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SYSTEM APPROACH AT THE PHENOMENA ANALYSIS MOTHER- INDEPENDENT KNOWLEDGE CODING PRINCIPLE



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Abstract. From the perspective of the theory of coding and transfer of information, it is proved that a new period is coming in the practice of human interaction with knowledge. This period is characterized by the fact that knowledge, thanks to consciousness, being in digital code (in computers in the form of BIG DATA), found a way to transfer independently from one material medium to another. Therefore, along with matter, another phenomenon appeared in Nature – matter-an independent phenomenon. This phenomenon is the fruit of another natural selection that exists in Nature – the competition of forms of information coding.

Cloud technologies and e-money are becoming a model in matter-independent knowledge coding. The emergence of matter-independent coding has led to the fact that the transfer of digitized knowledge from the past to the future is now carried out not necessarily with the participation of the human consciousness and subconscious. The brain remains a model of the carrier of consciousness only in matter-dependent coding.

Keywords: BIG DATA, cloud technologies, knowledge coding, information carrier, knowledge, matter, matter-independent phenomenon.

Introduction

In the negative development of digital technologies, there is a technique for creating computer viruses. A virus is usually a relatively small program module that has the property of being attached to the tail of a program running in the computer's RAM. It remains attached to the program body, in the tail, forever. Now this (once useful) computer program is a virus carrier when it is copied externally to other computers. This software virus is an example of another level of coding development. The knowledge of a person (programmer) acquires the property of being so coded that it protects itself from disappearing. The virus becomes as if able to move from the past to the future itself, without human participation.

Similarly, in cloud technologies, knowledge coding is now at a level where it is protected from disappearing. Therefore, it moves from the past to the future regardless of the will of a man. It is a paradox, but knowledge on paper, in the form of texts, films, architectural forms, paintings on canvases can disappear forever if its material carrier disappears. Formally, it should be admitted that knowledge coded “in the cloud” also has a material carrier in the form of magnetic terabyte disks of servers. But the trick of the new matter-independent type of coding is to make the storage of knowledge invulnerable (by replicating the same knowledge on a set of mutually remote servers).

The self-preservation of knowledge by means of matter-independent coding of oneself cannot be considered as a gift, according to V. I. Slobodchikov [1], which passes the older generation to the younger according to the anthropological nature of man. The phenomenon of matter-independent coding of knowledge is a cybernetic phenomenon, while, for example, the concept of nobility is the result of human consciousness.

A new round in the dissemination of knowledge and the emergence of its freedom from the material carrier cannot be interpreted as the appearance of certain information robots with intelligence. It is wrong to assume that a person, scientists, engineers and technologists created a double (robot) of their own will, a spreader of knowledge. It is another mistake to consider that matter, increasing its high organization, can produce miracles and it is the cause of all things, including human consciousness, as well as the Internet and cloud technologies. Let's try to figure it out.

The purpose of this work is to carry out a systematic and dialectical analysis of the processes of formation of the matter-independent principle of knowledge coding. Let's try to define it. Matter-independent principle of knowledge coding is a phenomenon (or computer phenomenon) of spreading knowledge by coding it, but without the participation of a material carrier. Presumably, we are now at the border and are conducting research at the intersection of artificial / natural intelligence.

Results: approaches, principles of thoughts

Figure 1 shows the path diagram (algorithm diagram) for implementing the system approach when analyzing the phenomenon of matter-independent principle of knowledge coding. Let's look at these questions in order.

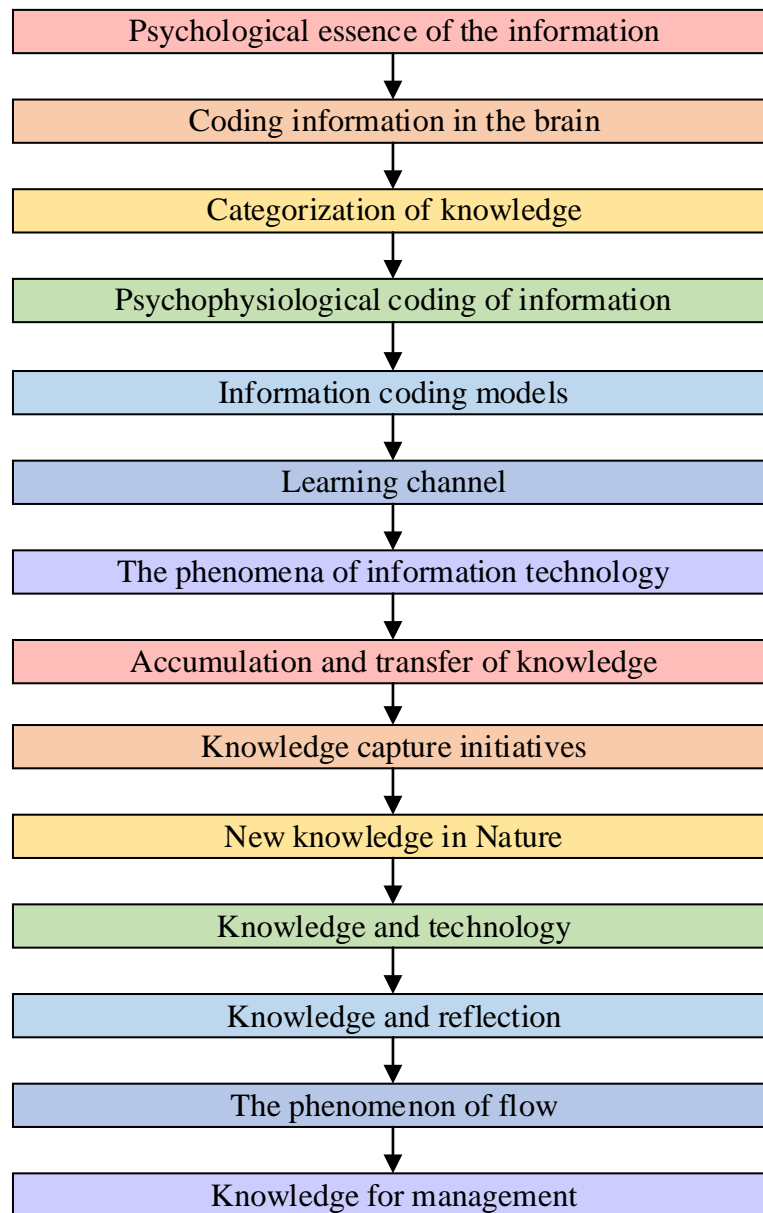


Figure 1 – Path diagram (algorithm diagram) for system analysis of the phenomenon of matter-independent principle of knowledge coding

Psychological essence of the information. In this work, we identify the concept of knowledge with the concept of information. At the same time, there is still no single definition of the concept of “information” in computer science [2]. The most “anthropocentric” definition was recently proposed by Professor A. Y. Friedland [3]. He showed the inconsistency of definitions of information based only on natural sciences. Information, according to Friedland, necessarily contains a psychological component, that is “meaning”. The second component is “data”. In this definition, the information contains a component that reflects not only matter, but also psychology, that is the “soul” of a man.

With this interpretation, information (as a phenomenon of Nature) becomes an adequate and important definition of the function of human thinking, i.e. thinking as a meaning-forming brain process [4]. As thinking has the property of forming new information out of nothing. This is when a man develops its function in the future for the object, and its goal in the future for the action being performed.

Along with the objective parameters of physical bodies, the human brain and its thinking add a semantic component about it (as a sign) to the physics of the natural body. A physical phenomenon, reflected in the brain, becomes the carrier of another phenomenon – meaning. In case of adding to the information about the objective parameters of physical bodies also information about the anthropological function of this body (for example, the purpose of actions with it), then it cannot be considered as a simple filtering of information coming to it from outside the world. The situation is complex.

More correctly, this phenomenon should be considered as a “curvature” of the information flow by a certain prism. The prism does not only filter, but also adds information about itself to the flow.

As a result, A. Y. Friedland analyzed the existing definitions of information proposed earlier in physics (A. Migdal, D. Ursul), in cybernetics (A. P. Ershov, V. M. Glushkov), in philosophy (K. K. Colin). It was concluded that it was necessary to introduce the “meaning” component into the definition [5-9].

Coding information in the brain. In connection with this definition of information, there is the question about the mechanisms (processes) of coding and storing the meaning of knowledge in the brain. The authors [10-12] considered the possibility of memorizing the meaning of knowledge in the brain based on the matter-dependent principle of its coding with a certain channel number.

In both interlocutors, the brain accepts approximately the same topological structure of signal processing channels. Conventionally, the first person can be considered as a transmitter of the event. It was in his brain that the $D\alpha$ detector was activated. The second person who received this message through the word is the receiver of this event. Therefore, in the brain of the second person the similar neuron detector $D\alpha$ will be aroused in a similar place. Thus, one interlocutor learns what semantic event (from the set of ΣD) occurred or was reflected in the head of the other interlocutor. All this happens without presenting the second person with a sensory stimulus, in this case the first person can send him a stimulus in the form of a word (in oral form). The heard word provides the same excitation effect in the sensory cortex of the same detector in both.

Categorization of knowledge. The knowledge that a man uses should be divided into two categories. Note that we consider (in connection with matter-independent coding) only the first category of knowledge. The essence of this knowledge is as follows.

The previous generation obtains and transfers to the next one: a) knowledge in the form of laws of physics, chemistry, mathematics, biology, medicine and astronomy discovered by man. Along with this, b) knowledge about the culture of peoples, about history, morality and ethics, as well as c) religious knowledge, philosophical knowledge, and genealogical knowledge is transferred.

There is the second category of knowledge. A man also uses it, but it is needed only during the period of the life. And therefore, he does not transfer it to descendants (or society as a whole). This knowledge, in fact, is only needed in order to make a career, build a family, provide recreation and entertainment during a life. This is the knowledge that today forms the basis of a common competent approach to learning, which is far from adequate to learning the first category of knowledge.

The phenomenon of matter-independent coding is considered in this paper in relation only to the case of developing knowledge in the previous generation, i.e. knowledge of the first category. We do not consider knowledge of the second category within the appearance of the matter-independent coding phenomenon.

Psychophysical coding of information. The knowledge in human phylogenesis obtained from his life experience was passed from generation to generation. However, this has always happened with changes in transfer methods, with simplification of the form of their coding (when fixing to a particular material carrier for transfer). At first, before drawing and writing, knowledge was coded in the mind and in external media three-dimensionally. The previous generation demonstrated

successful achievements of their work and patterns of behavior in three-dimensional space to the next generation.

With the advent of drawing, knowledge began to be coded (for transfer) not only in three-dimensional, but also in two-dimensional space of matter. The matter behind and in front of the drawing has stopped to code information about the meaning of knowledge in the drawing. Consequently, the matter-independence of such coding has increased by a step.

Further, with the advent of writing (in terms of the dimension of the material medium), the form of knowledge coding in the human brain (and on an external medium) left only the horizontal arrangement of the medium important. Linear coding of knowledge with signs appeared, in particular from left to right. The matter located above and below the line stops to be a carrier of knowledge in this form of coding. This form of knowledge coding by the human psyche is considered one-dimensional in the space of the material carrier.

Today, with the advent of cloud technologies and the phenomenon of BIG DATA, it is time to code knowledge in a zero-dimensional space (without a material carrier). At the same time, zero-dimensionality means that the location of knowledge on the material carrier is independent of the nature of the carrier. Before considering this zero-dimensional form of coding, let's consider why the analysis should link the dimension of the material carrier space with the dimension of the code.

Confirmation of the hypothesis about spatial (in the human brain) coding of external objects is the discovery of a neural mechanism for coding a signal by the channel number (coding by place) in psychophysiology, in the scientific school of E. N. Sokolov [13-15]. The mechanism of such coding is associated with the stimulation of local groups of neurons in the brain in certain (specific) physical places of the human brain. The location of a neuron in the space of the sensory and motor cortex of the brain codes the specifics of the information it stores.

The old forms of knowledge coding in the human brain for transfer from generation to generation did not die out (were not replaced). They were supplemented with new ones that were less dependent on matter (as a “mandatory” substrate for transferring knowledge from the past to the future). Therefore, cloud technologies and BIG DATA can be considered as a find in the natural selection of knowledge coding forms. A new, ideal form has been found in which matter is no longer able to resist the survival of knowledge. Matter continues to be present in the transferring of knowledge. But knowledge, having studied the nature of matter, has found ways to be independent of it as a carrier, but at the same time to exploit it.

Information coding models. So, it is legitimate to conclude that in the psyche (in phylogenesis) there was no extinction or replacement of forms of knowledge coding about the surrounding material world. This was the constant addition of new forms of knowledge coding [16]. 3D of knowledge coding reflected in the brain (in the space of neurons) in the form of 3D figures those three-dimensional events that occurred around a person. Then a 2D form of knowledge coding appeared in the human psyche. Then the 1D form of knowledge coding was added.

Each form of knowledge coding is able to pass to the human brain for processing (in its neural tissue) strictly: either 3D, 2D, or 1D stimuli. Let's repeat: this or that phenomenon of the material reality surrounding a man has always been realized in Nature as a 3D phenomenon. However, the arrival of this natural phenomenon in the human brain has three possible options. And accordingly, the model of this phenomenon in the human psyche and in the 3D neural tissue of the brain could be either three- or two- or one-dimensional.

Therefore, zero-dimensional knowledge coding has taken the baton of previous forms. This zero-dimensional coding consistently, persistently and not without success gets rid of the influence of the material carrier. It has finally become a form of knowledge coding that is completely independent of the material medium.

Learning channel. The study of the human psyche the following problem remains unresolved: how to transfer knowledge from one generation to another (unique to human) as the ability to humor, reflection, vanity, pride, envy, altruism, ambivalence of feelings, the ability to look at ourselves.

Known mechanisms of information transfer, such as genetic, social learning, and verbal communication channels, do not allow us to explain the transfer of these abilities. Such information cannot be called semantic, because in its essence it does not have any expediency for the material survival of man in Nature (as a species). However, the inheritance of these abilities somehow occurs.

It remains to consider that there is a certain channel of transferring such information – the learning channel. However, learning in psychology refers to a one-way process of transferring information – from teacher to student. In this case, it turns out that children do not have the opportunity to teach society. At the same time, it is theoretically possible that society, if it degrades by some signs of humanity, will be restored by children, their anthropology, and morality, which has not yet had time to degrade in children. This is why it is wrong to assume that only social learning is possible within Albert Bandura's theory [17], while children cannot teach adult members of society. It means that it is possible.

In this regard, the article [18] considers another possible mechanism for transferring knowledge from one generation to another, a striking feature of which is the ability to transfer knowledge purely about the moral, ethical and cultural interaction of people in society. This is a mechanism for transferring figurative information, information at the level of human behavior, rather than thinking and ideas. This mechanism is anthropological and independent, different from the genetic, social-imitative and verbal mechanisms of information transfer. For its implementation, the person transferring the message and the person receiving the message must have a similar physical structure and follow strict rules of their stay in the social environment.

Phenomena of Google technologies and Wikipedia. Today, with the development of cloud technologies, two new phenomena have emerged. This is, first of all, the phenomenon of Google translator working from one language to another. Secondly, it is the phenomenon of Google speech recognizer. Let's try to explain these two phenomena from the position of changing the form of information coding.

Both of these software products produce texts that are almost indistinguishable from those of human translation or recognition. In fact, a long translation text is created from separate parts of the translation. These pieces of text (for computer translation) are stored in the BIG DATA database, as translations previously made by certain members of the society.

Google translator does not open (which is important) the meaning of the text clip. The translator automatically finds samples of the literal translation of this clip, made once, by someone, absolutely no matter what members of society. This is the essence of the statistical method of combining a chain of individual small clips. Nevertheless, from such verbatim translated small clips, Google program itself dares to compose a merged (long) text of the translation. It is assumed that the meaning of a long text is equal to the linear sum of the meanings of individual small clips.

Let's explain the essence of this phenomenon. The user of Google translator, trusting it, accepts unverified knowledge. The user thus becomes a clone of the society (a clone of its knowledge, but no more). Then using compositional texts of such translations from the Internet in their everyday life, the user will visually remind others of an intelligent, cultured and literate person. But from the point of view of psychology, he will be a person without self-discovery of the truth (without self-discovery of the meaning of the text).

Let's look at the coding that is used to generate knowledge in Wikipedia today. The article placed in Wikipedia (on a particular concept) is formed from clips written (which is significant) by anonymous authors, as in Google translator, representing the society. Therefore, Wikipedia already belongs to the category of cloud matter-independent coding (at present). Through Wikipedia, its user also becomes a clone of society, learning trustfully and sincerely the meaning of the concepts it transfers. And there is nothing wrong (in 90% of cases). Note that by grouping small clips around one main concept, Wikipedia filters out unsuccessful clips. At the same time, a feedback loop (with users) is implemented. It minimizes the flow of false knowledge (in the selected concept).

Accumulation and transfer of knowledge. In connection with the appearance in Nature of matter-independent coding of knowledge (theoretically), it becomes possible to control matter, the physicality of a man, bypassing his will. Before the appearance of such coding, the truth of knowledge was necessarily checked by a man in his experience (material existence) and human logic. The subject took some of the knowledge on faith. But most of it was checked for the truth and expediency of applying this knowledge for himself.

So, thanks to matter-independent coding, knowledge transfers itself to descendants. And now the carrier (matter or Nature) can no longer check some knowledge for their truth. It cannot test this knowledge on the need for their survival of man as a species (according to the theory of C. Darwin). Now a man is in a new situation. Now he is forced to take more and more knowledge on faith, to inspire his consciousness that this knowledge is reliable.

Knowledge capture initiatives. Here are three examples of knowledge capturing an initiative from a man. These examples prove that knowledge controls him.

First example. In digitized form on the Internet, there are databases of knowledge about where you can go to relax, where you can spend a vacation, have fun, and cope with boredom. This is knowledge about the leisure industry. It is so tempting that tourist trips and tours have become mass. They are not caused by fashion, envy, or a physiological need for healing. They are provided with a person's access (via the Internet) to certain knowledge bases. These databases, using information technologies already known today and the laws of the human psyche, structured themselves. They put themselves so cleverly on the Internet that the user of these knowledge bases unwittingly obeys them and their constant desire to save themselves in time.

Second example. To survive, and this requires eating, a man from a civilized country today needs to spend much less of their attention, time, memory, and thinking than they used to. But the food industry today occupies the attention of the average man disproportionately more than what would be enough for a man to survive. For today, the Internet has already formed a digitized (and easily accessible) knowledge base about human food.

Third example. In the field of health tracking a man began to use the tips from the texts posted on the Internet (cloud technology). The man began to use the advice of the attending physician less. Knowledge on medicine, posted on the Internet, is a compilation of fragments of knowledge collected from society and from each group of doctors (experts) separately.

Naturally, this knowledge is not aimed at treating precisely this (specific) patient who requested knowledge. However, this knowledge (from cloud technology) also (subjectively) affects the consciousness of the Internet user. This knowledge already control people. And it is no longer possible to stop this process by the will of scientists and government. The degree of truth of this knowledge (regardless of the results of their verification) can no longer reduce the presence of this knowledge on the Internet. And the concept of truthfulness of knowledge just means the adequacy of knowledge's reflection of certain properties of matter (human practice).

The cultural and historical path of socialization and the formation of the psyche of the child (according to L. S. Vygotsky) is being replaced by the socialization of the child through the Internet and through television. A social clone is formed from a child, a schoolboy, a student. A carrier of knowledge is formed not deep and meaningful, but only (strictly) generally accepted. This does not mean that information technology is bad in all cases. The society in most cases has progressive knowledge, which in many cases is true. Most of the knowledge is taken by the child from the cultural and historical social past. The only concern is that often knowledge from the Internet (cloud technologies and BIG DATA) is taken primarily on faith, without testing their truth.

New knowledge in Nature. Formally, the birth of new knowledge is realized in Nature in two cases. At the same time, it is implemented in both cases with the help of a mechanism for putting forward counter hypotheses to the society that it (the society) needs (expediently) new knowledge. The birth of new knowledge occurs in two cases, similar to each other, but with fundamentally different results in terms of the system of this new knowledge.

The first case is when children hypothesize about the knowledge discovered in their subculture. These are such proposals from children that the society agrees to accept this knowledge for wide use. Children generate this new knowledge for society in games (as “experiments”) to expand the degrees of freedom of the principles of behavior that society has taught them.

For example, children put forward proposals to society in the form of word-making, verse- and fairy-tale creation, new versions of morality, humanity, honor, self-respect, hard work, and selflessness. In this (first) case, the knowledge offered to the society is verified by their transmitter (children) for truth: they are checked, even if in children's, but in the material (children's) subculture.

The second case is when cloud technologies (in connection with their functioning) put forward a hypothesis about the truth of knowledge, for example, the translation of text from one language to another made by BIG DATA technology. Cloud technologies use the method of compiling translations of individual small texts, small thoughts, and synthesize (without the human will) an extended text (often a strange sum of thoughts). These new technologies offer a man new knowledge (in the form of translation, recognized meaning in an acoustic signal) to society, for wide use.

Knowledge and technology. The database of computer-digitized knowledge about the material nature of things is constantly expanding. The search for the necessary information on the computer is being improved (on request). Scientific research provides new empirical data that is easy to publish in the BIG DATA database. When publishing (in favor of the meaning of the information), memorization of the author, date and place of appearance of the data stops. A phenomenon has become possible when two opposite hypotheses, each separately with its well-wisher, can be supported by the facts found in the knowledge base. This once again confirms the thesis that the truth of knowledge accumulated by a new, non-material coding principle cannot be verified.

The concept of scientists to skip and take technology into the future is the opposite of the concept “to demonstrate a master class”. In this (second) case, it is emphasized that the realization of some knowledge is impossible for the future generation without the participation of the art of the author of this knowledge. Conversely, some knowledge about recreating an object in the future (using a well-developed technology) by a robot is raised to the level of a computer algorithm. This is the matter-independent coding of knowledge (in our understanding). Conversely, let's consider a different position. If knowledge is not formalized to computer algorithms, for example, about the education of morality, honor, conscience, instilling a culture of behavior, then in this case, their implementation necessarily requires the participation of a man (dedicated skill, good education, mother's affection, the subjective influence of a hypnotist).

Knowledge and reflection. From the knowledge obtained from the sources of cloud technologies, the receiving man cannot have a reflection. Reflection in psychology refers to the ability of one subject to mentally put itself in the place of another subject [19]. This is the ability of a man to evaluate, judge, reason, imagine a certain surrounding situation not from his own, everyday position, but (for a short time) from another, someone else's position. This property of the psyche is a reflection of the first order. This property of reflection in people can be further developed to the second order. Its essence lies in the ability of the entity to imagine how it is in the mind of another subject. Moreover, not just to imagine, but to further develop this situation.

An Internet user cannot mentally take the place of the author of knowledge, because the name of the author of this knowledge is erased (missing). An Internet user, however, can empathize with participants of good or bad events presented on the Internet. But in order to mentally take the place of someone, this person needs to be at least a little represented or known. But we have already identified that knowledge from cloud technologies does not contain information about the authors or at least about the time of the emergence of knowledge. There is only the clip essence of knowledge (the clip essence of translating an article from one language to another or the clip essence of a concept from Wikipedia).

The article [20] showed that reflection is especially necessary for the interlocutor in the moments of real (not remote) communication with another person. This is necessary for assessing

sincerity, morality, and depth of intelligence of the second interlocutor. Each interlocutor has the opportunity (the ethics of people allow it) to be in conversation at least for a moment not sincere, to enter into the role of someone else, to become a translator of a thought that does not belong to him, or a thought that is not shared by him.

By accepting knowledge from cloud technologies, a person who accepts it simply takes this knowledge on faith. There is nothing wrong with this (it happens in most cases) when this knowledge is reliable. But knowledge, now, as shown above, can be compiled into BIG DATA automatically (from sketchy knowledge) and very often be unreliable. The author of knowledge is not personalized. Therefore, the recipient of this knowledge does not have the opportunity to put himself in the place of the author, there is no opportunity to make a reflection.

The phenomenon of flow. Another phenomenon, when knowledge controls (in addition to the will of man) his consciousness, is the phenomenon of flow. The essence of it is as follows. When searching for information on the Internet, not by using a keyword, but by clicking on buttons on a web page, the user (under the influence of the many degrees of freedom and click methods that open before him) sometimes simply forgets what exactly he intended to find on the web. Attention, the stream of consciousness, the code of thinking, is taken over by knowledge itself. It is wrong to consider that the site developer aims to capture the user's attention in the flow. This is not the case, because it is impossible to plan the superiority of the new window for the user over the one already presented in the flow.

It is not the developer or user of a computer program who is “guilty” of the appearance and development of the phenomenon of flow. The appearance of freedom in choosing the moment and place to click the cursor on the monitor screen is responsible for it. At the same time, in the knowledge base of cloud technologies, the algorithm for throwing a flow of different but similar information to the user (in new Windows) exists. Today, there are algorithms for automatically evaluating the socially accepted proximity of two meanings. But in the future, there will be algorithms that have time (in online mode) to automatically adjust the degree of proximity of the information of the new (presented) image to the original or current individual plan of the user [21].

The phenomenon of flow occurs when a man works with a smartphone. Messages are sent to the smartphone (in offline mode) that make the user aware by flashing lights and sound. They “impose a person's lack of freedom”, force them to stop the flow of their own thinking, literally force them to switch to the flow of imposed messages from a smartphone.

Knowledge for management. We considered the phenomena that have recently appeared in connection with the development of cloud technologies. However, even earlier (before us), the phenomena of the manifestation of the power of knowledge have already been used to control human consciousness. Both before and now, it was important for one person to know a lot about others. But without others knowing it. This opportunity is provided to the head of state by the authorities, and in particular, by state security organizations.

It is no secret that in the USSR, in Russia, in Ukraine, in Belarus, and in other countries, the heads of these states are very well aware of potentially dangerous citizens and their illegal actions through specially created databases and tracking tools. In this case, it is not the knowledge itself that controls the citizens, but being at the disposal of a narrow circle of government officials, it can be aimed both at the benefit of the state and against it. For example, it is knowledge to hold power in front of the opposition. In both cases, detailed knowledge of the object is very important for the management maneuvers of the official who manages it. Blocking access to information or increased misinformation only makes it easier to manage.

Another example. As an early prototype of modern knowledge from cloud technologies, knowledge of folk epics, songs, legends, proverbs and sayings is used. This knowledge was also transferred from one generation to another without the will of man. There is no explicit rationality of their meaning for ensuring the survival of the species. This is knowledge in written and spoken form: it is interesting to note that this knowledge is not knowledge (directly) about the laws of matter. They

are essentially knowledge about the culture of the generation, its moral and ethics. They reflect the higher mental functions of people.

Let's fix the fact. Like knowledge from cloud technologies, these above-mentioned knowledge do not have the authors or the time of their appearance. But they also control (involuntarily) the consciousness of the next generation, bypassing the will of man.

Conclusion

The concept of knowledge can be identified with the concept of information. The information contains a psychological component, that is “meaning”. The second component is “data”. With this definition, the information contains a component that reflects not only matter, but also psychology, that is the “soul” of a man. It is clear that with this interpretation, information (as a phenomenon of Nature) becomes an adequate and important definition of the function of human thinking, thinking as a meaning-forming brain process.

Today, in cloud technologies, knowledge coding has reached a level where this knowledge is protected from disappearing. Therefore, it is transferred from the past to the future, regardless of the will of man. Of course, it should be admitted that knowledge coded “in the cloud” also has a material carrier in the form of magnetic terabyte disks of servers. But the trick of the new matter-independent type of knowledge coding is to make the storage of this knowledge invulnerable (by replicating the same knowledge on a set of mutually remote servers).

The phenomenon of matter-independent knowledge coding cannot be considered as a great technique of a man when promoting their knowledge as a product on the market, or when providing information services. This phenomenon cannot be considered as an epistemological regularity of human consciousness development, as a pedagogical passion of a man to transfer knowledge to descendants. In the phenomenon of matter-independent coding, it is not man and his consciousness that is “guilty”, but knowledge itself, as another substance of Nature that was able to remove man from the process of preserving himself.

The self-preservation of knowledge by matter-independent coding cannot be considered as a gift (according to V. I. Slobodchikov), which the older generation transfers to the younger one, according to the anthropological nature of man. The phenomenon of matter-independent knowledge coding is a cybernetic phenomenon, while the concept of nobility is created and formed by the human mind.

A new round in the dissemination of knowledge and the emergence of its freedom from the material carrier cannot be interpreted as the appearance of certain information robots with artificial intelligence. It is wrong to assume that people, scientists and engineers have created a double of their own will, that is a robot (distributor of knowledge).

A new round in the dissemination of knowledge without the participation of a material carrier is evidence of the discovery by knowledge of a new, previously unknown principle of coding, digitizing itself, a principle that facilitates the transfer of knowledge from the past to the future in comparison with the already known ones. This is evidence of the presence of another natural selection in Nature, namely, the principles of information coding.

The knowledge that a man uses should be divided into two categories. We consider (in connection with matter-independent coding) only the first category of knowledge. The previous generation obtains and transfers to the next one: a) knowledge in the form of human-discovered laws of physics, chemistry, mathematics, biology, medicine, and astronomy. Along with this, b) knowledge about the culture of peoples, about history, about morals and ethics, as well as c) religious knowledge, philosophical knowledge, and genealogical knowledge is transferred. But there is the second category of knowledge. A man also uses it, but it is needed only during the period of the life. And that's why he usually doesn't transfer them to the descendants (society).

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СИСТЕМНЫЙ ПОДХОД ПРИ АНАЛИЗЕ ФЕНОМЕНА МАТЕРИЯ-НЕЗАВИСИМОГО ПРИНЦИПА КОДИРОВАНИЯ ЗНАНИЙ

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Аннотация. С позиции теории кодирования и передачи информации доказывается, что в практике взаимодействия человека со знаниями наступает новый период. Этот период характеризуется тем, что знания, благодаря сознанию, будучи в цифровом коде (в компьютерах в формах BIG DATA), нашли способ пересаживаться (перемещаться) самостоятельно с одного материального носителя на другой. Поэтому в Природе появился, наряду с материей, еще один феномен – материя-независимое явление. Этот феномен (это новое явление) – плод еще одного естественного, существующего в Природе отбора, – конкуренции форм кодирования информации.

Образцом в материя-независимом кодировании знаний становятся облачные технологии и электронные деньги. Появление материя-независимого кодирования привело к тому, что передача оцифрованных знаний из прошлого в будущее теперь совершается не обязательно с участием сознания и подсознания человека. Мозг остается образцом носителя сознания лишь в материя-зависимом кодировании.

Ключевые слова: BIG DATA, облачные технологии, кодирование знаний, носитель информации, знания, материя, материя-независимое явление.