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THE ROLE OF TECHNOLOGY IN REDEFINING HUMAN IDENTITY AND SOCIETY

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The Role of Technology in Redefining Human Identity and Society

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Abstract

In the period of globalisation, special attention is paid to the spiritual crisis and the loss of traditional values, emphasising the need to search for global unifying values. The article aims to study the influence of technological progress on human identity and society as a whole. The authors define the terms “human identity”, “technologisation”, and “technological progress”. They describe the main directions of technologisation’s influence on the individual and their self-awareness of identity and outline the concept of sustainable development aimed at preventing destructive conflicts. They analyse the value-normative foundations of modern society in the context of globalisation and explore the main principles of sustainable development that have gained general recognition, including direct ethical requirements present in the ecological imperative of humanity’s responsibility for the planet’s fate. Based on the analysis of existing data, the article identifies several vectors of technological impact, such as the implementation of technical means into the structure of identity, psychological experiences of loss of self-identity and privacy, changes in the objects and rules of identification, and the transformation of identification processes. In modern society, technologies are becoming “psycho-technologies”, influencing mental processes and human relationships, causing changes in the structure of human identity and identification

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processes under the influence of technological progress. It is established that the main factors of technological progress affecting personal identity include the loss of self-identity and privacy, the modification of identification processes, the change in objects and rules of identification, the integration of technical means into the structure of self-identity.

Keywords: technology; society; human identity; interactive technologies; informatisation; traditional values.

Introduction

On the one hand, technologies create new opportunities and, therefore, new goals and values, shifting the usual boundaries between normality and pathology, which alters the structure of activities. On the other hand, technologies become “psycho-technologies,” influencing mental processes and human relationships. However, psycho-technologies have many positive aspects: they facilitate interaction regardless of time, gender, race, and geographic boundaries, support information exchange, and allow people to find new and creative ways to “play with reality” and “play with the self.” However, there is also a reverse side to this, including psychological disorders and the loss of personal identity associated with new technologies. For instance, online games cease to be just entertainment and become a way to avoid confronting oneself and one’s “selfness,” offering the possibility of remaining anonymous while becoming an essential part of one’s life, identity, and self-esteem (King *et al.*, 2009). Technological progress generally enables the substituting of many standard forms of activity: it provides space for communication, solid sensations and experiences, and the expression of aggression (Shroff & Fordham, 2010). By acquiring anonymity through certain technologies, people lose their privacy through others, such as mobile phones (Thomee *et al.*, 2011; Madell & Muncher, 2007).

Technological practices and nanotechnologies combined into the so-called NBIC system have significantly expanded the capabilities and boundaries of modern existence. However, the expansion of human capabilities does not automatically lead to the expansion of personal freedom but rather the opposite to a lack of freedom. This is why scientific achievements directly connect to the generation of global crises, and the artificial world created by technology is characterised by unpredictability and uncertainty.

Philosophers have long noted the dual nature of science, whose achievements balance the edge between good and evil. On the one hand, we observe NASA’s breakthroughs in space exploration, the creation of alternative energy sources, and progress in medical research, particularly in transplantation, the use of stem cells, and cloning. On the other hand, innovations are becoming the cause of ecological and anthropogenic disasters. Thus, in contemporary philosophical thought, the issue of scientific rationality is increasingly raised in several dimensions - social,

ontological, and moral-ethical. In the context of technological achievements, the problem of defining the boundaries of humanity also becomes important (Carter & Gilovich, 2012). In specialised literature, this issue is framed through concepts such as the virtual human, post-human, cyber-human, techno-human, and others.

Additionally, in the last decade, virtual immortality has been developed and popularised, that is the continuation or perpetuation of one's life. The development of technologies based on artificial intelligence, the integration of humans and machines, and the application of biotechnologies have expanded the potential of the human brain. According to philosopher and futurist Fukuyama (2020), humanity may achieve its immortality less than half a century from now. The essence of this discovery will be the transfer of human consciousness to a computer, essentially "digitising" human consciousness through brain scanning, specifically its neural structures, for subsequent preservation in a virtual space where it can live forever. As we can see, our research topic is highly relevant and requires thorough analysis (Fukuyama, 2020).

The aim of this article is to investigate the impact of technological progress on human identity and society as a whole.

The authors of the article set the following research objectives, which were addressed in the course of the analysis: (1) to outline the meanings of the terms "human identity," "technologisation," and "technological progress"; (2) to describe the main directions of technologisation's impact on the individual and their self-awareness of identity; to outline the concept of sustainable development aimed at preventing destructive conflicts; (3) to analyse the value-normative foundations of modern society in the context of globalisation; (4) to examine the main principles of sustainable development that have gained general recognition, including the direct ethical requirements present in the ecological imperative of humanity's responsibility for the planet's fate.

Literature review

The problem of human identity, its types and components, as well as the conditions for acquiring and correlating this interdisciplinary concept with technological progress, has been examined by many global scholars (Prensky, 2013; Spahn, 2020; Crompton & Kasser, 2009). Ukrainian researcher Zabolotna (2007) considers the problem of changing moral values in the era of technological breakthroughs and globalisation trends. In her view, social identity is closely linked to mass moral consciousness, a rather specific socio-psychological phenomenon. It reflects the level of community generated by ordinary real-life circumstances. Bondarenko *et al.* (2022) studied the impact of society's informatisation on the effectiveness of strategic management of national security processes, particularly in the current Russian-Ukrainian war. Abolina (1997) and Jonas (2001) analysed

the change in the relationship between spiritual and life values in the era of globalisation changes.

Korotkevich (2019) rightly notes that the digital space grants individuals role pluralism, while digital reality expands human possibilities in shaping their identity, viewing “identity as a project” or even a series of projects. According to the scholar, virtual identity is associated with the perception of the Internet as the best way to spend time, causing significant changes in personality and leading to new forms of interpersonal relationship deficits. There is a decline in online communication’s importance and internet animation’s rise. Scholars Gatiatullina *et al.* (2015) consider identity as a category of social philosophy.

Researchers Yermachenko *et al.* (2023) examine the problem of social identity through the lens of the concepts of intelligent infrastructure and smart cities, particularly the planning, development, and functioning of smart cities based on identifying and removing barriers that create gaps between the stated goals of the city and actual practice, considering the motives and needs of human and creative capital in the context of the development of a digital society. Scholar Viner (2016) studied the impact of technological progress and the rapid development of technologies on the generation and spread of fake news.

Ukrainian researchers Storozhuk *et al.* (2023) offer an ambivalent view of humanity’s technologisation. From a positive perspective, digitalisation becomes a significant driver of sustainable growth in labour productivity and well-being. At the same time, the spread of digital technologies provides the opportunity to overcome various social challenges. Besides the positive changes, digitalisation can also lead to destructive social trends, among which digital divides caused by unequal access to digital technologies and services play a unique role. According to scientists Hren *et al.* (2023) for the first time in human history, at the beginning of the 21st century, the state, nation, and individual have merged into a single subject of information and national security.

Researcher M. Prensky in his work “Digital Natives, Digital Immigrants”, introduces the concept of “singularity,” which he defines as an event that changes things fundamentally and irreversibly. This so-called “singularity” is the extreme spread of digital technologies in recent decades, forming a new type of thinking. Therefore, according to the scholar above, it is logical to identify the new generation differently. Some scholars call them the N-[for Net]-gen or D-[for Digital]-gen. He suggests calling them “Digital Natives,” meaning “native speakers” of the digital language, contrasting this generation with “Digital Immigrants,” that is, the older generation, which finds it difficult to adapt to the digitalisation of their lives and will always feel like immigrants in this sphere (Prensky, 2001).

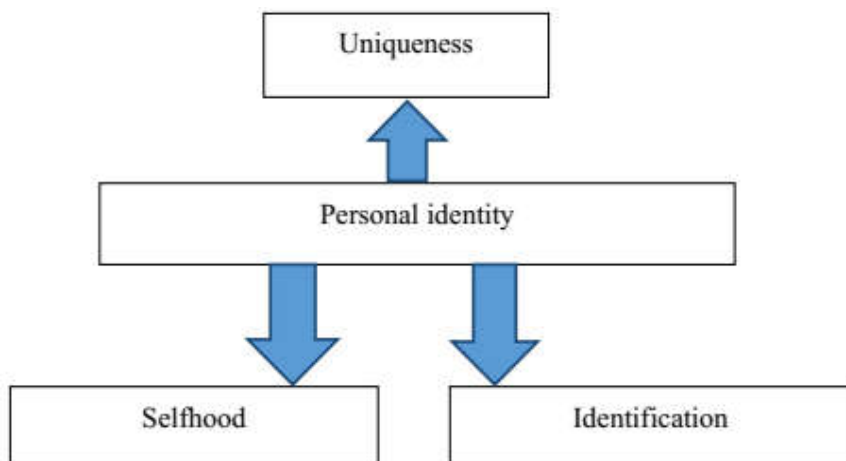
Methodology

In the course of the research, the authors of the article employed the following methods:

- descriptive method, synthesis and analysis methods – for conducting a critical review of the scientific literature on the specified issue;
- phenomenological method – to define the essence and semantic load of the critical concepts of the scientific study;
- transcendental method – to identify technological factors that influence the formation of human identity;
- modelling method – to develop a model of altered personal identity under the influence of technological progress;
- generalisation method – to formulate the scientific-theoretical conclusions of the research.

Results

The concept of human identity belongs to complex philosophical concepts. It is the result of an individual's identification with specific social or ethnic groups, along with the adoption of the axiological system of these groups. Therefore, philosophers distinguish between personal and social identity. It is worth noting that both personal and social identity are influenced by technological progress. Personal identity is formed through temperament, external uniqueness, creative abilities, and life experience, with its main components being uniqueness, selfhood, and identification with a particular group (Figure 1).

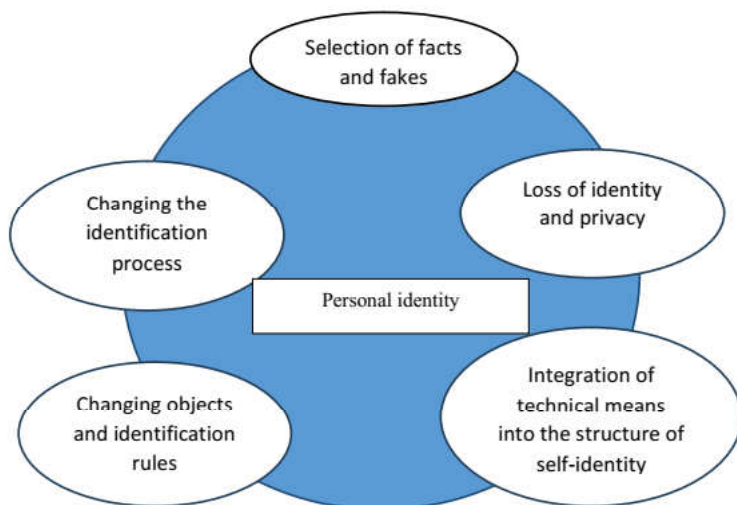


Source: author's conception

Figure 1: Identity Components

A common feature among different concepts is the consideration of identity as knowledge, perceptions, and experiences that form the basis of self-identity, about which a person can say, "This is me." Identity is formed in the course of interaction between an individual and society, and modern technologies create new conditions for human activities and interactions by directly "embedding" technological objects into the structure of identity (for example, a person cannot imagine themselves without social networks, a car, a mobile phone, or the Internet). New technologically oriented reference groups also emerge, offering new prototypes (e.g., the prototype of a confident internet user, the prototype of an electric vehicle driver) or requiring adherence to new rules (e.g., online communication, virtual interviews).

Scholars distinguish self-identity within personal identity as a subjective sense of uniqueness and individuality. We propose to highlight the following factors of technological progress that influence personal identity: the loss of self-identity and privacy, the modification of the identification process, the change of objects and rules of identification, the integration of technical means into the structure of self-identity, and the selection of facts between reality and fakes (Figure 2).



Source: author's conception

Figure 2: Modified Personal Identity under the Influence of Technological Progress

It is crucial to analyse the highlighted factors of altered identity in more detail.

Loss of self-identity. From a psychological point of view, it is appropriate to discuss the impact of technologies on the experience of self-identity and the fears and desires associated with technologies. Technological progress often offers quick and easy ways for those searching for their "true" selves. Therefore,

understanding the psychological consequences of technologies for an individual and their reactions necessitates considering their perceptions of how their identity may be altered by technical means. Translating the problem into the realm of fears and beliefs allows us to address another issue—the issue of the subjective security of technologies.

The educational component of identity. The impact of technologies on the educational component of identity requires separate consideration. Identity is formed and realised in the process of learning. Thanks to technology, individuals have access to a vast conglomerate of information. However, it is essential to distinguish between information as a set of facts and figures and knowledge as a result of reflection, cognitive processing, integration, and evaluation. The main danger for modern individuals is perceiving technology not as a tool or a source of material but as the content and final product of the educational process. This mistake is often made by pupils and students, who take information from open sources as a final product without processing, reflecting on, or comparing it. Additionally, the interactivity of the technologies used can replace genuine interest in learning with an expectation of entertainment. As a result, the individual seems engaged in the process but is deprived of self-reflection, not analysing or synthesising information, significantly complicating the process of realising one's identity.

Integration of technical means into the structure of self-identity. Technical means within the structure of identity have become key “social objects” present in our lives, capable of evoking experiences and changing human behaviour. Technical means do not so much satisfy the need for ownership as they organise some process (experiences). Some technologies open up opportunities for personalisation (e.g., avatar, music, belonging to a community) and carry identifying information about a person or social group. Gradually becoming indispensable and constant companions of individuals, technical tools expand the boundaries of the physical self but become invisible. Individuals develop the illusion of complete control over the device; the phone or tablet seems to become an extension of the hand, and the human brain begins to perceive it as part of one's own “self.”

Loss of privacy. The “boundlessness” of technology leads to the relevance of the issue of preserving identity and privacy. Any authority strives to control the individual, and this process begins with the control of identity. A term has appeared in scientific discourse the “digital shadow of the individual,” representing a person's identity in the virtual world. This “digital shadow” is partly created by individuals who personalise their technical devices and virtual space, such as managing personal pages on social networks. Additionally, this shadow is formed by other people and state and commercial organisations (accounts, bills). Often, individuals lose control over their “digital shadow,” leading to privacy violations (using personal information by others, theft or hacking of social network profiles).

Modification of the identification process. The technological breakthrough has determined the change in objects and identification rules, for example, by creating new social groups (e.g., fan club members, political parties, online game participants), which set specific rules of communication and behaviour. It has already been mentioned that many values are changing due to the expansion of the number of potential identification objects. The critical properties of psycho-technologies open up numerous positive opportunities: interaction between representatives of different cultures, genders, and races, regardless of time and location; support for culture and democracy through disseminating information and art; self-testing in various roles; and acceptance of different prototypes.

Moreover, identification in areas not related to technology is weakening. For example, the family is losing its vital role in forming identity, and the depth and closeness of communication in direct contact often suffer. New objects of identification emerge; for instance, identity-based on “network” connections inevitably differs from identity based on personal relationships with stable groups. Social networks serve as a forum for forming identity a social manifestation of inner aspirations (Boyd & Ellison, 2007). Individuals who identify as part of a social group in the “digital arena” “rebuild themselves,” in this process, they may lose or gain much, as the digital space becomes a place for communication and the transformation of personal identity.

Technological progress significantly affects the individual and their personal and social identity, which will be the subject of our further analysis. In the process of socialisation, as most empirical studies show, people orient themselves towards those similar to them, adopting various social or ethnic group norms (Maier-Abikh, 2004). The post-conventional level of ethical self-assertion and self-realisation has always been within the realm of elite culture and remains so today. In our opinion, the concept of sustainable development, as a search for a way out of the situation where “breaking the rules became the only preserved rule” (Fukuyama, 2006), is the most significant in contemporary globalism.

The founder and first president of the Club of Rome, A. Peccei, initiated the first intellectual impetus. While this organisation’s initial focus was warnings about the threats posed to humanity by uncontrolled technological progress, since the 1980s, more attention has been given to developing specific problems facing the future civilisation of the “information society.” Particular attention was also paid to the changes in the “cultural ethos” and values of life globally and the search for the foundations of “global humanism.” This was a continuation of A. Peccei’s fundamental idea of “human qualities” as the basis for further constructive development of humanity.

Among the basic principles of sustainable development that have gained general recognition are direct ethical demands within the ecological imperative of humanity’s responsibility for the fate of planet Earth, fair use of natural resources in the interest of ensuring the well-being of present and future generations, the

imperative of tolerance, interaction, dialogue of cultures, and the rejection of intolerance. This new worldview and research paradigm is particularly sensitive to ethical values that, in previous historical conditions of division, hostility to “otherness,” and social and cultural closure, served as a counterweight in guiding humanity’s spiritual orientation towards humanity without preconditions, criteria of universality, and a universalist horizon of general humanism. Overall, sustainable development is socially oriented and aimed at preserving social and cultural stability, including preventing destructive conflicts. Great importance is attached to preserving cultural and social capital, including both traditional sources of culture and its contemporary, specific forms.

The system approach plays a vital role among the methodological tools for modelling sustainable development. The praxeological aspect of general systems theory and system analysis is significant for philosophical and ethical research. To clarify the existence of systematicity in human transformative activity, extraordinary scientific developments are carried out in political science, sociology, conflictology, anthropology, law, global studies, and other fields.

Discussion

We can align with Fukuyama’s diagnosis regarding the current values in Western countries (Fukuyama, 2006). It is also worth agreeing with Fuller’s position on the necessity of dividing two moralities the morality of duty and the morality of aspiration, but with a certain clarification that their polarisation occurs only within a specific historical context in a society with a developed capitalist economy. The “morality of altruistic utilitarianism,” based on the division of systematic human activity based on total production and exchange, is connected with personalist values, oriented towards the relative isolation of the individual, conditioned by the growing autonomy of private and public life (Fuller, 1999).

Empirical experience daily demonstrates that people have begun to replace intellectual activity with the use of high-tech devices to increase the efficiency of their intellectual work. The number of incentives for people to develop their intellect and use it to its fullest extent will gradually decrease. In the modern world, a paradoxical situation arises where people who do not possess high intellectual abilities in a particular field may be more effective than highly intellectual individuals by using high-tech devices. Thus, people with high intellect find themselves forced to use these devices even if they do not wish to because otherwise, their effectiveness would be lower than that of others who use these devices.

This trend extrapolates into constructing a futuristic image of the “associative person,” characterised by the fact that with each need, a specific device is

consistently associated with satisfying it. Moreover, the person uses this device automatically (without making logical considerations). In other words, we are observing a tendency to transform the “rational person” into the “associative person,” who will deform their creative potential into a sequence of monotonous technical actions.

Conclusion

Thus, based on the above, we can assert that the main vectors of the influence of modern technologies on human identity are the “embedding” of technical means into the structure of identity, the change in objects and rules of identification, the transformation of identification processes, and the psychological experiences of the loss of self-identity and privacy. It has been shown that the traditional logical sequence “need – the process of satisfying the need – technical device – result” transforms into the following: “need – technical device – result” when trust is transformed into knowledge, where the link associated with the process of satisfying the need disappears. In this case, the result begins to be associated not with the achievement process but with the technical device. In today’s digital and digitised world, the boundaries of national cultures are so blurred that it becomes extremely difficult to promote national identity to “digital natives,” who draw their existential identity from intercultural experience.

Further research prospects include studying transformational changes in the axiological system in the era of globalisation and technologisation of society and the impact of technological progress on individual and mass consciousness.

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