ARTÍCULO DE INVESTIGACIÓN

Nichos digitales: estatus ontológico y cognitivo del usuario moderno en una realidad sin fisuras*

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Resumen

El artículo aborda el impacto de Internet y el entorno digital en la posición ontológica y cognitiva de los usuarios modernos. El estudio, realizado en la Universidad Federal de Kazán, Rusia, consta de dos fases: empírica y teórica. En la fase empírica, se llevó a cabo una encuesta a expertos de diversos campos, como medicina, psicología, filosofía y medios de comunicación, para obtener información sobre el consumo de medios en entornos digitales. Los resultados revelan que la frontera entre lo "virtual" y lo "real" se está difuminando, y los usuarios modernos están cada vez más conectados al entorno digital. Se observa un aumento en el grado de infantilismo del sujeto, ya que la digitalización ofrece un mundo perfecto que compensa las limitaciones del mundo real. La fase teórica se basó en el concepto de "nicho cognitivo" de J. von Uexküll y la idea de "cognición encarnada" de F. Varela, E. Thompson y E. Roche. Estos marcos teóricos permitieron comprender la experiencia digital del usuario como una práctica cognitiva única, influenciada por la inmersión corporal en entornos específicos. Se concluye que la digitalización ha llevado a prácticas de violencia en línea, como la manipulación, la intimidación y el control a través de tecnologías de la información y la comunicación. Además, los usuarios dejan una huella digital única en la red, lo que permite la personalización de contenido y recomendaciones adaptadas a sus intereses, pero también limita su exposición a nuevas perspectivas y crea una ilusión de completitud existencial.

Palabras clave: nicho existencial y cognitivo, realidad sin fisuras, realidad fundamental, entorno digital, dispositivos, paternalismo digital

Abstract

Digital niches: ontological and cognitive status of the modern user in a seamless reality

The article discusses the impact of the Internet and the digital environment on the ontological and cognitive position of modern users. The study, conducted at Kazan Federal University, Russia, consists of two phases: empirical and theoretical. In the empirical phase, a survey of experts from various fields, such as medicine, psychology, philosophy and media, was carried out to obtain information on media consumption in digital environments. The results reveal that the boundary between "virtual" and "real" is blurring, and modern users are increasingly connected to the digital environment. An increase in the degree of childishness of the subject is observed, as digitalization offers a perfect world that compensates for the limitations of the real world. The theoretical phase was based on the concept of "cognitive niche" by J. von Uexküll and the idea of "embodied cognition" by F. Varela, E. Thompson and E. Roche. These theoretical frameworks made it possible to understand the digital user experience as a unique cognitive practice, influenced by body immersion in specific environments. It is concluded that digitalization has led to practices of online violence, such as manipulation, intimidation, and control through information and communication technologies. In addition, users leave a unique digital footprint on the network, allowing for the personalization of content and recommendations tailored to their interests, but also limiting their exposure to new perspectives and creating an illusion of existential completeness.

Keywords: existential and cognitive niche, seamless reality, fundamental reality, digital environment, devices, digital paternalism.

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1. Introduction

Since the end of the twentieth century, the Internet has become an integral component of the everyday world. New communication formats produce a number of digital effects that determine the transformation of ontological and cognitive positions of users. The modern user is characterized by active alienation from his own corporeality. Digital evidence of biological processes becomes the basis of bodily experience. A modern person adjusts physical activity, food intake, evaluates his work productivity,

makes decisions about the need for medical diagnostics, and forms his own opinions and beliefs based on these devices. Ordinary (non-digital) reality becomes in this context a source of uncertainty and even causes existential horror, since it is not able to control a person's corporeality and warn him of dangers and threats. The purpose of this study is to identify the ontological and cognitive position of the modern user, based on digital corporeality experience and new methods of communication.

2. Materials and methods

This study was conducted in 2023 at Kazan Federal University, Russia, and was structured into two distinct phases: empirical and theoretical.

Empirical Phase: The empirical component was grounded in the results of an expert survey carried out in October-November 2023. The survey aimed to gather expert insights on the issue of media consumption in digital environments. Participants included 47 experts from various fields such as medicine, academia (psychologists, philosophers, cultural experts), and media, hailing from the cities of Kazan, Nizhny Novgorod, and Ufa. Experts were selected based on their research experience in medicine, psychology, culture, and their publications on digital education, digital hygiene, digital communications, and digital healthcare.

Theoretical Phase: The theoretical and methodological framework of the study was based on J. von Uexküll's concept of the cognitive niche (Umwelt), which posits that the environment influences consciousness and cognition processes. This concept views the Internet as a new (digital) existential and cognitive niche, shaping new user interaction models with both real and digital environments, experiences of digital corporeality, and novel cognitive functions.

Further, the study drew upon the research of F. Varela, E. Thompson, and E. Roche, centered around the concept of "embodied cognition." This perspective allowed for the examination of the user's digital experience as a unique cognitive practice, shaped by corporeal immersion in specific environments.

3. Results

Today's everyday digital experience is undergoing significant transformations. Not so long ago, in order to access the Internet, it was necessary to perform a number of actions related to technically turning on the device and waiting for it to connect to the network. Today the "seam" between the "virtual" and the "real" is leveled. The modern user never goes online at all, because he is permanently connected to it. For example, for modern computer games, the "seamless world" format is becoming a standard (The Elder Scrolls: Morrowind , Fallout 3, The Last of Us , The Wicher 3, Gods of War , etc.). Here the player moves around the game space without additional loading. In computer games of the 2000-2010s, when moving from one location to another, a waiting screen ("seam")

opened in front of the player. This disrupted the dynamic perception of the game, since the "seam" revealed the boundary between "real here" and "virtual there". Experts called (68%) the gradual blurring of the boundary between online and offline interactions as the main reason that radically transforms the processes of maturation of intelligence and determines the characteristics of thinking and cognitive action in general. According to the concept of J. Von Uexküll, placing in a certain external environment determines the formation of features of the inner world (Schank et al., 2023). That slice of the world that is significant for a living organism, which it is capable of perceiving, ultimately determines its cognitive capabilities, ontological intentions and actions - this is the Umwelt of this organism. In our case, this is a digital Umwelt, which is a product of interaction between the user and the digital environment.

The modern digital environment in relation to the user acts as paternalistic. The COVID -19 pandemic has expanded our understanding of digital paternalism: during the period of quarantine restrictions, the self-isolation regime and its possible violations were monitored using data from mobile operators, which collected data on the movement of users (Presiado, 2020). The digital environment is gradually becoming a perfect world for the user, compensating for the absence or restrictions of certain freedoms in the real world. As a consequence, the degree of infantilism of the subject increases. 54% of experts noted that the constant availability of devices has a therapeutic function. An analogy can be drawn with an infant pacifier or toy, which allows you to avoid feelings of anxiety, loneliness and mask the lack of communication skills. It can be assumed that the modern user voluntarily places himself in conditions of curtailing diversity, minimizing the range of possibilities in cognition and action. At the same time, according to the approach of F. Varela, E. Thompson and E. Roche (1991), cognition is inactivated, it is carried out in action, and cognitive abilities are formed through motor activity. The cognitive activity that a user manifests in a digital niche creates the niche itself, since he makes a selection, chooses in the digital reality what corresponds to his cognitive abilities and preferences.

Modern philosopher S. Zizek (2008) identifies several types of violence. Firstly, the subjective, which has a specific author, is visible and often physical. Secondly, the objective, which is divided into symbolic (embodied in language, ideology, various discourses) and systemic (derived from political and economic structures). Due to the digital environment, these types of violence acquire a digital modality. 79% of experts agreed with the statement that manipulation, intimidation, control, and causing mental and economic harm through information and communication technologies are becoming widespread practices. As a consequence, the digital modality of violent practices sets new ontological positions for the user.

Each user leaves his own unique digital footprint on the network, which is a complex structure. In addition to specific queries, search engines take into account the amount of time spent visiting sites, the features of the content consumed, etc. Based on these data, the characteristics of users are determined and their classification is carried out. This data allows you to personalize advertising recommendations for goods, services, music, etc. and thereby close the user's existential and cognitive niche. A digital

environment adapted in this way becomes for user a modern version of Plato's cave. The content received by the user has already undergone multiple adaptations and the only thing left for the user is to consume recommendations, being in the ontological status of a prisoner of a digital cave. The physical world narrows to the size of the location where the user with the device is located.

Most experts (72%) agreed with the statement that the ability of the digital environment to mimic the interests of the user performs a compensatory function. Confronting the challenges of the outside world necessitates the creation of individual closed digital structures, localities, and information bubbles. Such digital isolation provides the user with personalization of consumed content and psychological comfort. He does not go beyond the information he approves, which makes the world simple and understandable. However, at the same time, the user absolutizes the subjective position and becomes hostage to his own ontological narcissism. In this case, experts believe (68%), the digital niche begins to perform the social function of adaptation to ignorance and incompetence. In this way, the devices level out and mask the cognitive and psychosomatic deficits of users, creating the illusion of existential completeness. It should be noted that the user is not aware of the seriousness of the risks to which he is exposed.

> "Digital institutions formulate, broadcast and impose opinions and behavioral stereotypes, operating in the mode of education and propaganda, actively creating the idea that the digital environment is the main or only medium for providing information about the surrounding reality. At the same time, digital institutions...have the ability to exert a direct, although hidden influence on the formation of the worldview of large communities through the manipulation of content and in accordance with the political interests of the interested party (beneficiary, subject of management). The degree of this kind of influence and impact on society increases fundamentally with the development of relevant technologies" (Volodenkov et al., 2023: 124-125).

4. Discussion

In order to understand the essence of the digital method of communication, should be considered the concept of the performance society of the French philosopher Guy Debord (2021). Seeming appearance becomes an ontological feature of reality. In this context, the modern user finds himself hostage to a pseudo-world, and his cognitive abilities are based on the format of obtaining information through a device. This problem is relevant for humanitarian research and many authors conceptualize it through such concepts as "seeming-genuine", "truth-post-truth".

American researcher K. Shirky draws a parallel between the emergence of Gutenberg's printing press in the 15th century and the scaling of the Internet in the 21st century. The digital revolution of the 90s of the last century led to the integration of communication technologies and broadcast media. The audience received the tools to create their own content, which, according to Shirky (2008: 81), indicates an

unprecedented democratization of the process of producing mass content. However, on the other hand, the cost of error is reduced - having received the tools for creating content, the user begins to be guided by the principle "publish first, filter later". What the average person considers a way of self-expression becomes a manifestation of mass amateurism. Non-professional content becomes impossible to distinguish from expert content, and the audience loses the skill of demarcating the opinions of ordinary people from the opinions of experts (Aasman et al., 2021).

The results of modern research show the serious impact of free access to the Internet on cognitive functions. During the comparative experiment, it was proven that students from the "era of the ancient world of paper textbooks" surpass students from the "era of devices" in terms of the amount of information remembered. That is, in a relatively short period of time (from the point of view of anthropogenesis), the human brain has changed. And we do not have a clear answer to the question: "What is the appendage here - the brain or the device?" (Barr et al., 2015: 473).

Several researches show that users often are considering their devices as extensions of "Self", self-body (Oksman & Rautianen, 2006).

Devices become a "window to the world"; with their help, a person solves various social, cognitive, and mental problems that faced in daily life. Users often feel a deep emotional attachment to their mobile devices. The device breakdown causes a feeling of decreased quality of life and leads to nervous conditions. For some people, device becomes an extension of their body: they constantly hold it in hands, touch it, stroke it, even when the device is not in use.

G. Lovink (2019) in his critical theory describes a special socio-technical reality created from the sphere of social and technical. The Dutch scientist notes that while the elite enjoy offline, the majority of the population begins to submit to the communicative logic of the Internet, and the principles of decentralization of social networks deeply penetrate the culture. Digital corporations influence the worldview by promoting strategies of endless sharing, updates, and passive-aggressive behavior on social networks, forming "weak ties" between people that prevent their true political collaboration.

5. Conclusions

Blurring the boundaries between fundamental reality and digital creates a new (seamless) version of reality. This process seriously transforms the existential and cognitive status of the user. Integration processes ongoing between the Internet and users lead to the emergence of digital niches, within which the existence and knowledge of a modern user are often localized. Devices become conductors from the offline environment to digital reality and are perceived by users as an extension of their own "Self", their own corporeality.

According to the majority of experts surveyed (74%), leaving the digital niche is increasingly becoming traumatic for a person; confrontation with the offline environment creates restrictions and creates a feeling of vulnerability and helplessness. At the same

time, being in a digital niche provides a deceptive feeling of freedom and security, a full-fledged existence.

63% of experts expressed the opinion that the digital environment inevitably imposes certain restrictions on the user's ability to fully express and develop their cognitive abilities, which leads not only to impaired cognitive functioning, but also rebuilds the structure of the cognitive process. In particularly: the amount of time required to solve problems increases, decreases the level of cognitive tasks efficiency implementation, short-term memory deteriorates, the ability to concentrate on one source of information for a long time is lost, etc.). As a result of the study, the majority of experts (91%) agreed that an important problem for the modern user is finding a balance between two types of reality (fundamental and digital), which could provide full cognitive development and a holistic ontological position.

Data availability statement

The data and materials used in the work available for access.

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