



The Impact of Artificial Intelligence on the Methodology of Comparative Studies of the Dynamics of Contemporary Political Regimes

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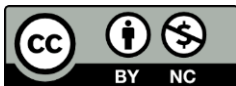
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The article examines how the use of artificial intelligence reshapes approaches to conducting comparative studies of political regime transformations. The relevance of the topic is associated with the shift from the traditional analysis of limited samples to the processing of large-scale datasets, which makes it possible to capture dynamic changes more accurately and on a broader empirical basis. The study aims to identify and assess how algorithmic tools influence the selection of indicators, measurement methods, and interpretation of results in comparative political science. The research combines qualitative case comparison, analysis of political indicator databases, and modeling based on machine learning algorithms. Particular attention is paid to the shift in research logic from explanatory to predictive models. At the same time, the changing role of the researcher under conditions of increasing reliance on digital tools is analyzed. The findings show that the use of intelligent systems makes it possible in practice to automate data collection and processing, reduce subjectivity in regime classification, and identify hidden patterns in their transformation. It is established that algorithms are capable of accounting for a significantly larger number of variables than traditional methods, which increases the accuracy of comparison. At the same time, several limitations are identified, including issues related to data quality, potential risks of model bias, and difficulties in interpreting the obtained results without a proper theoretical framework. The article proposes an approach to integrating algorithmic analysis with classical tools of political science, which involves step-by-step validation of results and maintaining analytical control by the researcher. The conclusions substantiate that the use of AI does not replace the researcher but changes the nature of their work: the importance of formulating research questions, critically evaluating data, and validating models increases. The effectiveness of comparative studies depends on the combination of algorithmic data processing and theoretical analysis, which allows for more well-grounded conclusions regarding changes in political regimes.



KEYWORDS

machine learning, algorithmic analysis, empirical data, predictive models, system classification, analytical tools.



Вплив штучного інтелекту на методологію порівняльних досліджень динаміки політичних режимів сучасності

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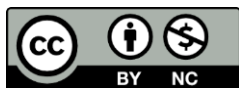
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У статті розглянуто, як використання штучного інтелекту змінює підходи до проведення порівняльних досліджень трансформацій політичних режимів. Актуальність теми пов'язана з переходом від традиційного аналізу обмежених вибірок до обробки великих масивів даних, що дозволяє фіксувати динамічні зміни більш точно та на ширшій емпіричній базі. Метою дослідження є визначення та оцінка того, яким чином алгоритмічні інструменти впливають на відбір показників, методи вимірювання та інтерпретацію результатів у порівняльній політичній науці. У роботі використано поєднання якісного зіставлення кейсів, аналізу баз даних політичних індикаторів і моделювання на основі алгоритмів машинного навчання. Особливу увагу приділено зміні логіки дослідження: від пояснювальних моделей до прогнозних. Водночас проаналізовано зміну ролі дослідника в умовах зростання залежності від цифрових інструментів. Отримані результати показали, що застосування інтелектуальних систем дозволяє автоматизувати на практиці збір і обробку інформації, зменшити суб'єктивність у класифікації режимів та виявити приховані закономірності їх трансформації. Встановлено, що алгоритми здатні враховувати значно більшу кількість змінних, ніж традиційні методи, що підвищує точність порівняння. При цьому виявлено обмеження, пов'язані з якістю вихідних даних, потенційними ризиками упередженості моделей та складністю інтерпретації отриманих результатів без належної теоретичної рамки. У статті запропоновано підхід до інтеграції алгоритмічного аналізу з класичними інструментами політичної науки, який передбачає поетапну перевірку результатів і збереження аналітичного контролю з боку дослідника. У висновках обґрунтовано, що використання ШІ не замінює дослідника, а змінює характер його роботи: зростає значення постановки дослідницьких питань, критичної оцінки даних і перевірки моделей. Ефективність порівняльних досліджень залежить від поєднання алгоритмічної обробки даних із теоретичним аналізом, що дозволяє отримувати більш обґрунтовані висновки щодо змін політичних режимів.



КЛЮЧОВІ СЛОВА

машинне навчання, алгоритмічний аналіз, емпіричні дані, прогнозні моделі, класифікація систем, аналітичні інструменти.

1. Introduction

Comparative studies of political regimes rely on limited samples and fixed sets of indicators, which narrows the possibilities of analyzing their changes over time. The use of artificial intelligence (hereinafter referred to as AI) expands the empirical base through the processing of large amounts of data and provides an opportunity to take into account the complex connections between political processes. Algorithmic models shift the emphasis from explaining already recorded changes to identifying trends and building forecasts. This approach allows you to work with more variables and more accurately record the dynamics of modes. The dependence of results on the quality of data and model parameters is growing. This requires clear procedures for checking and monitoring intermediate results. As a result, the research process becomes more multi-level and technically dependent.

The role of the researcher shifts in the direction of control over data selection and model adjustment. The importance of critical evaluation of results increases, since algorithms do not provide automatic interpretation of political content. The combination of algorithmic analysis with theoretical approaches of political science allows you to avoid formal conclusions, which forms a new requirement for methodological consistency of research.

2. Literature Review

Studies of the impact of AI on political processes are gradually shifting attention from describing technologies to analyzing changes in the very logic of scientific knowledge. In particular, J. J. Hartmann, J. J. Schwenzow and M. Witte show that even language models reproduce certain ideological inclinations that can be empirically recorded through the responses of the system [1]. This provides an opportunity to use AI as a tool for comparative analysis of political narratives, but at the same time requires taking into account built-in algorithmic biases. J. Tallberg shifts the emphasis to global AI governance, emphasizing the need to combine empirical and normative approaches [2]. This position forms the basis for rethinking the methodology of comparative research, where the analysis of regimes covers not only institutional parameters, but also digital management infrastructure.

Ukrainian researchers consider these processes through the prism of the transformation of political elites and knowledge. Thus, Y. Tararoev and V. Goreva associate global technological changes with the renewal of the mechanisms for the formation of elites, which directly affects the dynamics of political regimes [3]. N. Rezanova focuses on the boundaries of political knowledge, showing how environmental instability changes approaches to data interpretation [4]. In this context, the methodology ceases to be a set of stable procedures and acquires the features of an adaptive system that takes into account the variability of information flows. A similar line is continued by O. Zaporozhchenko, who connects the development of science with the ethical challenges of the digital age, emphasizing the responsibility of the researcher for the use of algorithmic tools [5].

The methodological dimension is detailed in works dealing with epistemology and the logic of knowledge. In particular, O. Kovalev analyzes the practical implementation of modern approaches in science education, demonstrating how the integration of digital tools changes the structure of research [6]. The institutional approach to the analysis of political stability is applied by G. Ujmajuridze, which allows him to adapt it to the comparison of different regimes in crisis conditions [7]. Epistemic logic as a tool for formalizing knowledge is considered by O. Yurkevych, which creates the basis for the use of algorithms in political analysis [8]. Taken together, these works form a theoretical framework within which AI is considered as an element of research methodology, and not only as an object of analysis.

The practical application of AI in politics demonstrates how approaches to data collection and interpretation are changing. Thus, S. Bout describes the main directions of using AI in political activity, in particular, the analysis of voter behavior and decision modeling [9]. H. Ali et al. (H. Ali et al.) prove that deep learning algorithms can predict election results based on social media activity [10]. This forms an additional type of empirical base, which is currently used mainly in research experiments. Machine learning is considered by L. Amore as a factor in the formation of political order, emphasizing its influence on decision-making [11]. This approach changes the object of study itself, since political processes are partially moved to the digital environment.

A separate direction is formed by research based on the analysis of large data sets and social networks. In particular, J. García-Díaz and colleagues (J. García-Díaz et al.) demonstrate the possibility

of determining the psychographic characteristics of politicians through the analysis of their messages [12]. Neural networks for measuring electoral violence are being studied by a team of authors led by D. Muchlinski et al., which allows obtaining data with high spatial and temporal accuracy [13]. These approaches change the criteria for comparing political regimes, since the researcher gains access to indicators that were previously outside the scope of quantitative analysis. In some studies, there is a gradual transition from static models to more dynamic approaches.

The comparative dimension is directly revealed by S. Rasikh, analyzing the political systems of different countries, taking into account the influence of AI [14]. The author shows that technological tools are integrated differently into democratic and authoritarian regimes, which affects their effectiveness and resilience. Such an approach allows you to expand the methodology of comparative research through the use of digital variables. The transformation of democratic indicators on the example of Iraq is studied by Z. Umran and L. Klioy [15]. This makes it possible to combine traditional political indicators with new analytical tools and creates the basis for a comprehensive analysis of the dynamics of regimes in different regions.

The social and communication dimension of digital technologies completes the overall picture. Thus, A. Castillo-Esparcia et al. (A. Castillo-Esparcia et al.) analyze the evolution of digital activism, showing how social networks are changing the mechanisms of political participation [16]. The use of media in election campaigns is studied by L. Doroshenko, demonstrating the role of digital tools in the formation of political strategies [17]. The report of the United Nations Development Program contains empirical data on the use of electronic services, which allows assessing the level of digitalization of public administration [18]. These materials expand the methodological toolkit through the integration of behavioral and institutional aspects.

Additional context is formed by works related to the digital economy and culture. In particular, M. Soltanifar and colleagues (M. Soltanifar et al.) consider digital entrepreneurship as a factor of social change, which indirectly affects political regimes [19]. The transformation of political culture under the influence of digitalization is analyzed by I. Tsygvintsev, emphasizing the emergence of new research tools [20]. Taken together, these approaches demonstrate that the methodology of comparative research is gradually integrating interdisciplinary elements, where AI serves as a tool for collecting, processing, and interpreting data.

The available research forms a sufficient empirical and theoretical basis for analyzing the impact of AI on political regimes, but a coherent methodological model has not yet been formed. Some of the works focus on technological aspects, others on political or epistemological aspects, which makes their integration difficult. This creates a need to build a holistic approach that combines algorithmic methods with classical benchmarking tools.

3. Problem Statement

The study aims to analyze how AI affects the methodology of comparative study of political regimes. The main emphasis is placed on changing approaches to the selection of indicators, methods of measuring them and further interpretation of the results within the framework of political analysis. The conditions under which algorithmic tools give correct results, as well as situations when their application requires additional methodological control, are considered separately.

4. Methods and Materials

The study applies a systematic approach that allows considering the transformations of political regimes as the result of the interaction of institutional, digital and informational factors. To identify changes in the characteristics of political systems, comparative analysis is used, which provides a comparison of countries according to uniform indicators and makes it possible to record differences in the dynamics of their development. Additionally, elements of qualitative analysis of cases were involved, which made it possible to take into account the context of political processes when interpreting quantitative data.

The empirical basis of the study is open databases of political indicators, international indices of democracy and stability of regimes, as well as structured data sets reflecting political changes in the time period. A separate group of materials is formed by scientific publications of Ukrainian and foreign

authors, indexed in international scientometric databases, which made it possible to clarify theoretical approaches to the analysis of digital policy transformations.

For data processing, machine learning algorithms focused on detecting hidden structures in large amounts of information were used. Their application provided an analysis of multidimensional relationships between political indicators and made it possible to identify patterns that are not always recorded by traditional methods of comparative political science. The results obtained were interpreted through a combination of quantitative analysis with qualitative contextual understanding of political processes, which made it possible to reconcile algorithmic conclusions with the theoretical framework of the study.

5. Results and Discussion

The empirical basis of comparative studies of political regimes is gradually shifting towards digital data formed in the process of real political interaction. The main shift is that the recording of political behavior is increasingly happening through digital traces that emerge on social networks and online platforms. This data allows you to partially track political activity over time, although coverage depends on the availability of platforms. The practice of using social networks to predict political results demonstrates that digital activity reflects repetitive patterns of voter behavior, which can be formalized in analytical models [10, p. 7539]. Against this background, machine learning begins to play the role of not only a data processing tool, but also a mechanism through which new analytical ideas about political orders are formed [11, p. 32]. The expansion of the scope of AI in political activity changes the very structure of the source base of research, since part of the information is generated directly in the digital environment, and is not collected through classical indicators [9].

The changing nature of data directly affects how indicators of political regimes are constructed. Classical measurements of democracy or authoritarianism are preserved, but gradually lose their monopoly on describing political reality, as they are supplemented by variables that reflect behavioral and communication processes. This configuration allows you to analyze not only the current state of the regime, but also its trajectory, that is, the way of transition between different phases of political stability. Algorithmic tools allow you to process large amounts of information faster than classical methods, although the quality of the results depends on the model settings. As a result, the empirical base acquires a multi-level structure, where statistical indices are combined with data on digital behavior and communication activity.

Practical confirmation of these changes can be traced through the case of the use of social networks in election campaigns in Ukraine. A study of the 2019 presidential election shows that digital platforms have become the main channel for mobilizing voters, and the analysis of media activity allows us to reconstruct the dynamics of support for political actors in real time. For example, V. Zelenskyy's campaign relied heavily on social networks as a tool for communication and the formation of electoral sentiments, which actually creates a digital trace of the political process suitable for algorithmic analysis [16, p. 232].

Such a transformation is demonstrated by the use of machine learning to predict election results. Deep learning models allow you to predict election results with high accuracy based on user activity on Twitter, which actually replaces some of the classic survey methods with behavioral digital data [10]. In this case, political sentiments are recorded not through declarative responses of respondents but through real online activity, which increases the efficiency of assessment.

A separate dimension opens up the analysis of political violence through algorithmic models. Neural networks built on the basis of social media data make it possible to identify and geolocate cases of selective violence with high accuracy [13, p. 133]. This significantly expands the comparative analysis of modes, as it gives access to events that previously remained fragmented or insufficiently formalized.

Additionally, the case of psychographic analysis of political actors is important. The analysis of politicians' messages on Twitter allows us to determine their ideological and behavioral characteristics, which opens up the possibility of comparing political elites not only by institutional, but also by communication parameters [12, p. 71]. This adds another layer of analysis related to the digital traces of individual actors' political behavior.

In a broader comparative perspective, it has been proven that the level of integration of artificial intelligence has a different impact on democratic and authoritarian regimes, changing their

effectiveness and resilience [14, p. 38]. This allows us to consider AI not only as a research tool, but also as a factor in the structural transformation of political systems.

As part of the comparative analysis, the application of algorithmic approaches was tested on different types of political regimes that differ in the level of institutional stability and digital openness. In stable democratic systems, digital indicators are mostly correlated with classic measures of participation and institutional trust, which confirms their complementary function. Instead, in hybrid or transitional modes, there is a gap between formal indices of democracy and the dynamics of digital activity, which records faster changes in public sentiment. This makes it possible to identify latent processes of political transformation, which are not always reflected in official statistics.

Case analysis also demonstrates a difference in the sensitivity of algorithmic models to the type of political environment. In systems with a high level of digitalization of public administration, social media data is integrated into analytical models without significant information loss, which increases the accuracy of predicting political dynamics. Instead, in regimes with limited access to digital platforms, a fragmentary empirical base is formed, which reduces the completeness of benchmarking. Such unevenness underscores the need to combine algorithmic results with contextual policy explanation for each case.

Such changes are not limited to a separate stage of the study, but cover the entire cycle of comparative analysis of political regimes. Algorithmic tools simultaneously affect the formation of data, their structuring and further use in explanatory models. This creates a situation in which the empirical base ceases to be a fixed set of indicators and turns into a dynamic system that is constantly updated. It is advisable to present the generalization of these transformations in a comparative form, since it is the comparison that allows you to record the scale of methodological changes within the framework of political analysis (Table 1).

Table 1. Changing the Methodological Components of Comparative Studies Under the Influence of AI

Methodological component	Traditional approach	Approach using AI
Empirical base	Limited Samples, Statistical Indices of Democracy	Large amounts of data from social networks and digital platforms
Data collection	Manual coding of indicators of political regimes	Automated real-time data collection
Mode Measurement	Fixed indices of democracy and authoritarianism	Neural networks and machine learning models
Analysis logic	Explanation of the changes already recorded	Trend Detection and Forecasting
Methodological framework	Static theoretical models	Adaptive models with algorithmic update

Source: Developed by the authors based on sources [1; 2; 4; 10–13; 18].

The use of machine learning is changing the way in which the characteristics of political regimes are captured in comparative political science. The analytical emphasis shifts from predetermined indicators to models that reveal hidden dependencies between a large number of variables. In this configuration, political violence and other forms of conflict behavior can be analyzed through neural networks that work with data from social platforms and allow the structure of events to be detailed at the micro level. Textual data of political actors also acquire a measurable character, since stable digital markers of political behavior are formed through algorithmic analysis. As a result, the comparison of political systems goes beyond classical indicators and begins to cover the parameters of efficiency and stability, which are calculated on the basis of multidimensional models.

The next stage of this shift concerns not only the way the data is collected, but also the logic of its interpretation. Benchmarking is no longer reduced to a direct comparison of indicators, since the results are formed in the form of multidimensional structures, where each variable affects the overall assessment of the regime. Such a model makes it possible, under certain conditions, to fix latent connections between political processes that remain invisible in classical methods of analysis. At the same time, the dependence of the results on the parameters of model adjustment and the structure of training data is growing, which actually turns the measurement of political regimes into a computational process with a high level of algorithmic sensitivity.

Against this background, comparative analysis gradually goes beyond the description of already recorded changes and moves on to the construction of forecast structures. The use of social networks to predict election results demonstrates that political dynamics can be reproduced in the form of statistically based scenarios. Language models further reproduce repetitive political patterns that are used as a basis for predictive interpretation of the behavior of political actors. In this process, it becomes important to reconcile the empirical accuracy of algorithms with the normative framework of political analysis, since this is what determines the correctness of the use of results in comparative studies.

The transition to predictive logic changes the very structure of the research process. The analyst works simultaneously with factual data and with model scenarios that describe the possible trajectories of political regimes. Under such conditions, the assessment of the results is shifted towards checking the stability of forecasts in different time intervals, and not only their explanatory power. This creates the need for constant updating of data and reconfiguration of models, which makes the study more dependent on the dynamics of the information environment. As a result, comparative political science receives tools that make it possible to analyze not only past transformations, but also to model their potential scenarios.

Methodological changes in this context are related not only to the emergence of new tools, but also to the rethinking of the limits of political knowledge. The conditions of an unstable environment make it difficult to fix stable interpretations, which directly affects the choice of research strategies. The integration of digital technologies into the structure of analysis changes the very organization of the scientific process, since data and their interpretation begin to be formed within a single algorithmic cycle. The formalization of knowledge verification procedures through logical-epistemic approaches creates an additional level of control over the results obtained in political research.

The digitalization of political science shifts the focus of research work towards constant interaction with algorithmic systems. New tools for data collection and analysis form a different logic of research practice, in which the interpretation of results ceases to be the final stage and becomes a continuous process of refinement [20]. The methodology in this configuration acquires an adaptive character, since its structure depends on the dynamics of the data and the parameters of the models. The latter forms the need for constant coordination between algorithmic results and the theoretical framework of political science, which determines the modern architecture of research on political regimes.

Social networks in this system serve as the primary source of political signals that reflect both individual and collective political behavior. Studies of digital activism record the emergence of a separate dimension of political participation that functions outside of traditional institutional channels. Election campaigns in the digital environment create additional mechanisms for influencing electoral behavior, which can be formalized through structured data. As a result, social networks are turning into an indicator not only of communication processes, but also of the level of political mobilization.

Within the framework of the study, these data were summarized in the form of a model of digital traces of political regimes, which combines institutional and behavioral parameters. A separate role in it is played by indicators of democratic transformation, which make it possible to compare regimes according to the degree of openness of the political system. An additional element is the level of digitalization of public services, which reflects the depth of technological changes in public administration. The generalized structure of these parameters is given in Table 2.

Table 2. Digital indicators for analyzing political regimes

Digital Data Group	Indicator content	Analytical value for comparing modes
Social media activity	Posts, comments, user interactions	Identification of the level of political mobilization and public participation
Digital election campaigns	Online communication of political actors	Estimation of the intensity of information influence on voters
Indicators of democratic transformation	Level of institutional openness and participation	Comparison of stability and type of political regime
Digitalization of public services	Availability of electronic services, the level of their use	Determination of the degree of institutional modernization of the state

Source: Developed by the authors based on sources [15; 16; 18; 19].

The comparison of digital indicators demonstrates the emergence of a separate measurement of political regimes, which does not repeat classical institutional indicators, but works in parallel with them. Social networks record behavioral reactions much faster than traditional statistical sources, which changes the pace of obtaining empirical data in political analysis. This is most clearly manifested in situations of gradual institutional changes, when formal indicators remain stable, but digital communication already reflects shifts in public sentiment. In such conditions, digital indicators begin to serve as an early signal of political transformations.

The practical use of digital data is changing the structure of benchmarking through the integration of time granularity into the measurement of political processes. Social platforms capture short cycles of political activity that are not reflected in traditional periodic reports or aggregated statistics. The combination of these data with institutional indicators makes it possible to reconcile the macro level of political stability with the microdynamics of behavioral changes. As a result, a denser analytical picture is formed, where different types of data mutually adjust the interpretation of the transformations of the modes.

The use of algorithmic models in this context creates unevenness in the quality of data, which arises at the stage of their collection. Digital sources reflect only a part of political reality, as they depend on the availability of platforms and user activity. Additional distortion is formed by language models that reproduce structural biases embedded in educational data [1]. As a result, the analytical output of the algorithm combines real political signals with the peculiarities of the digital environment, which complicates direct comparisons of different political regimes.

A separate block of limitations is associated with the lack of unified approaches to checking the results of algorithmic analysis. Regulatory and methodological standards do not keep up with the speed of AI development, so practical decisions are often made at the level of a single study. This forms various practices of model validation that reduce the reproducibility of results in comparative political science. In such conditions, the comparison of studies depends not only on the data, but also on the chosen research logic.

The ethical dimension of the use of algorithms adds another layer of complexity to the interpretation of political outcomes. The processing of digital data affects not only the accuracy of analytics but also further conclusions that can be used in a political or managerial context [5, p. 232]. This shifts the emphasis to the responsibility of the researcher for the way the results are presented, and not only for obtaining them. In practical terms, this means the need to control how algorithmic inferences translate into political interpretations.

The methodological limits of political knowledge are manifested in the fact that algorithmic models do not eliminate, but only change the nature of uncertainty in the analysis of regimes [4]. Formalized results give the impression of stability, but their interpretation remains dependent on the context and theoretical framework. Therefore, the algorithm does not replace the analytical explanation, but transfers it to the level of constant refinement. As a result, the accuracy of benchmarking is determined not only by the model, but also by the researcher's ability to maintain a relationship between the data and the political context.

The combination of algorithmic and classical approaches forms a shift from separate methodological practices to an integrated research model. Within the framework of comparative analysis of political regimes, this is manifested in the parallel use of institutional explanations and structural patterns obtained through machine learning. Algorithmic models describing the formation of political orders change the way of analyzing power relations, adding a computational dimension to it [11, p. 32]. In this context, the institutional approach provides a stable interpretive basis for data obtained from digital sources [7, p. 233].

The distribution of functions between approaches forms the practical logic of the integrated model. Classical political theory determines which parameters of regimes are relevant for analysis, while algorithmic methods reveal hidden structures in large data sets. Such interaction avoids the isolated existence of machine results without a theoretical explanation and, at the same time, expands the empirical possibilities of research. As a result, a combined model emerges, in which the explanatory function of political science is combined with the analytical power of algorithms (Figure 1).

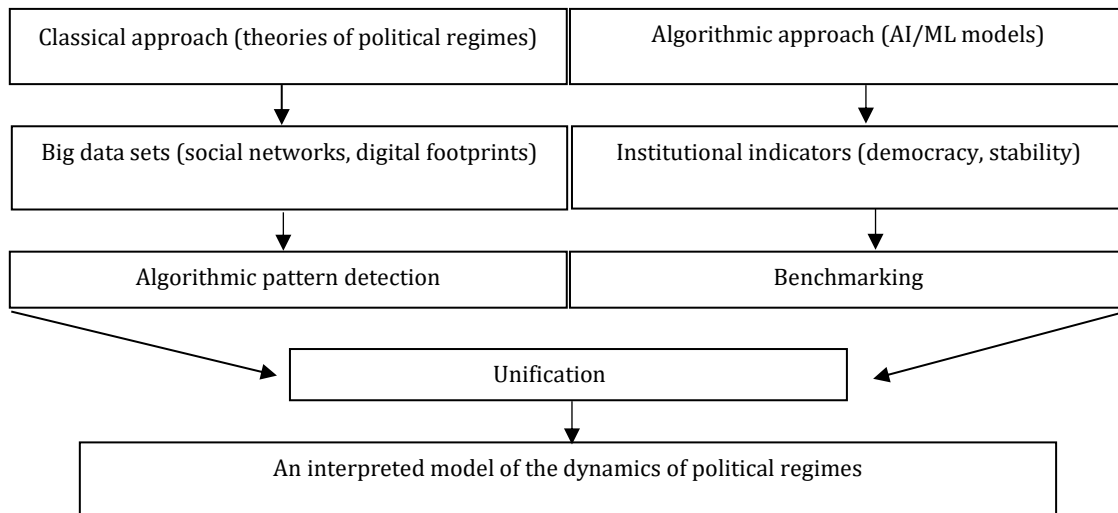


Figure 1. Integration model of comparative analysis of political regimes based on classical methods and AI

Source: Developed by the authors.

Model visualization serves as a tool for capturing the logic of the study, not as an illustrative complement. It traces the distribution of analytical tasks between classical methods of political science and algorithmic approaches, as well as the way they interact within one research cycle. In the traditional logic of political analysis, the interpretation of the results occurred after the completion of data collection and processing, which formed a linear sequence of stages. Algorithmic systems change this structure, as the results are updated in the process of analysis and need constant clarification.

In this configuration, interpretation ceases to be the final stage and goes into the mode of continuous verification of intermediate results. This is how the organization of benchmarking is influenced, where analytical conclusions are formed gradually along with the updating of data and models. An approach that combines the empirical and normative dimensions of AI research emphasizes the need to simultaneously consider data and the context of their interpretation. At the same time, the questions of the limits of political knowledge in the context of algorithmization indicate that such a model reinforces the dependence of the results on the chosen theoretical framework and procedures for controlling interpretation.

6. Conclusions

The study showed that the use of AI in the comparative analysis of political regimes does not change individual technical stages, but the general logic of building an empirical base. Data is increasingly being formed in the digital environment, where political behavior is recorded through online activity, which creates a different type of observation compared to classical statistical indicators. This shift affects the way in which the boundaries of the political regime are defined, since some of the characteristics begin to be measured not through institutions, but through behavioral patterns.

It has been established that algorithmic models change the structure of the analysis of modes through the transition from fixed indicators to multidimensional assessments, in which institutional and digital variables are combined. This configuration allows you to identify hidden connections between political processes, but the result mostly depends on the quality of the initial data and the parameters of the model. The conditions for the formation of educational buildings and the structure of digital sources affect the stability of conclusions, which requires constant verification of the results obtained within the theoretical framework of political science.

It is found that the transition to forecast models changes the nature of the interpretation of political processes, since the analytical focus shifts from the description of past transformations to the assessment of possible scenarios for the development of regimes. This creates an additional level of dependence on algorithmic settings, since even minor changes in parameters can affect the results of the forecast. Under such conditions, research work is no longer limited to data fixation and includes constant refinement of models in response to changes in the information environment.

It is summarized that the combination of classical methods of political science with algorithmic approaches forms an integrated model of analysis, where each component performs a separate function.

Theoretical approaches determine the meaningful boundaries of research, while AI provides processing of large data sets and the identification of structural patterns. Such interaction enhances the analytical capabilities of comparative studies, but at the same time increases the requirements for methodological consistency and critical interpretation of results. Prospects for further research are to deepen the integration of algorithmic methods of analysis with classical approaches of comparative political science in order to increase the accuracy of measuring and predicting transformations of political regimes in the context of the growing role of digital data.

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