THE THREATS ENCOUNTERED BY MAN IN THE VIRTUAL REALITY: INFORMATION DISTORTION, ILLUSION, AGGRESSION

Anotaція. Розвиток технології змінив підхід людини до реальності. Нові медіа, які з'явилися відносно недавно, уможливили майже необмежений доступ до різних джерел інформації. Проте наслідки технологічної революції є не завжди корисними для користувача медіа, який легко може загубитися в «морі» надмірної інформації. Вони також створюють низку загроз, пов'язаних з появою створюваного медіа віртуального світу. Можна сказати, що сучасна людина живе в двох світах: реальному та віртуальному. З екзистенційної точки зору ця уявна реальність не лише не допомагає людям подолати екзистенційну дихотомію, а робить її ще важчою для подолання через приховування та замовчування. Традиційний світ змінився абсолютно новим і невідомим. Стаття зосереджується на найбільш видимих загрозах для людської психіки, таких як деформація даних/інформації, ілюзія, а також агресія, яка стимулюється через певний медійний контент.

Ключові слова: загрози для людської психіки, віртуальна реальність, загрози для людської психіки у віртуальній реальності, деформуюча інформація, ілюзія, агресія у віртуальній дійсності, комп'ютерні ігри.

* Maria Katarzyna Grzegorzewska – Ph.D., Department of Sociology and Social Anthropology, Faculty of Humanities, AGH University of Science And Technology
Anna Małecka – Ph.D., Department of Cultural Studies and Philosophy, Faculty of Humanities, AGH University of Science and Technology in Kraków
**Abstract.** The development of technology has changed the human approach to reality. New media that have recently emerged make it seemingly possible to access the differentiated sources of information in an unlimited way. However, the consequences of the technological revolution are not always favourable to the new media user who can get easily get lost in the excess of information as well as face several menaces inherent to the virtual world. It can be said that the modern man lives in two worlds: the real and the illusory media-created one. From the existential point of view it is clear that this illusory reality does not help people to overcome the existential dichotomies, and, what is more, makes them even harder to bear by blurring and concealing them. The traditional and familiar world has been replaced by a completely new and unknown one, abstracted from everyday reality. The present paper focuses on most evident threats to the human psyche generated by the new media and related to the virtual world evoked by them, such as distortion of data/information, illusion and aggression stimulated by certain media contents.

**Key words:** threats to human psyche, threats to human psyche in the virtual reality, virtual reality, information distortion, illusion, aggression in virtual reality, computer games

**Аннотация.** Развитие технологии изменило подход человека к реальности. Новые медиа, появившиеся относительно недавно, обеспечили возможность практически неограниченного доступа к разным источникам информации. Однако последствия технологической революции не всегда являются полезными для пользователей медиа, которые легко могут затеряться в «море» избыточной информации. Они также создают угрозы, связанные с появлением виртуального мира, создаваемого медиа. Можно даже утверждать сказать, что современный человек живет в двух мирах: реальном и виртуальном. С экзистенциальной точки зрения эта мнимая...
реальность не только не помогает людям преодолеть экзистенциальную дихотомию, но и создает новые трудности для ее преодоления из-за сокрытия и умалчивания информации. Вместо традиционного мира появляется абсолютно новый и неизвестный мир. Авторы сосредоточиваются на наиболее видимых угрозах для человеческой психики, таких как деформация данных/информации, иллюзия, а также агрессия, которая стимулируется через определенный медиийный контент.

Ключевые слова: угрозы для человеческой психики, виртуальная реальность, угрозы для человеческой психики в виртуальной реальности, деформирующая информация, иллюзия, агрессия в виртуальной реальности, компьютерные игры.

People engaged in the Web are considered the members of the so-called Web community. They share a sense of unity and distinctness in relation to other communities. Within this community, local groups are formed around selected issues. This specific cyberspace – which can be identified with Juliusz L. Kulikowski’s idea of the infosphere [2, p.20-25] – consists of totality of information accessible to man and used by them in the realisation of their life objectives. It is exactly in the 21st century that the so understood infosphere has gained priority and become Web-placed.

Referring to the dangers inherent in the infosphere we can talk of the information disease when the information homeostasis (balance) is impaired. Of course, the level of this information balance differs from person to person depending on their individual character. Information is the stimuli to which a man responds in a more or less active way, which in turn affects their physical and psychological condition. As Wieslaw Babik pertinently remarks: «This is not the information itself that poses a threat, but an unreasonable and irresponsible choice and use of it» [2, p.20-25].
In this context, the term *information ecology* can be introduced, which refers to the sum of information quality assessments, effects and values. With regard to information, the term *ecology* constitutes a kind of metaphor to describe some aspects of controlling the entire information environment, that is the human infosphere or anthropinfosphere [11]. Its main postulate says that we should protect the information resources in the way analogous to the protection of our natural environment, because information affects man and their wellbeing – either positively or negatively. The outcome of the information ecology strategy should be the ecological information, that is the information that does not falsify the actual image of reality, and thus provides us with a true, complete, up-to-date and reliable message. It should rely upon the human rational intervention in the information processes thus contributing to the emergence of user friendly information ecosystem [7].

The most important dangers related to the manipulation of information in the modern world consist in the following pathologies [5]:

- presenting the untrue information;
- presenting the unimportant or not essentially important information, while at the same time neglecting the crucial information;
- presenting the essential information in a way suggesting that it is unimportant or irrelevant;
- distorting the information in result of intentional interference, presenting the ambiguous information designed as such to make it harder for the recipient to understand;
- submitting the unnecessary excess of information aimed at causing a disinformation chaos.

Especially the users of modern information technologies encounter the following threats:
a) threats of technical nature (e.g. the risk of data loss through theft or computer viruses);

b) threats of legal nature (for example, the threat to the copyright);

c) medical risks (for example, threats to the broadly understood human health caused by computer monitor radiation harmfulness and others);

d) social risks: especially the problem of new social divide caused by unequal access to information, the digital divide; the division into those who have access to information and those who do not have access to it; the loss of a sense of public service; the atomization of society; privacy protection problems; the influx of unordered and false information.

Several types of addiction caused by the extensive usage of the web can be distinguished as well:

- IDA syndrome (Internet Addiction Disorder), involving the internal compulsion of constantly being in the Web. The Internet becomes indispensable for life and functioning in society to the point that many of its users become regular internetholics;

- technohipnosis syndrome, in which the user falls in trance, for example, in the course of a game;

- ASC syndrome (Alcohol Stupor Condition) caused by intense use of the computer, leading to states of the consciousness physiologically and psychologically akin to alcohol or narcotic intoxication;

- addiction to the virtual reality evoked by the Web.

Referring to Neil Postman, we can speak in terms of toxicity of mass communication processes drawing in particular attention to such negative phenomena as:

- incorrect selection of information qualified for transmission in the media;

- littering the infosphere with irrelevant, false information and pseudoinformation (lengthy information, verbose, vague and unclear information);
disinformation (fabricating, concealing, and distorting information,); parainformation (unsubstantiated irrelevant presumptions).

The most dangerous threat is an illusion that the Internet may be the primary and only source of information [7];

e) another type of menaces is of psychological nature:

- imposing escapism from the real world to the artificially emerged virtual world;
- the impact of the virtually generated aggression on the behavior in the real world;
- getting lost in the Internet which can be considered a 'trash' of the information, where an essential need “to separate the wheat from the chaff“ is not an easy challenge;
- access to pathologic and toxic sub-cultural groups, parareligious, pseudo-therapeutic, crypto-and explicitly Satanic ones which promote an ideology of aggression, destruction, violence and nihilism. The Internet is extremely vulnerable to all sorts of abuse;
- inner compulsion to be in the network;
- isolation from community (closing up in the four walls, escaping from the social world);
- psychic alienation.

The impact of the new media on the psyche of the adult recipient. In the contemporary technologically developed society, the media have assumed the role of an omniscient observer. Belief in the omniscience of the media is reduced to a conclusion that images and information presented by them are more real than what we actually perceive. The virtual world evoked by the newest media in many respects is illusory and differs to a great extent from reality. More and more often, people escape from the real world to this artificial one.
Illusion constitutes one of the «worlds» of human specific experience. It is a world not rationally recognized and as such mysterious and seductive. It can become very dangerous when manipulated to harm people and designed to realise the interests of a particular group of administrators.

Illusion as rooted in imagination and not governed by the intellect is intensified by emotions, causing pleasure, evoking curiosity and building a positive image of the cognising subject. Thus it is able to subdue the intellect and will of man, and restrict and even paralyse their activity within the real world [6, p.98]. A boundary between the real world and the virtual one becomes blurred. The illusion of movement and depth created by the new media accompanied by an apparent interactivity evoke an intense sense of reality, which fills the imagination especially of young users, thus hindering their participation in truly real processes and face to face communication with others.

**The impact of aggression presented in the virtual world on people’s behavior in the real world.** Aggression and violence are not new phenomena. They have always been present in societies. But what raises concern nowadays is the fact that the level of aggression is becoming more and more intensified. Frustration connected with the ambition to be the best, the faster pace of life, the meaning of life reduced to professional careers and the accumulation of material goods negatively affect the human psyche and often find their outlet in aggressive behaviors. This process is compounded by the ubiquitous mass media such as the internet, television and computer games, in which violent contents often dominate.

Violence begets violence, and the assaulter trying to justify their violence exaggerates the evil inherent in the enemy. Regular watching of aggressive scenes on television or the internet can affect the perception of the world as a hostile and dangerous place, which can lead to the development of what George Gerbner calls *the mean world syndrome*. This is a belief that crime and violence predominate in
the world [8]. The outcome is a reduced level of empathy and sensitivity to the suffering of others.

**Aggression stimulated by computer games.** The most vivid illustration of the so far described negative impact on the human psyche especially in the context of generating aggressive behavior constitute computer games. It has been widely observed by psychologists that: «the impact of computer games on the audience is stronger than the impact of the television, the press or the radio» [14; 15].

Treated as a substitute of real life, they give a sense of existence in a world akin to the real one. It is here that the recipients, especially the young ones, are prone to lose the sense of:

- the border between reality and fiction;
- irreversibility of events;
- transience;
- death and life.

The invasion of artificially created characters into people's real lives assumes dangerous dimension. The principal question of the present paper should be once again considered in this context: Does the violence presented in video games possess an actual negative impact on the players, making them to manifest the accumulated aggression manifested in their real lives? The two opposing theories can be referred to at that point: the theory of catharsis and the theory of stimulation. According to the theory of catharsis (referring to Aristotle’s concept), video games can have cathartic, i.e. purifying properties. They enable the players to get rid of aggression accumulated in the course of everyday life and provide them with the possibility of alternative symbolic reaction. Most importantly, after completing the game the user does not transfer the so-unloaded aggression into the real world. According to the theory of stimulation, on the other hand, frequent virtual reception and symbolic participation in violent acts cause the lasting changes in the psyche of the players. Aggression is perceived as a normal thing, or even as the easiest way to
resolve all problems. It is worth mentioning that the concept of «symbolic catharsis» has been rejected by most psychologists. Currently, researchers have no doubts: violence in the media promotes and encourages violence in everyday life [9].

Another dangerous influence of computer games on the human psyche consists in weakening the principle adopted in early childhood that imposes control over aggressive behaviour. The young player treats a fictional character taken from the virtual world, such as a soldier, policeman, warrior as a pattern, and gradually modifies their attitude to the so far accepted principle of avoiding violence. Taking additionally into account the fact that the adolescent period is connected with emotional instability, it becomes clear that the agitation having its source in the hormonal changes can (in accordance with the double factor theory) lead to aggressive behaviours. If a person begins to manifests such aggressive behaviour, there is a high probability that such mode of conduct will escalate. This is confirmed by numerous studies and experiments carried out in recent years [1, p.522].

Let us consider the behaviour of sports rioters. The rivalry between two football teams can lead to the intensification of aggressive attitudes and behaviors among their hooligan fans. The actions showing violent character have assumed a kind of social status, and resistance against aggressive behaviour encoded in the psyche becomes abolished. The desire for conformity to the presented model of behavior may be a force motivating the further negative behavior. Manifesting consistency is associated with the force of personality and intellect [4, p.257]. As a result, a permanent change of the image of one’s own personality can follow. What is more, an open attack of the opponent affects the relationship with the opposed person. We begin to depreciate the enemy by blaming them for «forcing» us to become aggressive. The resulting gap between our good image of ourselves and our behavior is reduced (the cognitive dissonance) by coining a belief that if we attack
someone it means that he or she deserves it. Another good example of this psychological mechanism is the popularity of the so called “hates” in the social media.

The stimulation of aggressive behavior by certain aspects of the virtual reality can be explained by the desensitisation theory. According to this theory, the frequently repeated stimuli, in time cease to be stimulating and thus also a physiological reaction which would normally occur otherwise disappears. The result is callousness. Hence, the violence that occurs on the monitor screen can lead to a user’s reduced sensitivity to violence in the real world. The prolonged and intensive contact with violent scenes in the virtual sphere leads to a reduced sensitivity to violence in the real world; the terror of the scenes dripping with blood fades, compassion for the victim is lowered, the acceptance of violence gradually intrudes with the accompanying permission to use it “if necessary”. Violent scenes taking place in the virtual reality evoke the psychic distance, leading to a situation in which the spectator faced with the actual situation is unable to feel the horror of the tragic events.

However, the approaches towards the impact of computer games upon the psyche of children and youths are not univocal. Three groups of attitudes can be distinguished in this respect, in particular in the field of developmental psychology:

1) Computer games constitute a source of social disease. They are responsible for a variety of problems, they teach children to use aggression as a way to solve their problems; they instill unjust value systems; they divert young people from the things that are indispensable and beneficial to their development.

2) Computer games are not useful, but they are not especially harmful, either; they represent a neutral technology, which can be used both in a way that is useful and harmful.

3) Computer games are extremely useful in the information age, they teach youngsters new skills, and bring about numerous educational benefits [7, p.94-95].
Iwona Ulfik-Jaworska in her analysis of the video games contents in the context of their potentially aggression-stimulating aspects mentions the following factors:

- active participation in the game - the player not only watches the violence, but is also a subject who “evokes” it;
- focus on the game – the virtual world can assume an important role in the life of the player;
- unlimited repetition of the game - violence becomes a repeatable and normal phenomenon, to which the player quickly gets used;
- associating violence with a prize – the game is designed in such a way that violence, crime and aggression lead to success;
- the lack of consequences of acts virtually perpetrated in real reality (theft is not an offence, murder is not a punishable crime, burglary does not cause a law consequences [13].

**Conclusion.** How to resist the above mentioned threats? Any restriction of access to the virtual reality does not seem reasonable or even possible, and would be contrary to the very idea of the Internet. The only solution seems to be the proper education of the potential Web users in respect to the selection of the materials accessible in the Internet, and providing the systems of assistance on the Web helpful for information selection, and especially equipping the user with the axiological system filtering information, owing to which they will be able to consciously select the valuable material and reject the unworthy and morally threatening contents [6, p.104-105]. The final decision on what to choose in the Web is always made by the individual user. On the one hand, the Internet is a relatively new medium that generates interest and enthusiasm among the recipients, presenting numerous advantages for everyday life and education, but on the other it generates several risks to the human well being. The network is filled with
information out of which it is difficult to select the valuable and not distorted data. Moreover, it facilitates access to games showing the acts of violence and morally detrimental material. Besides, the use of the Internet is interactive, but in contrast to the direct face-to-face interaction, the subject remains anonymous, which causes the release of the sense of social control, and allows for the change the identity. This is especially dangerous in the case of young people entering adulthood whose sense of identity is only emerging [3].

Evolving technology and media have an ever greater impact on man, especially on young generation. The process of socialisation has ceased to be predictable, and no longer does it proceed from the primary group (home, family) to the secondary group (school, society). A huge part of the education of young people is occupied by the media which are taking control over the young minds. They are becoming the youth leaders, imposing the abiding values. The parent seems to have lost a traditionally fundamental position in early education. The representatives of the new generation hardly ever seek for the answer to crucial questions and problems in the traditional sources. In most cases, they decide to ”google” the answer instead of consulting their parent or the authority in the real world. Such situations generate several threats. Above all, by anonymity the Internet gives a sense of security to the user. We know about the Web user only that which they decide to reveal. The Internet gives the senders an impression that they are able to fully control the way other users perceive them. This creates a temptation to manipulate the facts. The change of identity, disguising the information, the disclosure of false messages are not infrequent phenomena. The lack of non-verbal communication is very convenient for those users who do not want to disclose the truth. The Internet also creates an illusion of safety for all those who wish to evade uncomfortable questions or difficult situations – allows them to escape through a single click of the mouse. Therefore, the Web makes it possible to avoid the consequences of one’s actions and creates a space for a sense of impunity.
In conclusion, it should be noted that in order to properly and safely use the Internet and take advantage of the virtual space one should do it with the right distance and care, and try to acquire as much knowledge about the impact of the media on the overall well being of a human psyche as possible.

**Literature**