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Philosophical-anthropological and ethical aspects of modern computerization: Hans Jonas's ethics of responsibility and the challenges of the digital age

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Abstract. *The article examines the philosophical and ethical implications of the deep computerization of the modern world.* ***The aim*** *is to analyze the consequences of computerization and the basis of different ethics of responsibility and the new infosphere of war. The authors focus on the problems of the transformation of human subjectivity, digital inequality, algorithmic governance, as well as the challenges for moral autonomy and human dignity in the era of artificial intelligence and automated decision-making.*

Methods. *The research employed an interdisciplinary approach, integrating methods from social philosophy, ethics, anthropology, and sociology. This combination allowed for a comprehensive analysis of the philosophical and ethical aspects of computerization in contemporary society.*

Results. *The results of the study established that modern computerization is not only a technological trend, but a powerful philosophical phenomenon. It calls into question the fundamental ideas about autonomy, responsibility, corporeality and justice. The preservation of the humanistic core of human existence requires not only technical regulation, but above all philosophical sensitivity, ethical judgment and social criticism. Our research is based on the actualization of Hans Jonas's ethics of responsibility and its analogues in modern conditions, in particular the Florida ethics.*

Conclusions. *Jonas's ethics, which Florida transforms in the digital world, acquires new relevance in Ukraine. Developers of digital solutions, from volunteer IT projects to state technological structures (for example, «Diya») find themselves in the position of «ethical architects of reality» (L. Florida). Florida indicates that information dignity should encompass not only the living, but also the dead. In the digital environment, the memory of the deceased can be either an instrument of dignity or an object of manipulation.*

The article analyzes Ukrainian cases of digital identification as a technology of memory and testimony, for example, the project «Eyes of War» as an algorithmic testimony for the International Criminal Court, which establishes the exact place and time of a war crime, and the Public Organization «Truth Hounds», which is engaged in digital documentation of war crimes. Also created by the Ministry of Digital Transformation is «eVorog». «Reface for Recognition» is used as a deepface identification technology to identify the dead. The project «Tribunal for Putin» has gone from media to an evidence base for crimes against humanity and their

consequences. These cases demonstrate that Ukraine is forming a new global ethical precedent of digital memory of war, where information ethics is not an abstract philosophy, but a means of survival and justice.

Keywords: *information technology, digital society, digitalization, philosophy of culture, philosophical anthropology, ethics of responsibility, moral choice, digital documentation of war crimes, humanism.*

Філософсько-антропологічні та етичні аспекти сучасної комп'ютеризації: етика відповідальності Ганса Йонаса і виклики цифрової доби

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Анотація. *У статті розглядаються філософські й етичні наслідки глибокої комп'ютеризації сучасного світу.* ***Мета*** *– проаналізувати наслідки комп'ютеризації на основі різних етик відповідальності та нову інфосферу війни. Автори зосереджуються на проблемах трансформації людської суб'єктивності, цифрової нерівності, алгоритмічного управління, а також на*

викликах для моральної автономії та людської гідності в епоху штучного інтелекту й автоматизованого прийняття рішень.

***Методи**. Застосовано міждисциплінарний підхід, що поєднує соціальну філософію, етику, антропологію та соціологію.*

***Результати.** У результатах дослідження встановлено, що сучасна комп'ютеризація не є лише технологічною тенденцією, а потужним філософським феноменом. Вона ставить під сумнів засадничі уявлення про автономію, відповідальність, тілесність і справедливість. Збереження гуманістичного ядра людського буття вимагає не лише технічного регулювання, а передусім філософської чутливості, етичного судження та соціальної критики. В основі нашого дослідження лежить актуалізація етики відповідальності Ганса Йонаса та її аналоги в сучасних умовах, зокрема етика Флоріді.*

***Висновки.** Етика Йонаса, яку Флоріді трансформує в умовах цифрового світу, набуває нової актуальності в Україні. Розробники цифрових рішень, від волонтерських IT-проєктів до державних технологічних структур (наприклад, «Дія») опиняються в позиції «етичних архітекторів реальності» (Л. Флоріді). Флоріді вказує, що інформаційна гідність повинна охоплювати не лише живих, але й мертвих. У цифровому середовищі пам'ять про загиблого може бути або інструментом гідності, або об'єктом маніпуляції.*

У статті розібрані українські кейси цифрової ідентифікації як технологія пам'яті та свідчення, наприклад проєкт «Eyes of War» як алгоритмічне свідчення для Міжнародного кримінального суду, що встановлює точні місце і час воєнного злочину, та Громадська Організація «Truth Hounds», яка займається цифровим документуванням воєнних злочинів.Також це створений Міністерством цифрової трансформації «eVorog» (єВорог). Для ідентифікації загиблих використовується «Reface for

Recognition» як технологія deepface-ідентифікації. Проєкт «Трибунал для Путіна» пройщов шлях від медіа до доказової бази злочинів проти людяності та їх наслідків. Ці кейси демонструють, що Україна формує новий світовий етичний прецедент цифрової пам'яті про війну, де інформаційна етика є не абстрактна філософія, а засіб виживання та справедливості.

Ключові слова: *інформаційні технології, цифрове суспільство, диджиталізація, філософія культури, філософська антропологія, етика відповідальності, моральний вибір, цифрове документування воєнних злочинів, гуманізм*

Problem statement. In the conditions of rapid development of technologies and computerization in society, there is a need for a deeper study of the philosophical and anthropological aspects of this process. Computerization and digitalization have become an integral part of our everyday life, and they significantly affect humanity as individuals and as a whole: on the cultural, social and economic structures of society.

Computerization, which was initially perceived as a tool for optimizing human labor, has turned into a general cultural logic. Digital technologies not only transform social institutions, economics and politics, but also radically rethink the person himself, his consciousness, body, interaction with the world. In the 21st century, there is a transition from a person as an autonomous moral subject to a person as an element of an information and algorithmic system. In this context, numerous philosophical and ethical questions arise that require critical reflection.

Analysis of recent research and publications. This problem is at the forefront of modern humanities research, the methodological basis of our study is the works of researchers and philosophers who have dealt with issues of

computerization, digital culture and technological impact on humanity: Donna Haraway, Sherry Turkle, Nick Bostrom, Clay Shirkey and Manning Andris.

The philosophical and anthropological dimensions of computer information and communication technologies are considered in M. Geuss, P. DiMaggio, E. Drexler, G.M. McLuhan, N.Y. Harari [7; 8], J. Palfrey, J. Rosen, B. Stiegler [15; 16], O. Toffler, M.Taddeo, L.Floridi [5; 6;11;17], E. Hargitay, L. Karvaliks, J. Masuda.

Highlighting previously unresolved parts of the general problem. Modern computerization means not only access to digital devices, but also the penetration of algorithms into fundamental decision-making processes. In Gilles Deleuze's terms, «disciplinary societies» are being replaced by «control societies» [2, p.7], where power is exercised not through institutions, but through computational procedures capable of predicting, correcting and directing behavior.

Algorithms become new «structures» (in the semiotic sense), which contain not only the logic of efficiency, but also a system of norms, values and ideas about man. However, unlike humanistic structures, the algorithm does not intend to «understand» man, only to predict and model his behavior.

The condition for the possibility of moral autonomy is the individual's ability to self-reflect. In a digital society, this ability is eroding under the pressure of endless external stimulation: notifications, likes, recommendation feeds. Subjectivity does not disappear, but changes form, from a reflective self to an «interactive self», constantly open to digital intervention.

Under such conditions, according to Bernard Stiegler [15; 16], with which we agree, there is a «proletarianization» of consciousness as the loss of the individual's ability to think outside of digital templates. This generates a new type of dependence: not on technology as a tool, but on technology as an organ that constitutes a person.

Artificial intelligence, particularly in the fields of medicine [13], justice [21], finance and war [18], increasingly makes decisions that have existential

significance. At the same time, responsibility for algorithm errors is often blurred. The ethical question arises: who is the subject of moral responsibility in a situation where the action is caused not by a person, but by a machine system?

The problem is complicated by the fact that algorithms are «trained» on data that contain structural biases: racial, gender, class. This means that computerization is not neutral but reproduces and reinforces inequalities. This set of socio-philosophical problems remains not only unresolved, but also not sufficiently theoretically conceptualized.

Formulation of the objectives of the article (Problem statement). The purpose of the work is to study the philosophical and anthropological dimension of computerization and digitalization of humanity, in particular the impact of technological changes on culture and identity, an attempt to build a new ethic of responsibility.

In accordance with the goal, the following tasks have been formulated:

1) to consider computerization as a necessary algorithmizing of modern life and humanistic resistance to societies of dictatorship and control;

2) to analyze Hans Jonas's ethics of responsibility as a possible way of a civilizational response to the challenges of the digital age;

3) to analyze the infosphere of war, namely computerization, ethics and digital subjectivity in the conditions of the Russian-Ukrainian war.

Presentation of the main material of the study. Computerization exacerbates social gaps and leads to «digital inequality»: access to technology, digital education, cybersecurity and autonomy in the digital space is distributed extremely unevenly. The concept of «digital citizenship» implies the right to access the Internet, but in practice, «digital privilege» is being consolidated as the ability to be visible, heard and protected online.

Sociologically, this leads to a new stratification of society: not by capital, but by digital competence and algorithmic «weight» [21]. Those who are not «seen» by algorithms find themselves on the periphery of social existence. Digitalization changes not only thinking, but also the body. Biometric systems, fitness trackers, augmented reality lead to the «screening» of the body. The person appears as a data subject, a collection of digital traces. At the same time, the body becomes an object of control, optimization and commodity, in particular in the context of biohacking and digital medicine.

From the perspective of philosophical anthropology (Plessner, Gehlner), this means a transition from an «insufficient» being to a «redefined» person who is constantly rebuilding himself according to digital standards.

In the context of digital transformation, there is a need for ethics that are not based on utilitarianism or efficiency, but on dignity, vulnerability and reciprocity. This is the ethics of responsibility (Hans Jonas [4]), which takes into account the future consequences of technological development for humanity and nature.

Resistance to computerization does not mean a rejection of technologies, but only a critical reflection on what values they embody. In this sense, philosophy becomes a political practice: a defense of the human as such, man, as Max Scheler declared, a needy being, full of the imperfect, the non-algorithmized, the ethical.

Modern computerization is not just a technological trend, but a powerful philosophical phenomenon. It questions fundamental notions of autonomy, responsibility, corporeality and justice. The preservation of the humanistic core of human existence requires not only technical regulation, but above all philosophical sensitivity, ethical judgment and social criticism.

In his fundamental work «The Imperative of Responsibility» (1984) [4] Hans Jonas formulated a new ethics suitable for the era of technogenic civilization. Its key postulate is responsibility not only to existing people, but also to future generations,

nature and the very fact of being. This imperative sounds like this: «Act so that the consequences of your action are compatible with the permanence of real human life on Earth» [4, p.121]. This formula, although it was conceived as a reaction to the ecological crisis and the nuclear threat, today acquires new meaning in the context of computerization, artificial intelligence and automated control systems.

Modern digital technologies, especially large language models, recommendation algorithms, biometric systems, autonomous machines, are able to change the trajectories of human life without direct human participation. This creates a new situation of moral hazard, where the boundaries of responsibility are blurred. If the decision is made by an algorithm, who is responsible? The programmer, the user, the company, the state, the system itself? Jonas warned of the danger of losing the «ontological centrality of man» [4, p.39], and this is exactly what we are observing: algorithms are less and less designed for man as an ethical subject, while man is increasingly adapting to the demands of the algorithm. The use of artificial intelligence in decision-making, especially in such critical areas as health care, finance and justice, calls into question traditional ideas about moral responsibility. For example, algorithms in medicine today perform diagnostics, predict mortality risks, suggest therapy, but they are often «black boxes» without explanations (black-box models).

Modern bioinformatics platforms based on artificial intelligence (e.g. AlphaFold from DeepMind) are already capable of modeling protein structures with high accuracy, opening up new horizons in synthetic biology and genetic engineering. This opens up not only therapeutic possibilities but also creates the threat of abuse - for example, when creating biological weapons or dangerous strains in uncontrolled laboratories. In this situation, Jonas's «principle of foreseeable harm» [4] acquires special importance: any breakthrough in biology supported by AI must be accompanied by an ethical and expert assessment of potential risks for

the future of humanity. Another relevant idea of Jonas is the priority of negative prediction over positive [4]. In a digital world where excitement over innovation often overtakes reflection, this principle demands that before implementing something technically, one should carefully consider the possible harmful consequences. Cases such as Cambridge Analytica, predictive policing, or automated job selection show that ignoring potential harm leads to systemic human rights violations.

One of the most pressing ethical issues is the use of autonomous systems in military conflicts. According to recent UN reports, combat drones with AI elements can already detect and destroy targets independently without the direct participation of an operator [8], [9]. This violates the fundamental moral principle of «the distinction between combatants and civilians», and also deprives a person of the right to the last judgment before lethal action. Jonas directly said that technological power should not be divorced from ethical capacity [4]. In the case of autonomous drones, it has already been divorced.

Additionally, there is a threat of escalating irresponsibility: countries can use such systems without declaring war, shifting responsibility to “neutral” technology [11]. This undermines international law, humanitarian norms and the idea of moral choice in war.

Thus, in each of these examples, from AI in medicine [14], [18] to military autonomy, we see that technological possibility is not the same as moral permissibility. Jonas’s Ethics of Responsibility [4] requires a reflexive limitation of human omnipotence, especially when its consequences may become irreversible or invisible to the current generation. His approach emphasizes: the center of development should be not only opportunities, but primarily responsibility for life.

It is especially important that in Jonas's philosophy, responsibility is not reduced to legal or institutional. It is an ethical act that arises in the face of a

vulnerable Other, both a specific person and the future of humanity. In the conditions of digital control, when a person becomes «transparent» for systems, the need for ethical opacity, the right to privacy, unpredictability, irreplaceability increases [4]. Actually, this is the field of implementation of responsibility: to prevent the technical utilitarianization of the human essence.

Jonas's ethics of responsibility thus requires a rethinking of the logic of technological development. Instead of a «can-do logic», it proposes a «must-only-if-we-can-do-no-harm» [4, p.112]. In the digital age, this means creating technologies that are not only effective but also morally acceptable, transparent, accountable, and compatible with human dignity.

Floridi introduces the concept of the «infosphere» [6] as a general information ecosystem that includes people, computers, objects with sensors, algorithms, digital processes. In this system, a person no longer has an exclusive epistemological status but is only one of the information agents. This creates a new ecology of responsibility in which moral duty is no longer tied only to the human subject, but to holistic information interaction. Floridi speaks of an information ethics [5] that is based not only on autonomy, but also on minimizing informational harm (e.g., manipulation of algorithms, fake news) and maintaining informational dignity (reflecting dignity in the digital presence of a person). It also envisages the responsibility of developers as new «architects of reality» [6]. We consider Floridi's concept as an analogue and development of Jonas's ethics, transferred from bioethics to the information environment: «We are now modifying our environment to such an extent that we must accept moral responsibility for the infosphere itself, not just for our actions within it» [6, p. 91].

In the context of the Russian-Ukrainian war (2022–2025), the problem of computerization acquires particular urgency. It manifests itself not only as a technological process, but as an existential challenge that transforms the structure of

reality in which Ukrainian society lives and struggles. What Floridi calls the «infosphere» [6], in war conditions becomes a battlefield for truth, consciousness and subjectivity.

Russia's information aggression against Ukraine since 2014 has evolved into a high-tech infosphere war, where cyberattacks, disinformation, fakes, deepfake videos, fact-swapping and emotional algorithmic manipulations are no less important than artillery or missiles.

Digital technologies, in particular monitoring systems, facial recognition, geolocation, chatbots, as well as artificial intelligence tools (from analyzing enemy movements to conducting information campaigns) have become part of everyday reality. Thus, war has become fully integrated into the infosphere, where there is no clear distinction between the front and the rear, between the private and the public, between the technical and the humanitarian.

Jonas's ethics, which Floridi [6; 17] transforms in the digital world, gaining new relevance in Ukraine. Developers of digital solutions, from volunteer IT projects to state technological structures (such as Diya, eVorog, etc.), find themselves in the position of «ethical architects» [6] reality.

The main questions that need to be addressed in this context: do chatbot developers have the right to collect geolocation without informed consent in combat conditions, how to ensure the ethics of using the faces of the dead in deepfake content, even for patriotic purposes, what is the moral status of a military drone that autonomously makes a decision to destroy. Which is not only a technical or legal dilemma, but is the essence of the ontological tension that arises between security and dignity, between information efficiency and human subjectivity.

In times of war, Ukrainian society has demonstrated an example of digital solidarity, in particular through open data initiatives, crowdsourcing of information verification, digital humanitarian aid, and information volunteering. However, this

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same digital transformation poses a challenge: will a citizen not turn into a «digital biomaterial» of war, where privacy, corporeality, and the inner world will be completely subordinated to algorithms and information flows. This question is not only for politicians or programmers, but for all humanitarian expertise, philosophy, ethics, and sociology, it is actually a philosophical-anthropological and most important question.

One of the most delicate and at the same time fundamentally important aspects of computerization in times of war is the use of neural networks to identify the dead, record losses, and document war crimes. These processes combine artificial intelligence, a large number of images and videos, recognition and search algorithms, and at the same time touch on the most intimate and tragic boundaries of human existence - the body, death, memory, dignity.

Ukrainian IT initiatives such as FindFace UA, Reface [13], as well as international partnerships with artificial intelligence platforms, use facial recognition algorithms to identify the bodies of those killed on the front or civilian victims among photo and video materials. This allows to speed up the identification of the dead without documents or with mutilated features, to confirm the facts of death for families, even if there is no official notification; to record the facts of war crimes (Bucha, Izyum, Mariupol). However, the philosophical question is different: can artificial intelligence be the subject of recording the tragedy, or does automatic recognition of death reduce it to statistics, depersonalizing the loss.

Floridi [6], [17] indicates that informational dignity should encompass not only the living, but also the dead. In the digital environment, the memory of the deceased can be either an instrument of dignity or an object of manipulation. Therefore, the most important and relevant issues remain ethical issues [20], does the state have the right to publish images of the killed without the consent of the family, even in the context of propaganda or recording a crime, and does AI have the

moral right to determine: this is «ours» and this is «the enemy», even in the image of the dead, how to avoid the aestheticization of violence – turning photos of the deceased into images distributed through emotional algorithms? Neural networks already today perform the function of digital witnesses, analyze satellite images, detect mass graves, verify GPS data from videos of shelling, and sometimes reconstruct the chronology of events. Such systems become the basis of the evidence base in cases of crimes against humanity. The ethical question is whether moral judgment will be delegated to the algorithm, how it will remain a matter of conscience, memory, and the human legal system.

In our opinion, the ethics of Jonas and Floridi [5] should help in this.

According to Jonas [4], in a world where technology has an unpredictable and irreversible impact, the highest ethics is ethics before the future, before those who cannot protect themselves. Identification of the dead through neural networks is part of this responsibility [3]. This is an attempt to restore the face of those erased by war. However, it requires extreme caution, because any memory technology can become an instrument of oblivion, and any archiving can become an instrument of censorship or humiliation.

One example of digital memory in Ukraine is «Eyes of War» as algorithmic evidence for the International Criminal Court.

The Eyes of War project, initiated by a coalition of Ukrainian and international developers and human rights activists, uses neural networks to analyze satellite images and geotags on video. This allows you to establish the exact place and time of a war crime, even when the enemy is trying to cover up the tracks. The system integrates videos from open sources, TikTok, Telegram channels, and compares them with databases of satellite services (Planet Labs, Maxar). Such materials are already being used to prove the facts of shelling of residential areas and civilian infrastructure.

The non-governmental organization Truth Hounds [19], which has been operating since 2014, has been actively using digital tools to collect evidence of crimes against the civilian population. Thanks to deep image recognition tools and automated video timecoding, the organization forms verified chronologies of crimes, which have already been transferred to the UN and the ICC. The team organizes training for field researchers, teaches how to work with algorithms while maintaining a humanistic ethics of testimony.

Created by the Ministry of Digital Transformation of Ukraine, єВорог is a crowdsourcing platform [10], [12], which collects information about the movement of troops, equipment, and crimes of the Russian Federation. The system uses filtering algorithms, geolocation, and neural networks to filter out fakes. This is an example of digital patriotism, which at the same time poses ethical challenges to privacy, the presumption of innocence, and the limits of personal responsibility.

The team of the Reface startup [13] (known for its face-changing app) has transferred some of the technologies for identifying the dead and missing. In particular, neural networks are used to recognize facial features even in a damaged state or based on partial photos. This has significantly helped military and humanitarian services, especially in the de-occupied territories.

The media initiative Tribunal for Putin [1; 3] is a coalition of journalists, human rights activists and technical specialists who collect videos, photos, eyewitness testimonies and algorithmically structure them into cloud databases. In collaboration with programmers, Natural Language Processing (NLP) methods are used to automatically classify events by type of crime, geography and intensity of consequences.

These cases demonstrate that Ukraine is forming a new global ethical precedent for digital memory of the war. In this context, information ethics is not an abstract philosophy, but a means of survival, justice and future peace.

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Conclusions. As a conclusion, it can be noted that computerization is not a neutral environment, but a deeply valuable field that requires a new philosophical, ethical and political understanding. The main task of thinking in the 21st century has a humanistic direction, neohumanism is to protect a person in conditions when technology begins to independently interpret, decide and manage. A new ethics is needed, where the basis is the ethics of caution, solidarity, and above all responsibility.

Modern computerization is not just a technological process, but a deep transformation of the anthropological, social and moral structure of human existence. In this article, we have traced how computerization becomes not only a tool, but also a subject of ethical, cognitive and political influence. From everyday life to bioethics, from artificial intelligence to military digital memory, everywhere we are dealing with new forms of responsibility, individual and collective decision, new conflicts between freedom, control and human dignity.

Within the framework of Hans Jonas's concept of responsibility for the future in the context of new technologies, especially in the field of biotechnology, military drones and artificial intelligence, we considered the issue of digitalization of modern society, including Ukrainian.

We drew research attention to the danger of reducing human subjectivity to a computational function, integrated L. Floridi's concept of information ethics as a modern philosophical response to the challenges of a digital society.

It was especially important to investigate how the problem of computerization functions in the Ukrainian context, namely in conditions of war, hybrid aggression, digital mobilization of memory, documentation of losses, identification of the dead, fixation of crimes through neural networks. We will consider ethical and philosophical-anthropological problems using the example of Ukrainian digital initiatives (Truth Hounds, Tribunal for Putin, eVorog, Reface, etc.), which

demonstrate that technology can be not only a tool of control, but also a carrier of justice and truth.

In the Ukrainian context, the ideas of Hans Jonas are applied in the philosophy of technology, eco-ethical studies (in particular, in the topics of environmental reconstruction after the war) and in the development of sustainable development policies.

L. Floridi proposed the concept of an «information ecosystem», where information objects have a certain ontological value. The ideas of Jonas and Floridi contributed to the formation of a new type of humanism, namely techno-humanism, where a person does not oppose technology, but coexists with it responsibly, creatively and critically.

In Ukrainian cultural studies, this is manifested in studies of posthuman identity (human enhancement, posthumanism) and digital memory and work with historical trauma through digital means (for example, digital war museums). Work is also being carried out on the analysis of the aesthetics of virtual reality and new media.

The prospects for scientific research into computerization and its impact on Ukrainian society are very broad.

Computerization stimulates the development of e-government (for example, the "Diya" system), bureaucracy automation, transparency of procedures and accountability of authorities. Scientific research in this direction should study not only technical efficiency, but also social consequences: accessibility of services, digital inequality, cybersecurity issues.

Computerization has caused a profound transformation of communication practices (social networks, messengers). Research here focuses on the impact of digital technologies on identity, public opinion, political activism and new forms of culture (digital art, memes as new cultural codes).

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Automation of production, development of the IT sector and remote work are changing the structure of the Ukrainian economy. Scientists are studying both positive effects (creation of jobs in IT) and risks (loss of jobs due to automation in traditional industries).

The experience of the full-scale war of 2022 - 2025 has shown the importance of cybersecurity, information security, and IT-based military innovations. Research here covers not only military but also socio-political aspects (e.g., the role of digital volunteering).

REFERENCE

1. Bellingcat & Truth Hounds. Open-source investigations in Ukraine: Visual evidence and verification practices [Electronic resource]. – Mode of access: https://www.bellingcat.com/ (accessed: 25.02.2025).

2. Deleuze G. Postscript on the societies of control // October. – 1992. – Vol. 59. – P. 3–7. – Mode of access: http://links.jstor.org/sici?sici=0162-2870%28199224%2959%3C3%3APOTSOC%3E2.0.CO%3B2-T (accessed: 25.02.2025).

3. Dobryden A. How Ukrainian AI technology is used for identifying the dead [Electronic resource]. – Mode of access: https://forbes.ua (accessed: 25.02.2025).

4. Jonas H. *The imperative of responsibility: In search of an ethics for the technological age*. – Chicago: University of Chicago Press, 1984. – 263 p.

5. Floridi L. *The ethics of Information*. – Oxford: Oxford University Press, 2013. – 380 p.

6. Floridi L. *The Fourth Revolution: How the Infosphere is Reshaping Human Reality*. – Oxford: Oxford University Press, 2014. – 248 p.

7. Harari Y. N. *Homo Deus: A Brief History of Tomorrow*. – New York: Harvill Secker, 2016. – 448 p.

8. Harari Y. N. *21 Lessons for the 21st Century*. – London: Jonathan Cape, 2018. – 368 p.

9. Kychko I. I., Samiilenko H. M., Khudolei V. V., Bondar N. P., Kravchyk Y. V. Risks of digital transformations of labour relations and the labour market // Laplage Em Revista. – 2021. – Vol. 7. – P. 650–660. – [Electronic resource]. – Mode of access: DOI: 10.24115/S2446-622020217Extra-E1357p.650-660 (accessed: 25.02.2025).

10. Ministry of Digital Transformation of Ukraine. єВорог platform: Citizen reports and AI-powered processing [Electronic resource]. – Mode of access: https://thedigital.gov.ua (accessed: 25.02.2025).

11. Morley J., Floridi L., Kinsey L., Elhalal A. From what to how: An initial review of publicly available AI ethics tools, methods and research to translate principles into practices // *Science and Engineering Ethics*. – 2020. – Vol. 26. – P. 2141–2168. – [Electronic resource]. – Mode of access: DOI: 10.1007/s11948-019-00165-5. (accessed: 25.02.2025).

12. Novikov M. Crowdsourcing the enemy: How Ukraine's digital ministry launched єВорог [Electronic resource]. – Mode of access: https://www.pravda.com.ua/ (accessed: 25.02.2025).

13. Reface. Reface Stands with Ukraine: How We Work in a Wartime [Electronic resource]. – Mode of access: https://reface.ai/blog/ukraine-support (accessed: 25.02.2025).

14. Senior A. W., Evans R., Jumper J., Kirkpatrick J., Sifre L., Green T., Hassabis D. Improved protein structure prediction using potentials from deep learning // Nature. – 2020. – Vol. 577(7792). – P. 706–710. – [Electronic resource]. – Mode of access: DOI: 10.1038/s41586-019-1923-7 (accessed: 25.02.2025).

15. Stiegler B. *For a new critique of political economy*. – Trans. D. Ross. – Cambridge-Oxford-Boston-New York: Polity Press, 2010. – 100 p.

16.Stiegler B. *States of Shock: Stupidity and Knowledge in the 21st Century*. – Trans. D. Ross. – Cambridge-Oxford-Boston-New York: Polity Press, 2015. – 288 p.

17. Taddeo M., Floridi L. How AI can be a force for good // Science. – 2018. – Vol. 361(6404). – P. 751–752. – [Electronic resource]. – Mode of access: DOI: 10.1126/science.aat5991. (accessed: 25.02.2025).

18. Topol E. *Deep medicine: How Artificial Intelligence can make healthcare human again*. – New York: Basic Books, 2019. – 400 p.

19. Truth Hounds. Documenting war crimes in Ukraine: Methodology and digital tools [Electronic resource]. – Mode of access: https://truth-hounds.org/en/ (accessed: 25.02.2025).

20. UNESCO. Artificial intelligence and ethics in the context of armed conflict: Ukraine case study [Electronic resource]. – 2023. – 156 p. – Mode of access: https://unesdoc.unesco.org (accessed: 25.02.2025).

21. Zuboff S. *The Age of Surveillance Capitalism: The Fight for a Human Future at the New Frontier of Power*. – New York: PublicAffairs, 2019. – 704 p.