

EVOLUTION OF POLITICAL SYSTEMS IN THE ERA OF DIGITAL TRANSFORMATION:AN ANALYSIS OF THE IMPACT OF ARTIFICIAL INTELLIGENCE ON DEMOCRATIC INSTITUTIONS

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Anotation : This research paper is devoted to one of the most pressing issues of 21st-century political science - the integration of artificial intelligence and "Big Data" into traditional democratic processes. Based on the theories of technological determinism and social constructivism, the article analyzes the impact of algorithms on public administration, electoral behavior, and information sovereignty. In particular, the "Cambridge Analytica" case, China's "Social Credit" system, and Uzbekistan's "Digital Government" reforms are examined comparatively. The research findings show that while AI technologies increase the effectiveness of political participation, they also carry existential risks that may lead to "digital authoritarianism" and societal polarization. The conclusion proposes strategic recommendations for protecting Uzbekistan's national information space from algorithmic manipulation.

Keywords:artificial intelligence, algorithmic governance, digital sovereignty, deepfake, microtargeting, panopticon, political legitimacy, cyber diplomacy.

INTRODUCTION

Today, human civilization is experiencing the fourth stage of the Industrial Revolution. A defining characteristic of this era is the gradual erosion of boundaries between the physical, biological, and digital worlds. From a political science perspective, this transformation signifies a fundamental change in the nature of state power and the mechanisms of governance. While democracy in the twentieth century was understood as the "rule of the people," in the twenty-first century it is increasingly evolving into a form of "data-driven power. In the contemporary world, elections are no longer decided in public squares but on servers, and the success of political parties depends not on the strength of ideology, but on the precision and effectiveness of algorithms. This shift reflects the growing influence of digital technologies and artificial intelligence on political decision-making processes.

The relevance of this study lies in the fact that the pace of technological development has significantly outstripped the formation of legal frameworks and ethical norms. This imbalance has created a "zone of unregulated governance," posing serious threats to national security and to citizens' fundamental right to free and informed political choice. The aim of this research is to identify the mechanisms through which artificial intelligence influences contemporary political regimes and to forecast the prospects for developing a model of "digital democracy" within the context of Uzbekistan.

THEORETICAL AND METHODOLOGICAL FOUNDATIONS

In political science, there is no single unified approach to the study of the phenomenon known as the "digital turn." The integration of artificial intelligence into social life has generated intense debate within the academic community regarding the ways in which it transforms the nature of political power. Within this study, the issue is examined through the lenses of two opposing theoretical schools - technological determinism and social constructivism. The techno-



optimistic paradigm views technological progress as a primary instrument for rescuing democratic institutions from systemic crisis. Proponents of this approach argue that digital technologies and artificial intelligence enhance political participation, transparency, and governance efficiency.

Manuel Castells, in his trilogy *The Information Age: Economy, Society, and Culture*, advances the theory of the “Network Society.” According to Castells, traditional bureaucratic systems based on vertical hierarchies have become increasingly ineffective. Artificial intelligence and networked structures, by contrast, enable the decentralization of power and the implementation of horizontal governance models¹. Pierre Lévy emphasizes the concept of “collective intelligence.” His theory suggests that artificial intelligence algorithms are capable of processing the knowledge, preferences, and proposals of millions of citizens in real time, thereby assisting the state in making optimal policy decisions. In this perspective, technology serves as a guarantor of transparency and participatory democracy.

In contrast, the **techno-pessimistic paradigm** regards technological advancement as an existential threat to individual freedom. Advocates of this approach argue that artificial intelligence provides governments with unprecedented tools for mass surveillance and censorship². Yuval Noah Harari highlights the risk of a “digital dictatorship.” According to his argument, if governments are able to use algorithms to identify and exploit the fears and vulnerabilities of each individual citizen, the emergence of political opposition may become biologically impossible. In such a system, political power is no longer concentrated in the hands of landowners or capital holders, but rather in those who control data³.

MAIN SECTION: ALGORITHMS, POWER, AND POLITICAL TRANSFORMATION

This section analyzes three fundamental transformations emerging from the integration of artificial intelligence into political processes: the rise of manipulation technologies, the emergence of new forms of authoritarian governance, and the problem of digital inequality. In classical democracy, electoral campaigning took place openly within the “public sphere.” However, in the era of artificial intelligence, this process has become subject to the so-called “black box” effect - meaning that neither voters nor, in many cases, even the developers themselves fully understand how algorithms make decisions or determine which content is shown to whom. A revolutionary shift in political technologies occurred following the Cambridge Analytica scandal. During this period, the method of “computational propaganda” was applied, whereby voters were analyzed based on the OCEAN psychological model:

1. *Openness – individuals inclined toward novelty and change (typically associated with liberal views).*

¹ Castells M. (2010). *The Information Age: Economy, Society, and Culture. Vol. 1: The Rise of the Network Society.* (2nd ed.).469-p

² Shah A. & Funk A. (2023). *Freedom on the Net 2023: The Repressive Power of Artificial Intelligence.* Freedom House.

³ Yuval Noah Harari – 21 Lessons for the 21st Century:44-p



2. *Conscientiousness – individuals who value order and discipline (often conservatives).*
3. *Extraversion – socially active and outgoing groups.*
4. *Agreeableness – individuals inclined to conform to others' opinions.*
5. *Neuroticism – emotionally sensitive and anxiety-prone individuals⁴.*

Based on this model, artificial intelligence systems identified voters with high levels of neuroticism and targeted them with alarming fake content related to crime or migration. As a result, voting behavior was driven not by rational political choice, but by artificially manipulated fear. This process led to the erosion of a shared political agenda and contributed to the atomization and fragmentation of society. Deepfake technologies produced by generative neural networks have become one of the most dangerous tools of political discreditation. During the 2024 U.S. presidential primaries, an artificial imitation of President Joe Biden's voice was used in automated phone calls urging residents of New Hampshire not to participate in the election. In political science, this phenomenon is described as "information pollution." Its primary danger lies in the fact that voters gradually lose trust even in authentic audio and video materials, ultimately leading to a complete erosion of public confidence in the political system itself.

Digital Authoritarianism: Artificial Intelligence as a New Form of the Panopticon has provided authoritarian states with a cost-effective and highly efficient mechanism for social control. As political scientist Larry Diamond describes it, this phenomenon represents a form of "postmodern totalitarianism." The "Social Credit System" of the People's Republic of China serves as a classic example of digital dictatorship. Through artificial intelligence systems that process data from millions of surveillance cameras and online activities, the political loyalty of each citizen is continuously assessed. Citizens with declining social scores are not necessarily imprisoned; instead, they are subjected to "digital isolation." This may include reduced internet speed, restrictions on enrolling children in high-quality schools, and limitations on domestic or international travel. Such a system fosters an environment of self-censorship. Individuals refrain from political engagement not out of fear of direct punishment, but due to the fear of losing their social rating. As a result, political conformity is maintained through algorithmic incentives rather than overt coercion.

Artificial intelligence is increasingly being weaponized not only in domestic governance but also in foreign policy. Authoritarian regimes employ AI-driven bots and automated networks to amplify social divisions within democratic societies and interfere in electoral processes. This strategy does not constitute "soft power," but rather represents a form of "sharp power" aimed at undermining societies from within by exploiting internal vulnerabilities. Another critical issue concerns algorithmic bias and digital justice. Politics is fundamentally the art of distributing resources - wealth, rights, and opportunities. In many Western countries, this function is gradually being delegated to algorithmic systems. However, artificial intelligence has proven to be far from objective.

In the United States, the COMPAS system - an AI-based tool designed to assess the risk of recidivism - was found to be nearly twice as likely to assign higher risk scores to African American defendants compared to white defendants. This bias stemmed from the historical data on which the system was trained, which reflected racially discriminatory policing practices. As a

⁴ Sunstein C. R. (2017). *Republic: Divided Democracy in the Age of Social Media*. Princeton: Princeton University Press. 5-p



result, “digital inequality” becomes institutionalized. Poor neighborhoods are labeled as “high-risk zones,” prompting increased police presence and surveillance. This leads to a higher number of recorded offenses, which in turn reinforces the algorithm’s initial assumptions. This phenomenon is known as a closed “feedback loop,” where biased data continuously reproduces and legitimizes structural inequality⁵.

For Uzbekistan, artificial intelligence represents both a means of increasing the efficiency of public administration and an issue of geopolitical sovereignty. Within the framework of the “Digital Uzbekistan – 2030” Strategy and Presidential Decree No. PQ-4996, several important developments can be observed: the reduction of bureaucracy through the introduction of platforms such as My.gov.uz and the FaceID system, which minimize the “human factor” and corruption risks in the provision of public services; and the expansion of electronic participation, as platforms such as “My opinion” and “Open Budget” have enabled citizens to directly participate in the allocation of public funds, serving as an important factor in reducing political apathy and strengthening civic engagement⁶.

ANALYSIS AND DISCUSSION: THE CRISIS OF POLITICAL PHILOSOPHY IN THE DIGITAL AGE

The entry of artificial intelligence into the political arena raises not only technological challenges but also profound ontological and epistemological questions. Based on the evidence presented above, the conceptual crises faced by contemporary states can be analyzed in four key dimensions.

Political Legitimacy and “Synthetic Consent”: The foundation of democratic theory is the notion of the “social contract,” according to which political authority is derived from the free will of the people. However, in the age of artificial intelligence, the concept of “free will” is increasingly called into question. If a voter’s political preferences are shaped by microtargeting and psychometric algorithms without their conscious awareness, can their vote still be considered “genuine”? Political science now observes the phenomenon of “synthetic consent,” where election outcomes reflect not the authentic will of the people but rather the manipulative efficacy of the most sophisticated algorithms. This undermines the legitimacy of elected governments and institutionalizes public distrust toward the state.

“Black Box” and Diffusion of Responsibility: According to Max Weber, bureaucracy is founded on strict rules and personal accountability. With the introduction of AI, an “algorithmic bureaucracy” is emerging, resulting in the erosion of political responsibility. When state functions—such as social benefit allocation, tax calculation, or judicial sentencing—are delegated to AI systems, who is held accountable for errors? Politicians may respond, “I do not understand the program; the system calculated it this way.” Programmers may claim, “I wrote the code, but the neural network made the decision itself.” This process, known as the diffusion of responsibility, leaves citizens without a clear subject to address grievances. The principle of “the computer said so” has become a major flaw of modern governance, leading to the subjugation of human rights under technocratic mechanisms.

⁵ [Helbing, D., et al. \(2019\). "Will Democracy Survive Big Data and Artificial Intelligence?". *Scientific American*. 7-p](#)

⁶ Decree of the President of the Republic of Uzbekistan. (2020). *On the approval of the “Digital Uzbekistan – 2030” Strategy and measures to ensure its effective implementation*. Decree No. PF-6079.



Social Fragmentation and the Erosion of the “Habermasian Public Sphere”: The public sphere described by Jürgen Habermas is a space where individuals with diverse viewpoints meet and seek compromise. Algorithms have dismantled this space, replacing it with isolated “echo chambers.” Recommendation systems show users only content that aligns with their preferences, resulting in liberals interacting exclusively with liberals and conservatives exclusively with conservatives. This intensifies the “confirmation bias” within society. Consequently, the moderate middle class disappears, society polarizes into radical extremes, and compromise becomes nearly impossible, as opposing groups perceive each other not merely as competitors but as enemies. This represents an existential threat to national cohesion and state stability.

Digital Colonialism: Another crucial dimension of the analysis is geopolitical. For small and developing countries, AI technologies introduce a new form of external dependency. Algorithms that govern the national information space are predominantly owned by U.S. or Chinese corporations. This constitutes a form of “digital colonialism.” If a state does not possess its own national AI models and independent servers, its information sovereignty is effectively conditional. Foreign algorithms, unconstrained by local values, can embed external cultural norms and political agendas into domestic digital spaces, undermining national autonomy and policymaking.

Conclusion and Recommendations

Artificial intelligence is the “nuclear energy” of the twenty-first century: if managed properly, it can illuminate and empower society; if misused, it can cause destructive consequences. The political system of Uzbekistan must be prepared to navigate this technological wave. Among the key recommendations, it is essential to adopt the Republic of Uzbekistan’s “Artificial Intelligence Code” as a legal framework. This legislation should criminalize the use of deepfakes and bots in electoral processes and ensure transparency in targeted political advertising mechanisms. The quality of algorithmic audits must be strengthened, with AI systems responsible for decisions of state significance -such as in the judiciary, taxation, and social protection - regularly examined by independent experts to prevent bias. Within the scope of digital sovereignty, state grants should be allocated to the development of national search engines and linguistic models, which serve as a guarantee of information security. Enhancing citizens’ political literacy is also a critical task, and it is recommended that political parties establish “Digital Ethics” departments and implement programs aimed at improving media literacy among the electorate.

