed by a political elite that unites politicians and intellectuals who personify the organ of logical thinking. The historical experience of the state and the universe of knowledge of all mankind, on the basis of which the elite controls the life of society, act as information data banks.

The state organism also possesses reflex thinking, personifying the influence of social groups, adherents of reactionary ideas and destructive methods of achieving goals, using the negative experience of the past. Therefore, the nature of government decisions depends on whether representatives of these groups are present in the ruling elite or whether some members of the ruling elite have destructive intentions. With this in mind, another principle should be formulated: state intelligence depends on the peculiarities of thinking of its carriers.

In historical examples of the existence of large states, one can notice an important pattern, which is that at the most important moments of radical changes (bifurcation points), even the appearance of an insignificant factor, for example, a minor event, or a previously little-known political figure or spiritual leader are a powerful process of social and spiritual transformation of society.

INFOVIRUSES AS CATALYSTS OF PHYSICAL DISORDERS

It did not take long for the suspicion to appear that bacterial and viral pathogens are capable of causing diseases only with the participation of infoviruses. This suspicion was supported by the fact that people living far from society, fairly free from infoviruses, are less susceptible to disease. If we consider this problem from the position of predisposition, it is clear that in ordinary people diseases are associated with the level of the social mood, the lower it is, the higher the incidence of disease is. It is known that during periods of social adversity, when the general level of social mood of the population is low, various diseases, sometimes long forgotten, begin to attack.

It is believed that most childhood diseases are associated with the need for early development of immunity. However, there is a concept that the majority of childhood illnesses follow the mental stress experienced by children in large numbers. Stress can serve as activators of some of the infoviruses initially present in the child. As a result of their influence on the body, the child becomes a victim of any of the bacterial or viral pathogens that come along. If the action of the infovirus does not stop, then the disease can take on more severe and chronic forms. Thus, childhood illness can be mild or severe, depending on the presence or absence of infovirus accompaniment.

In accordance with this concept, it can be assumed that childhood illnesses in themselves are quite mild and can only be complicated by the experienced stresses that infoviruses awaken.

It should be noted that discrepancies in the medical community regarding the problems of predisposition and development of diseases can obtain quite specific versions if we consider them from the point of view of the theory of infoviruses [8].

An infovirus introduced from the outside acts according to a certain algorithm in the environment of the human body. It forces the body to prepare for behavior that matches the program content or command. When a factor that activates an infovirus appears, the body begins to act in accordance with the command and can induce a disease in itself, which can become chronic. A common cold begins to show its symptoms when cold and dampness activates the infovirus, which sends a command to the body about the cold. As a result, the body activates protective functions, including the secretion of sputum, and mobilization of immunity.

Social infoviruses begin to attack society in painful moments arising from political, economic, environmental, or military causes. Since the destructive ideas that take possession of society are infoviruses, the ease with which they are able to take the form of epidemics during periods when ideas take possession of the masses becomes understandable.

THE SYMBIOTIC MECHANISM OF CORONAVIRUS EXPANSION IN SOCIETY

Today, it can already be stated that COVID-19 played the role of a catalyst for change for which it may have appeared. We can conclude that the coronavirus, as a part of nature, has shown itself as an active subject, a natural agent of social change. This may indicate its close connection with social processes, more precisely, with their information essence, and this is possible only if the information structures of the multiplied virus and human society are compatible.

The COVID-19 virus and its derivatives are essentially a bioinformation creature that combines the characteristics of biological and information organisms, capable of existing according to the laws of information systems. The following target functions can be distinguished as the essence of the coronavirus software:

- expansion on a planetary scale;
- depopulation of humanity on a planetary scale;
- reduction of the anthropogenic load on the planet's noosphere through depopulation;
- profound social changes to reduce anthropogenic pressure.

The interaction of the coronavirus with society is based on resonant-field communication, which makes it possible to use the "friend or foe," identification mechanism, which can explain the selective nature of the action of this pathogen on the population. This is the clue to the phenomenon in which the population was divided into two categories, those who feel the danger of coronavirus and those who do not feel it, those who get sick and those who are not affected by the disease, those who die and those who do not, those who are recovering, those whose worldview has changed and those who have remained in the same positions. This is where the idea of differentiation of humanity lies, which is capable of determining further ways of development of society and world medicine, in particular.

According to a number of unofficial opinions, COVID-19 could be a simple influenza virus, which would hardly have been so dangerous if it had not been provided with an information "shell," whose structure included the above programs, which caused a massive reaction of fear among the population at all social levels. Fear is a form of counter-aggression. Such a reaction of the society was perceived by the systemic mind of the multiplied virus as a counterattack and provoked its new reaction in the form of increased aggressiveness, which was followed by a new reaction of society, even more powerful, and then increasing.

This kind of interaction led to a gradual escalation of aggressiveness and fear in society, which has caused an even more powerful and widespread expansion of the coronavirus. In the early stages, this process was facilitated by the mass media, which at first simply

informed society, then power structures at all levels were activated, which mobilized civil and medical funds, and, finally, advertising and propaganda media were connected to accompany powerful and capital-intensive social and vaccination programs. Separately, these processes involve the specific interests of pharmaceutical companies and their investors.

The coronavirus pandemic that started in 2019–2020 has disrupted the stable ideas about the laws of the spread of epidemics in human society, about strategies for combating them, and about the role of medicine in this fight. Conflicting assessments and poorly disguised confusion in the global health care system in the face of a rapidly mutating virus signal the end of the era of pharmacy as a universal weapon in the struggle for human survival. Under these conditions, the problem of the pandemic acquired a special meaning and for the first time made one think about the fact that the usual scientific approaches and previous experience are becoming a thing of the past and mankind is facing a transition to a new social reality that requires new thinking. The first step towards this will be the formation of an attitude towards the coronavirus as a part of nature, as a systemic mind of a planetary scale, intellectually proportional to the mass consciousness of mankind. It must be accepted that the coronavirus as a system, in its inherent scale, is not an object, but a subject of society, capable of independent actions. This requires a revision of the attitude to this problem, and hence other methods of solving the problems of national conservation. This is where the moment comes when pharmacy must give way to new tools, information ecology and information virology.

CONCLUSIONS

1. The foreign policy of countries that are hostile towards other countries helps to reduce the bioinformation immunity of the population of both sides.
2. Countries that are developing bacteriological weapons should be aware that the bioinformation hybrid of a combat virus in its expansion shows signs of selectivity, which may result in an attack on its creators.
3. The information policy of the countries of the planet should be aimed at reducing the level of aggression and fear among the population.
4. With the advent of a new paradigm of health care, such scientific areas as information ecology and information virology should take a worthy place.
5. Information ecology and information virology in the form of academic disciplines should become mandatory in medical universities and be used in the development of new treatment methods and the organization of medical centers.

CONFLICT OF INTEREST

The author declares that he has no conflicts of interest.

REFERENCES

1. Prigozhin, I. and Stengers, I., *La Fin des certitudes*, Paris: Odile Jacob, 1996.
2. Zhebit, V.A., *Teoriya nelineinoi kommunikatsii. Istoki-Aspekty-Aksiomy* (Theory of Nonlinear Communication: Origins—Aspects—Axioms), Saarbrücken, LAP Lambert Academic Publishing, 2010.
3. Viruses, *Bol'shaya meditsinskaya entsiklopediya* (Great Medicine Encyclopedia), Petrovskii, B.V., Ed., Moscow: Sov. Entsiklopedia, 1974—1989, 3rd ed.
4. Vernadskii, V.I., A few words about the noosphere, *Usp. Sovrem. Biol.*, 1944, vol. 2, no. 18, pp. 113—120.
5. Kaznacheev, V.P., *Teaching of V.I. Vernadsky on Biosphere and Noosphere*, Novosibirsk: Nauka, 1989.
6. Yanshina, F.T., Noosphere of V.I. Vernadsky: Utopia or real perspective?, *Obshch. Nauki Sovrem.*, 1993, no. 1, pp. 163—173.
7. Pesotskii, V.A. and Zhebit, V.A., Methodological features of the social systems study in their development, *Ekon. Sots.-Gumanitarnye Issled.*, 2018, no. 1, pp. 90—97.
8. Zhebit, V.A., Information viruses as a communication tool of programming the individual and collective consciousness, *Sb. statei Mezhdunarodnoi konferentsii-sessii IGSU RANKhiGS: Gosudarstvennoe upravlenie i razvitiye Rossii: vybor prioritetov* (Collection of Papers of Int. Conf. of the Inst. of Civil Service and Administration, The Russian Presidential Academy of National Economy and Public Administration: State Administration and Development of Russia: Priority Choice), Moscow: IGSU Ross. Akad. Gos. Sluzhby i Narodnogo Khozyaistva, 2017, vol. 2, pp. 829—833.
9. Zhebit, V.A., *Energeticheskii mir chelovecheskogo soznaniya* (Energy World of Human Consciousness), Moscow: Sputnik+, 2014.
10. Zhebit, V.A., *Teoriya kommunikatsii. Nelineinaya kommunikatsiya* (Theory of Communication. Nonlinear Communication), Moscow: Groshev-Dizain, 2005.