



## Research Article

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# Definition of Virtual Reality through Creative Act

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## Abstract

Currently there are many attempts to determine virtual reality which is created by digital technologies. The present article discusses this phenomenon in the creative act. This approach gives an opportunity for the full consideration of virtual reality because the category of reality includes not only digital technologies but subjective perceptions which creates problems in its definition. According to our understanding virtual reality is determined by the relation with the person's virtual world and digital code. The person's creative potential is defined, in its turn, as the person's virtual. In the creative act between virtual reality and creative potential besides homogeneous connection there is an ontological connection and then virtual reality is a medium and a tool for the person's creative potential realization. In this case the creative act is an actualization of images or symbols, by changing the intensities of the virtual image which results in the transition of the creative potential into otherness- the virtual reality of the code. As the tool of creative reality virtual reality plays the role of the digital technology which alienates the person's time and space.

**Keywords:** virtual reality, digital technologies, creative act, perception

## 1. The Problem of Virtual Reality Definition

The first and the most complicated problem which researchers face is a problem of its definition. Today there are many such definitions and they are always not full because the phenomenon has recently appeared and is under understanding.

The name "virtual reality" was used for visual space imitation created by digital technologies, in 1990s, which resulted in the necessity of its understanding as a new and perspective phenomenon. In this case, it immediately became clear that the history of the term "virtual" goes back to antiquity, and

it can be found even in Cicero, in a treatise of the 45th year B.C. "On the nature of the gods," where *virtus* denotes "virtue" (Nemykina, 2011, p. 55). In the Middle Ages, philosophers began using this term in a meaning close to male potency, it can be translated as "conformity to one's strength." This change of meaning is explained by the fact that the word was originally associated with the Roman goddess *Virtus* - the personification of masculinity as the main virtue of the ancient world. Thus, it originally implied the specific content of virtue - male potency.

*Virtus*, as a philosophical category, refers to even more ancient Greek term *δύναμις* (*dunamis*) which also denoted an opportunity, potentiality, potency, but at the same time might, strength, power. Aristotle, which Aquinas considered his teacher, understood this term as the ability of a thing to becoming. Thus, the history of the virtual phenomenon is older than the Latin term *virtus*.

However, is it worth going so deeply into history to define a new technical phenomenon? Many people think not. In English, they utilize the term digital reality (digital reality) or simply digitality ("digital", digit). Behind this name there is a specific approach in which virtual reality becomes a property of the code. Sometimes this approach is called digital philosophy, but in essence it is a modern philosophy of technology. The subject of philosophical consideration of the digital philosophy of virtual reality is interface and digital code. In this way two different approaches to the definition of virtual reality are formed - ontological and technological.

The essence of the phenomenon under consideration in the technological approach is always mentally held in the code of the phenomenon, while the ontological approach tends to pay more attention to the visual space of images (or symbols) formed by the code. It is this space that is viewed by the ontological approach through a more general category - virtual.

One of the trends of the technical approach is the separation of digital technologies from analogue, which means earlier types of technologies, the principle of operation of which is not based on a digital code, but on analogs of natural processes: mechanical, thermodynamic, and others. Nothing similar to the graphical user interface (GUI) was not previously used in production. It is based on the WIMP concept: windows, icons, menus, pointing device. Through the manipulator, the user controls the cursor, which becomes the first virtual tool of a mass user, connecting the reality of man with the reality of virtual. Virtual reality becomes both a medium and a tool of creative human activity.

Defining the phenomenon of virtual reality in the creative process, we necessarily come to the synthesis of these two approaches, since the creative act implies not only an object, but also a subject of creativity, while virtual reality is correlated with the creative potential of a person. Thus, in a creative act, the virtual with virtual reality enter into relationship, playing the role of a creative image and a medium / a tool of its objectification.

## 2. Virtual Reality and Virtual

Virtual reality is understood by us as the following specific forms of digital technology implementation:

1. social networks,
2. computer programs,
3. artificial intelligence and
4. virtual 3D space.

All of them equally represent both the medium and the tools of creative activity. In its turn, we determine virtual reality as part of a broader ontological concept of virtual, which also includes the space of images and symbols in the human mind.

### 2.1 Duality of virtual reality: code and visual space

Virtual reality is originally characteristic of duality. Firstly, the code that forms virtual reality consists of bits - the minimum amount of information. Their name comes from the English word binary digit - a binary number. This is a symbol or signal represented by a single binary character of the yes-no, on-off, or "1-0" type. Any code ultimately consists of bits.

The second aspect of the duality of virtual reality is that it is at the same time a code - and a way to visualize it. If the code forms virtual reality, then the interface determines it. The digital code is written using the originally designed visual parameters of the interface. The quality of the text editor code - like any other computer program - is determined by the "friendliness" of its interface. This is an intuitively defined measure of correspondence of virtual reality as a creative medium. In fact, the less the interface is noticeable in the process, the more intense its friendliness is. As Alexander R. Galloway writes, "frames, windows, doors, and other thresholds are transparent devices that achieve more when they do less." (Galloway, 2012, p. 25). Using the interface allows performing actions in virtual reality. You change windows - the interface also changes. You delete the text with a click, then put a like on it, then paint something in the graphics editor - you do these actions with the same cursor, your virtual tool. It is impossible to imagine that the analog tool has such versatility. Not only a mouse, but also a joystick, a car steering wheel, a golf club, etc. can act as a GUI manipulator. Virtual reality is an open system that a person can tailor for almost any task. In digital technologies, what the user wants from this machine is important but not the process that takes place inside the machine (computer). Even the standard interface of programs today has the widest range of functions and settings, and researchers argue that programming and using a computer at a fundamental level are one and the same (Ceruzzi, 2003)

At the same time, virtual reality remains the code quality - without it, virtual reality does not exist. The visual representation is updated only when the computer works, while the code is stored even when the equipment is turned off. We can't say that virtual reality disappears when the computer is turned off. It becomes not visible, going from unit mode to zero mode. Virtual reality becomes digital. It continues existing as a code stored in the magnetic structure of the hard disk.

Thus, the environment of creative activity is virtual reality, and not digital. Of course, writing a self-written code is also a work, however, and it takes place in a virtual medium, which is a text editor of a programming medium. When working with a computer, we create something that we see: a dissertation text, a well-processed photo, a song track, melodies, an election video clip, or a 3D model of an architectural structure. We can save the changes and close the file, and then open it again and continue working. Everything that we create is stored on the disk in the form of a structured magnetic field with many cells in which magnetization means "1", and the absence of magnetization means "0". When we reopen the saved file in the program, we again see the text, the photo, the melody and more. They are presented to us on the display through a system of pixels, the color of which changes according to the commands coming from the equipment and from the user through a keystroke, or the movement of the mouse which are then encoded into a binary system. All these processes pass invisibly for the user - his/her consciousness is aimed at writing text, or processing photos. However, this immediacy of the connection between human movement and the changes visible on the display is seeming - all human interactions with virtual reality pass through a digital format. This is the difference between the virtual medium of creativity and the analog medium. This does not happen when we simply write text by hand, or even when we type it on a typewriter. This does not happen when we display a photo in a darkroom. In these cases, we also use tools that act as an intermediary between us and the creative environment (pen, typewriter or photo enlarger), but these are analog tools. Digital technologies are a single virtual-digital space in a division, it is a world of duality, and in a creative act a virtual space appears as a shared identity of the space of images, or as a category of virtual.

## 2.2 Virtual

Virtual, as a more general category, includes not only the virtual space of the code, but also the virtual person. To clarify this, let us turn to Ernst Kapp's philosophy of technology, which presents technology as a homologous image of the human body: "We should emphasize the internal affinity of the tool and organs, which manifests itself more in unconscious discovering than in intentional invention and should show that in the tool the person always only reproduces oneself. Since the sample is an organ the ability and strength of which must be increased, it is only he or her who can give the tool an

appropriate shape" (Kapp, Noir & Espinas, 1925). The goal of such a projection of bodily organs is the self-knowledge of a person who "... finds an interaction between his/her body and the world outside it, which was previously the world inside it. Trusting the leadership of this affinity between the prototype and its reproduction, and applying the outside world created by him as a measure to himself, he or she achieve all higher self-consciousness" (Kapp, Noir & Espinas, 1925).

Another philosopher of technology, Lewis Mumford, believed that man initially perceived his body technically. He considers the idea of a "boom" of inventions in the era of capitalism to be erroneous, in fact, an ancient person was initially inclined to inventions, since they enabled him or her to survive in the wild world. Australian savages use their legs as clamps and anvils. They also use tightly clenched jaws as a vice and knife at the same time. Mumford lists what a person can do with his/her bare hands: "dig, scratch with nails, punch with fists, twist fibers, spin threads, weave, tie knots, build shelters from twigs and leaves, weave baskets, make pots, sculpt from clay, peel fruits, chop the nutshell, tear the fibers or threads with teeth, soften skins by chewing, crush the grape with bare feet (Mumford, 2001, p. 138).

Due to unusually developed brain not only the organs of body could serve as tools. This brain also allowed using the organs of body not by their functional purpose. The latter ability manifested itself in primitive art, as in the creation of symbolic forms. "... A person could manage a large amount of mental energy than he or she needed to survive at a biological level. It was necessary for person to direct the surplus of such energy not just at obtaining food and sexual reproduction, but also at such modes of life that transform this energy into appropriate cultural, i.e. symbolic, forms in a more direct and constructive way. Only by orienting his/her energy to culture the person was able to control and completely utilize his/her inherent nature" (Mumford, 2001, p. 14).

It should be noted that the Kappa technique exteriorizes not only the working limbs of the body, but also, for example, its nervous system: "... nerves are the cable of the animal body, telegraph cable is the nerves of mankind." (Mumford, 2001, p. 14). Based on this principle of homogeneity, digital technology can only be regarded as a projection of human consciousness. Indeed, a social network is separate accounts that exchange a wide variety of information. They can be compared with a network of brain neurons exchanging impulses, and artificial intelligence (AI) was originally created bionically, based on studies of the work of brain neurons.

The virtual reality of digital technologies is a projection of a person's ability to imagine, think, i.e. perform operations with images and symbols. The figurative content of the visual space is not limited by the code, but only by the person's imagination. The code limits only the medium of the actualization of these images, or the intensity of the created imitation.

One of the features of the virtual category is its relation to the law. In the human's mind images can be scientific, i.e. reflecting objective processes and phenomena, but they can also be artistic. The images produced in virtual reality, like the images of human imagination, are not limited by the laws of physics, morality or the state, the person is able to imagine what is impossible in the physical world, or what is considered immoral or illegal in society. The flight of a person using magic, naked body, mass killings - in the creative act of any of these images can be realized as a 3D model in virtual space and immediately presented to the public. It is characteristic that even in physics, virtual particles also break the law - the law of energy conservation. Physicists explain this fact that this happens in a very short period of time, but the fact remains: the category of virtual is not limited by the law, but includes it.

Therefore, the virtual is a space of images and symbols having different degrees of objectification and different intensities of imitation of these images. In the human mind, images are the least objectified. In the material world they are objectified to the greatest extent. In virtual space, the degree of objectification occupies a middle place. However, by the intensity, or the degree of certainty, virtual reality surpasses both the material world and the space of human consciousness. The law, as a necessity, expresses the material side of the virtual - the brain, the code, or the canvas for the picture. However, based on the law, the virtual is not limited by it. It expands it as a concept.

*Since the virtual is a shared identity of virtual images, the creative act is the act of the transition of*

*the image into its other being through an increase in the intensity of its imitation. The creative act in this case looks like a virtual transition from a less to a more objective form. Also, the creative act objectifies the illegal virtual, which allows us to speak of it as a miracle, as the creation of something fundamentally new.*

### 3. Virtus and Digitality

To clarify the relationship within a single in the division of virtual-digital space, we will turn to the ancient and medieval philosophy of virtual and number. Two names will allow us to do this: Thomas Aquinas and Plotinus.

Thomas Aquinas in Sum of theology employs the root of virtus quite often. It is employed to denote the following meanings: (1) virtue, (2) power, (3) ability, (4) virtual. The homonymy of these meanings can be confusing. For example, when Thomas speaks about the consequence of the action performed which is virtually (virtute) contained in the act a sophisticated technique follows as a disputed thesis: a Latin translation of the quote from Aristotle's Ethics is used: "virtus is what makes one who possesses it good" (St. Thomas Aquinas, 2008a, p. 595). In this case, Aristotle has in mind a different meaning, in fact, not power but virtue makes one who possesses it good. The author of the statement that Thomas undertakes to challenge plays with the words (St. Thomas Aquinas, 2008a, p. 746), acting as a sophist, he says that the consequence virtually contained in the action is a power (virtus) that "adds good or evil to the action." (St. Thomas Aquinas, 2008a, p. 256). However, it is characteristic that in his response to this sophism, Thomas gets involved in this pun. If, Thomas writes, "... the power (virtus) of the cause is considered according to not incidental but essential consequences ..." (St. Thomas Aquinas, 2008a, p. 258) of the action, then its consequence really adds good or evil to the action. In other words, if the consequence, virtually (virtute) contained in the action, is a manifestation of the "essential power (virtus)" of the action, then this consequence, adds good or evil to the action even before its actualization. Here it should be noted that good and evil are understood as a dialectical principle of formalized unity and formless multitude (Losev, 1994).

Thus, Thomas Aquinas speaks of the virtual as a power of an essential intensity, some internal tension, as some unrealized readiness, but not as a logical consequence of an act that we may see in the future. Possible consequences observed in the action are considered together with this relevant action at the time of its implementation. The virtual seems to expand the ontological space of the act, adds an additional dimension to it. It includes the reality of images of the possible consequences of this event in the act. According to Thomas Aquinas the virtual is not a logical but ontological category. It should be understood as conformity of the essential power of events. Even when Thomas speaks of the virtual logical concept of "science", for him it is some essential power of the initial axioms on which this science is built: "... in the beginnings of science," he writes, "all science is virtually (virtutem) contained" (St. Thomas Aquinas, 2008a, p. 48).

As we now see, power is an integral quality of the virtual, and this is its difference from potential, which is on the contrary something undergoing and not acting. So, the matter of elements is an absolute potency i.e. something that "... does not always abide in an act, but passes into an act from potency, which is found in arising and collapsing things" (Thomas Aquinas, 2008b, p. 179). The virtual is connected with the act, and not with the enduring. For example, unlike matter, the divine mind - "... does not abide in potency, but it is an absolute act" (Thomas Aquinas, 2008b, p. 179). At the same time, in this act "... as in the first reason, all existence virtually and initially pre-exists" (Thomas Aquinas, 2008b, p. 179). The world of all possible events is a virtual divine mind, and it is not important whether these events will take place.

So, the virtual by Thomas manifests itself as energy, and like any energy it is expressed quantitatively, i.e. it requires a number. The category of quantity itself, according to Aquinas, manifests itself in two ways - both extended and virtual (Lobkovitsa & Appolonova, 2015, p. 271). The first quantity is measured by material objects, the second is spiritual energies, such as love-caritas (spiritual love for one's neighbor, in contrast to passionate love-eros). Love-caritas "... have not an extended, but

exclusively virtual amount, but this last is determined not only by the number of objects (so that they love more or less of something), but also by the intensity of the action (so that they love one thing more or less). In the latter sense the virtual amount of love-caritas increases” (Lobkovitsa & Appolonova, 2015, p. 271). And further, Aquinas adds that this is a way to increase any form in general, which can be intensified: “... as long as the size of a thing follows its being, say that the form is larger “ it means to say that it is inherent in the perceiver to a greater extent, and not that some other form is added to it” (Lobkovitsa & Appolonova, 2015, p. 271). *Such a method of increasing — as an intensification of intensity — is a property of the form because the form has quantity* only in relation to its subject.

However, it cannot be said that the power of the virtual manifests itself only as the intensity of the action, it also manifests itself as the number of objects, and in this duality of the quantitative expression of the virtual the duality of the virtual reality of the code is guessed. Continuing talking about caritas, Thomas Aquinas comes to the conclusion that its power is able to increase “only because its subject becomes more and more involved in it which agrees with the fact that the subject often does its action and obeys it” (Lobkovitsa & Appolonova, 2015, p. 275). This is not an increase by adding, since such an addition will mean the separation of love, its plurality. This increase occurs by bringing the subject of love - the rational mind, in agreement with this virtual quality through the act. In other words, an intensive increase in the virtual is manifested in the same way as a measure of its actualization, a measure of its manifestation as real. And in this case, we deal with a different type of quantity, which is determined by the number of objects. So, we have two quantitative v sulfurs of the virtual: (1) intensity - as a measure of the virtual in its internal space, as the internal power of the image, the degree of its conformity with reality; and (1) the frequency of actions performed by the subject of the virtual - as a measure of the virtual in the space of objective reality.

We will illustrate all these in a creative act. Human creativity is an example of an increasing the virtual. At first it is guessed in a person as the intensity of images, ideas in the consciousness of the subject of creativity, as one’s inner readiness for a creative act. Increase in creative potential will mean more and more frequent actualization of this ability in creative works. When intensity increases creative potential starts realizing and becomes othrethness i.e. *a number of the produced objects of creative activity*. However, the subject can pay more attention to the intensity of the image created by him/her, and then even one masterpiece will contain a larger number of meanings, associations, emotions and so on.

Two types of quantity - the intensity and the number of objects - in virtual reality find expression in the code - as the number of bits. In the visual space they find their expression as the degree of "friendliness" of the interface of programs and social networks, or the degree of fascination of the world of a computer game.

According to A.R. Galloway’s definition “... any process that produces or maintains differences between one or more elements can be designated as digital ... This means that digitalization is the basic process of the difference when a part of the Real / One is distinguished and becomes precisely this Real (the One) as opposed to the Other” (Galloway, 2014, pp. 52-53). By the way, Galloway notes that the Russian word “figure” and the French word “numérique” more accurately reflect the meaning of digitality, since “... the concept of number is “incorporated” in these words, but in English language, perhaps, the thought needs to make a certain path in order to reach this” (Galloway, 2019).

Similar reflections about the number can be found in the works of philosopher, Alexei Fedorovich Losev, namely in his work “The Dialectics of Number by Plotinus” (Losev, 1994). In this work, he analyzes in detail the Plotinus treatise “On Numbers”, and comes to a capacious definition of a number in the following formulations: “A number is the principle of the categorical meaning itself and can be defined as 1) *separate* 2) *identity* 3) *in moving* 4) *in rest* 5) *existence*, or - the moving rest of the separate self-identity of the things in existence, or - *the singularity, given as the moving rest of the self-identity of the different*” (Losev, 1994, pp. 799-800). Let us try to analyze this definition and then compare it with Thomas Aquinas’s understanding of the virtual in order to define the ratio of code and virtual reality within the framework of the digital approach.

So, a number is not a series, not a quantity, and not even a measure, but a principle. To realize

this, you need to understand that the numbers are different. For example, the English word digit comes from the Latin digitus - a finger on a hand or a foot. This concept is based on the concept of a number of objects, separation, differentiation. The Russian word "figure" comes from the Arabic sifr- zero. Unlike digitus, sifr is more associated with the symbolic aspect of numbers, one of the meanings of English cypher is a symbol. Zero does not represent any physical meaning. It is not always referred to natural numbers. It is a pure abstraction, and in this sense a number is not so much a number as a measure, but a number as a sign, a formal abstraction. These numbers are no longer countable. They are not countable units. They are symbols, eidoses, forms. "The eidos and number for Plotinus is some semantic images," Losev A.F. writes, "which he compares ... with pictographic writing, opposing both to discursive thinking or letter writing" (Losev, 1994, p. 744).

If we consider the unit as an eidos it is a key category in the philosophy of Plotinus and the Neoplatonists. In general, it is One. This being in its unity is presented in the thought as the initial point, as the beginning of any thinking, as any correlations and differences. The two, or double, is the next step in the understanding of being since the matter opposes to it as an object of thought. This is not the second thing in a series, it is a different principle of understanding the One as an existing One. These two principles — the one and the matter — do not depend on anything, but they are the potencies of the other existence. "This potency and principle which are here the potency and principle of not only one but existence, being, hypostasis, are a number" (Losev, 1994, p. 799). Thus, Plotin's world comes from the pair, as the code comes from a binary number.

All other numbers arise from two: both in the sense of the sequence, and in the sense of the types of numbers: ideal, arithmetic, and so on. Plotinus identifies five categories that stem from the unity of the two: (1) the existence, (2) the moving (in a purely meaningful and intelligent movement), (3) the resting, (4) the separate and (5) the self-identical (Losev, 1994, p. 799). This allows us to talk about the number as the principle of categorical meaning and define it as the "moving rest of the separate self-identity of the existence."

Now let's try to correlate the virtual and the number on the example of virtual-digital reality. We are far from the idea of attributing the magical powers of the creative double of Plotinus to the digital code. Our aim is to show the relationship between digital and virtual realities. So, a number (a figure, a code) is a principle that allows this reality to come true. It is potentially contained in every virtual-digital reality object. This reality is divided, but united in its separation. Virtual reality allows you to perform actions with virtual objects, however, the program code remains unchanged. Thus, the code creates virtual reality as the moving rest of a separate self-identification of the existence. Moreover, the number of codes appears as a law, as the basic formative principle of this being. Virtual reality is contained in the code as a quality. It is expressed quantitatively through the intensity of the imitation of the symbols produced in it: the more real the world of this reality looks, the more associations and meanings it contains in itself, the higher its intensity is.

It should be noted that Losev's approach to the number is a dialectical approach that proceeds from synthesis as a necessary consequence of the contradiction. It differs from Alain Badiou's approach, who Galloway A.R. refers to in his speculations. Badiou would define Losev's approach as "*a double that merges together.*" In the opposite approach, in which "*the unit is divided in two,*" the essence of dialectics is understood as the genesis of antagonism (Badiou, 2004).

This approach is good if you need to emphasize the idea of a gap, a transition. An example of such a gap is the virtual world, represented by the conscious, digital and physical (for example, virtual particles, or quantum superposition, which is used in quantum computers) worlds. This is the reality of different ontological status. They can be thought in isolation from each other. However, the act of creativity, as the process of transition of the virtual into a different being, requires their synthesis, for which it is better to make a use of Losev's approach, which we did. As a result, we obtained the concept of virtual reality, the concept of which is revealed through its relationship with digital technology and with the category of virtual.

#### 4. Conclusion: Creativity in Virtual Reality and Personality

Describing the act of creativity as a transition of virtual images into otherness, we approach the specifics of creativity in virtual reality. If the objectification of a virtual image occurs in material reality, analogous, in the reality of the law, then it has a lesser degree of freedom than in the case of transition to virtual reality. Passing into virtual reality, an image remains more a way, or a symbol, than a thing. The economy of symbolic exchange described by Baudrillard with the introduction of digital technology received additional development opportunities.

Virtual space is actively included in the economic and political spheres, i.e. in the social sphere. Nowadays, Apple and Microsoft occupy the first places in ratings of the richest corporations, having displaced oil producing companies such as ExxonMobil from leading positions. The scope of services - including state ones - is increasingly going to the Internet, interactivity is becoming a key property of a modern service. Communication on social networks has expanded the circle of acquaintances, but for many it has reduced the number of contacts offline. We found ourselves in a situation where new technologies were introduced so quickly that humanity began actively using them until they realized their fundamental difference from analog technologies. The issue of their influence on the personality also remains open.

The consideration of virtual reality as part of a creative act also necessarily touches on this aspect. It certainly requires more time for its full disclosure than the format of the article allows, however, in conclusion, we would like to touch on it to show the advantages of this approach.

The personality appears here as the boundary separating the virtual subject from the objective world of the law. As we have already shown, in the creative act, the virtual image is transformed into its own being. In the case of creativity in virtual reality, this transition occurs twice: from virtual consciousness to the analog world, in which the body of the subject of creativity is located, and then through a digit to virtual reality. It is easy to see that the "friendliness" of the interface ultimately shows the degree to which it minimizes the participation of the analog world in this process. Consequently, the world of the law, the matter, the analog world is reduced to the medium of information transfer, or to the function of the interface.

Another aspect is alienation. Digital technologies remain technologies. Working with them as a means of creative activity leads to alienation. Virtual reality creates non-physical space, and compresses the physical space. Capitalism employs the new space as a space of investment and capital accumulation. Robert Hassan (2020) introduces the concepts of platform capitalism and inward globalization. Uber is an example of platform capitalism which operates through a network and acts as an intermediary between a taxi customer and a driver. They do not need to be physically present in the country in order to build a business in it taking an advantage of loopholes in local tax legislation. Inward globalization implies the use of virtual space which expands the boundaries of geographical space. The logic of capitalism requires investing in undeveloped markets where labor force or resources are cheaper. However, over time, investments in infrastructure cause economic growth, develop the economy of the region, and then capital requires a new space for investment. The limited geography implies the ultimate "thermal death" of capitalism, but virtual space changes the situation. The growth of Apple, Amazon, Uber, and other companies the service of which is impossible without the Internet illustrate this process. "They create virtual space and monetize it. And they — along with other companies such as Google, Facebook, Netflix, etc. — play an important role in creating what Mark Andreivich calls "digital enclosure" (Hassan, 2020, p. 106), We can remember the enclosures in Europe at an early stage in capitalism development.

Not being fully realized, virtual reality begins struggling for the attention of users, which is now becoming the main product of virtual capitalism. Databases created by social networks and Internet services are utilized to create advertising and conduct election campaigns. Commodification of online audiences is a key way to generate profits on the Internet. A social network account becomes not just a virtual image of a person, but also a way of earning.

This, in turn, entails the alienation of the human person, to the "relation of irrelevance", which is

the digital alienation according to Rachel Yeggy. This is a form of alienation, which is expressed in the "loss of significant involvement in the world" (Jaeggi & Neuhouser, 2014, p. 23), when not we shape our environment, but the environment shape us.

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