



Ideological Security Maintenance: The Value and Application of Artificial Intelligence

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Abstract. Artificial intelligence is profoundly influencing and reshaping the ideological working mechanism and communication patterns, and is of great value for maintaining national ideological security. The key elements of maintaining ideological security by using artificial intelligence are: to build a complete and informative national ideological database, to design an accurate and flexible application model, and to cultivate specialized manpower. Artificial intelligence is a double-edged sword, with pros and cons coexisting. For some potential ideological crisis that artificial intelligence may bring, it is necessary to pay full attention to its negative effects, and to take active measures to ensure reasonable application and scientific operation of it.

Keywords: artificial intelligence; ideological security; maintenance

1 INTRODUCTION

At present, the intellectualized technology represented by artificial intelligence is profoundly reshaping the ideological working mechanism and communication patterns, and “the war of invisible gunpowder” is becoming more complex. Especially in recent years, with the hostile infiltration activities of various kinds to our nation, the sabotage has been clear-cut and rampant, with the characteristics of focused goals, diversified events, and concealed methods, so it is extremely a great challenge to protect ideological security of our nation. President Xi pointed out: “In the ideological struggle, we must achieve a complete victory, and we have no room for compromise” [1]; “we must have not only the first hand in preventing ideological risks, but also some great strategies to deal with challenges; not only will we win a battle to prevent ideological risks with well-prepared measures, but also gain a victory by turning crisis into opportunities with active strategies” [2]. In the top-level design, the party and our nation attach great importance to the use of artificial intelligence technology in ideological work, and great measures will be taken to maintain political, military, and ideological security of our nation by making full use of big data, artificial intelligence and other technologies to improve the ability to prevent potential risks in the ideological field.

2 GREAT VALUE OF ARTIFICIAL INTELLIGENCE IN IDEOLOGICAL SECURITY MAINTENANCE

Artificial intelligence is a production of information technology and an advanced form of information development, which represents technology empowerment with the characteristics of permeability, globalization, integration, etc., and with a wide range of fields in our society named “all-around empowerment” [3]. Artificial intelligence may predict the development trend, and the prediction is not based on random samples, but on massive data; the prediction is not an analysis of causal links, but an analysis of correlation. This is precisely the response to the uncertainty of ideological risks, which makes artificial intelligence extremely valuable in ideological security maintenance. The information collected by artificial intelligence is more comprehensive, objective, dynamic, and more capable of reflecting the current situation and changing trend of ideological risks.

2.1 Promoting a joint force in ideological work

It is a prominent problem that the government and society are hard to form a joint force of all members to maintain the ideological security. The main reasons are: a differentiated and targeted list of ideological responsibilities has not been formed, and a comprehensive and specialized mechanism has not been built, which requires the combination of the participation of all members of the society with the management of the government, to carry out some measures to prevent potential ideological risks. Artificial intelligence, represented by the brain-computer interface, may realize the exchange and interaction of knowledge and information, breaking down information barriers, and optimize traditional ideological security work through the connection and interaction between the brain and the machine. A new mode of “everyone can prevent, everyone is willing to prevent, and everyone likes to prevent” may be formed by such a system.

2.2 Connecting all links in ideological work

Although artificial intelligence cannot sneak into the unconscious and subconscious level to collect the moral data of people, and it is also difficult to fully achieve those moral thinking and behavior plans that remains at the conscious level, as long as these signals are transformed into specific moral practices, they can be discovered and stored. At present, there are three main types of data that can be collected with the help of artificial intelligence: individual information data collected in political and social life; behavior data collected by digital devices; and structural data collected by previous academic research and social survey [4]. Artificial intelligence can conduct targeted screening of these existing data according to the needs of ideological work, and use data mining technology to perform association analysis, cluster analysis, classification analysis, anomaly analysis, specific group analysis and evolution analysis on these data, so as to “holographically” reveal the law of generation and evolution of ideological risks, deeply grasp the interrelationship and function mechanism of

various elements and links of ideological work, and realize the whole control of the process.

2.3 Enhancing all-round effect in ideological work

On the one hand, the Internet and self-media have become a part of people's lives. Artificial intelligence can intuitively display the "traces" left by people's thoughts and behaviors, collect data on people's thinking dynamics and behavioral activities, and grasp the laws of people's ideology through correlation analysis. We may build a platform and mechanism for data openness and sharing, to facilitate spatial interaction, and to avoid any individual or group from being left out of the all-round ideological work. In particular, the army, as the ideological forefront, can collect and analyze a series of conventional "traces" of thoughts and behaviors in the training, study, and life of officers and soldiers with the help of artificial intelligence, to effectively guide their thinking and behaviors. On the other hand, the amazing capabilities of data collection of artificial intelligence may provide strong technical support and reliable decision-making basis for ideological work. With the help of artificial intelligence, we can judge and predict the moral development and ideological behaviors of individuals or groups, supervise and evaluate multiple social thoughts and values, predict and analyze the emotional state and behavioral preferences of individuals or groups, and grasp consciousness in a timely manner. By doing this can we timely understand the ideological dynamics and inner voice of the people, improve the unification and combination of ideological work, and enhance the all-around effect of it.

3 PRACTICAL STRATEGIES FOR MAINTAINING IDEOLOGICAL SECURITY

Some scientific and effective practical strategies should be taken to explore the mechanism of ideology empowered by artificial intelligence, to precisely understand the law of development, evolution, and changing trends of ideological work, and to improve the rapid response to potential and uncertain crisis. The way should be changed from "immediate handling" to "advance intervention", and from "inertia response" to "active fight", in order to resolve ideological crises and effectively maintain national ideological security.

3.1 Basic premise----building a complete national ideological database

The greatest value of artificial intelligence lies in its ability to mine hidden laws from the vast and complex data, analyze people's ideological dynamics and behavioral habits, scan "group portraits" and "individual portraits", and then exert its effects such as accurate prediction, scientific management, and effective evaluation. The basic premise for achieving such functions is to build a complete and detailed database of national ideology relying on data in the national big data center, banks, logistics, Internet, and etc. to provide strong support for ideological security.

On the basis of the built national ideological database, we may use data mining, data association, deep learning and other technologies to carry out all-round and multi-angle application of the large database, and conduct an overall, differential dynamic, and correlation analysis of data to achieve a multi-dimensional and accurate ideological data portrait. First, an overall analysis, which is a comprehensive and macro analysis method, can make group and individual portraits of data in a global and multi-faceted manner. Traditional ideological work generally adopts a method of partial sampling in order to obtain some accurate data. However, due to the limited sampling, it is difficult to achieve a full-scale result and analysis of the data. Based on big data, artificial intelligence can analyze the overall and ideological dynamics and behavioral tendencies of individuals or groups, and carry out all-around investigation and analysis of thoughts and behaviors, thereby preventing potential ideological risks and crisis, and providing comprehensive and global services. Second, a differential analysis, also known as personalized analysis, is a targeted analysis method based on a microscopic perspective and problem-solving awareness. Based on a large database of individuals, we can use artificial intelligence to conduct a differential analysis from the perspectives of age, educational background, work occupation, family environment, hobbies, social behavior and etc., so as to accurately describe the whole picture of individual ideology. We can also use artificial intelligence to analyze a certain group (military, students, etc.) of people from the aspects of profession, income, culture, social status and etc., to get some information to analyze the ideological characteristics of different groups, and to understand the ideological development trend of each group or organization. Third, a dynamic analysis, refers to an analysis method for specific subjects in different time, space, and fields. We can timely and quickly update the trend of data changes by dynamic analysis. What's more, we can refresh the data results according to the periodic changes of people's thoughts and behaviors, and pre-judge the ideological dynamics and behavioral tendencies, so as to prepare for the next step of ideological work. Fourth, a correlation analysis, also known as relevance analysis, is the basis of the prediction of artificial intelligence. By correlation analysis can we collect all "traces" of thoughts and behaviors of people, and conduct real-time public opinion monitoring through various methods such as retrieving high-frequency words, scanning hotspots, and collecting comments. At the same time, we can trace the infiltrated ideological trends of quasi-Western countries, explore the potential internal relationships and laws of action hidden between various elements and links, and make as much as possible accurate predictions.

3.2 Key link---building an accurate and flexible application model

Building an accurate and flexible artificial intelligence application model for ideological work is a key link for maintaining ideological security. Based on the complete and detailed national ideological database, we can build an artificial intelligence application model containing five elements to conduct systematic analysis, evaluation and prediction of ideological trend to achieve the results of precise targeting, classification design, targeted development, and changeable solutions, forming a closed loop from analysis, production, dissemination, monitoring, prediction and intervention, so that we can observe, identify and control the specifics of ideological work.

3.2.1 Intelligent elements of content.

According to mainstream of national ideological development trend, based on different targeting groups, we design main ideological trend plans, various settings of the same theme, and different settings of special groups, to form an all-round, multi-level, focused, and fully covered ideological content structure of different elements, serving as the "director" of ideological work in the new era.

3.2.2 Intelligent presentation of discourse.

Boundaries between multimedia should be broken to realize the cross-modal processing of multimedia information, such as the mutual displaying of images and texts, automatically matching a text with a picture, and generating a text for an image. An online visual map of ideological discourse can change the traditional way of ideological education approach represented by direct and straightforward teaching. In this way can we realize the transformation of ideological discourse from "explicit" education to "implicit" infiltration, acting as a "propagandist" for ideological work in the new era.

3.2.3 Intelligent prediction of crisis.

Through pattern recognition and prediction, we can infer ideological trend of certain groups and individuals, and conduct timely research and judgment on new trends and characteristics of ideological penetration of various non-mainstream ideologies in Western countries, and predict the possibility, probability and consequences of ideological risks, realizing the pre-warning of potential ideological crisis, and serving as a "forecaster" for ideological work in the new era.

3.2.4 Intelligent intervention of events.

On the basis of changing trend of ideology, artificial intelligence may generate natural language such as text, sound, and image, and automatically intervene in specific events, hotspots, opinions and tendencies, which can strengthen the positive cognition of mainstream ideology, and correct the negative perceptions of it. We can reinforce the guidance of mainstream ideological education of special groups (soldiers, young students, etc.) and individuals, realizing intervention in major events and hot spots, and acting as "escorts" for ideological work in the new era.

3.2.5 Intelligent interaction of identification.

Artificial intelligence can immediately respond to the demands of groups and individuals, and send mainstream ideological content in time according to some identification crisis of targeted audience, realizing "zero" delay from the presentation of demands to feedback, and "zero" delay from the emergence of crisis to response, acting as "hot-line" for ideological work in the new era.

3.3 Guarantee requirements---building a skillful ideological workforce

Maintaining national ideological security urgently needs backbone talents with artificial intelligence power, and it is extremely important to building a skillful ideological workforce. The workforce includes professional artificial intelligence technicians, ideological and political workers, and other personnel engaged in ideological and political work. The professional artificial intelligence technicians should have some basic ideological and political education background, and can realize the ideological attributes and value of artificial intelligence to prevent ideological risks; ideological and political workers, and those who are engaged in ideological and political work need to be trained to use artificial intelligence to better carry out ideological work. First, establishing artificial intelligence thinking. Artificial intelligence thinking provides a new perspective for ideological work to examine people's thoughts and behaviors. Establishing this kind of thinking can comprehensively grasp people's ideological dynamics and deeply understand the laws of ideological work. Changing the traditional thinking mode and establishing artificial intelligence thinking can make full use of the advantages of artificial intelligence and improve the effectiveness of ideological work. Second, improving the ability to use artificial intelligence. It can deeply integrate the potential value of artificial intelligence with the traditional advantages of ideological work to comprehensively acquire, systematically analyze, and accurately predict big data, and use them to grasp the law of ideological work and the moral formation and development of it to improve the specificity and effectiveness of ideological work..

4 PRINCIPLE REQUIREMENTS FOR MAINTAINING IDEOLOGICAL SECURITY

Artificial intelligence is a double-edged sword, with pros and cons coexisting. While it brings value to ideological construction, it is also accompanied by possible ideological crisis, which poses a threat to national ideological security related to the long-term stability of our nation and the mental health and value pursuit of the people. From this point of view, when using artificial intelligence to maintain ideological security, we should keep a clear head, pay full attention to its possible negative effects, and take active actions to avoid negative effects to ensure the correct, reasonable and scientific operation of it.

4.1 Strengthening party spirit

The application of artificial intelligence to ideological security maintenance is not a technical application and innovation in the general sense, but a serious political task. Party spirit must be strengthened, and the requirements of Party management of ideology must be incorporated into the whole process of ideological work to ensure the correct direction and track of it. First, unwaveringly adhering to the guiding position of Marxism. We must take the Marxist theory as the fundamental guide, and use the outlook and methodology of Marxists, especially Chairman Xi's thoughts on artificial

intelligence, big data, and network ideological governance to explore the logical mechanism, internal basis, and theoretical value of artificial intelligence embedded in ideological work. Second, adhering to the correct political direction. The mainstream ideological disseminators of the Party must follow the ideals and beliefs of socialism and communism, strengthen the "four consciousnesses", and cultivate the "four self-confidence". On the basis of it, they should study hard and realize some new changes and new features of ideological mainstream empowered by artificial intelligence, and actively use it to promote innovation both in content and process of ideological mainstream construction, so as to maximize and optimize the effects of ideological security maintenance.

4.2 Correct positioning

The involvement of artificial intelligence in ideological security maintenance is the empowerment of intelligent technology. Artificial intelligence acts as server, and the ideological work is served; rather than completely replacing, artificial intelligence cannot completely solve all contradictions and problems in the field of ideological construction. The data, informatization, and visualization of research paradigms and thinking methods used in artificial intelligence must obey and serve the needs of ideological mainstream construction and development. On the one hand, it is necessary to grasp the basic development and characteristics of artificial intelligence, deeply understand the technical and operational logic of artificial intelligence to make preparations for scientific management of ideological crisis; on the other hand, it is necessary to "embed" the technical content in ideological work to realize the organic integration of mainstream ideological content with algorithm programs, databases and other technologies, to ensure that artificial intelligence products conform to the mainstream moral trends and ideology.

4.3 Pursuing advantages and avoiding disadvantages

The creating ideas, composition modes, and construction methods of artificial intelligence used in ideological security maintenance must be conducive to the generation of mainstream ideological construction. To this aim, first of all, we should continuously improve algorithm and data technology of artificial intelligence. Through technical correction, we may use the mainstream value orientation to control the algorithm, and embed the generation and dissemination of mainstream ideology in the internal logic and operation of intelligent algorithm technology to strengthen the dominant construction power in discourse, transmission and identification, eliminating potential ideological crises and dangers from the source. Secondly, we must strengthen the ideological education of technical designers in mainstream values to ensure the deep integration of mainstream values and technical logic, to avoid ideological dangers that may be buried due to the deviation of the values of technical designers, and prevent potential ideological crisis. Finally, in response to the complex ideological situation brought about by artificial intelligence technology, it is necessary to strengthen legal constraints and social supervision. Through resolute discourse struggles, we should completely control

the voice of mainstream ideology by maintaining the bottom line, achieving consensus, and resisting infiltration.

5 Conclusions

In a word, artificial intelligence has the typical characteristics of a high degree of integration of technical advantages and social value judgment. Its strong ideological attribute is the theoretical support for its application of national ideological security in the new era. With the help of key artificial intelligence technologies such as data mining, data association, deep learning and human-computer interaction, give full play to the data, accuracy, design and temporary characteristics of artificial intelligence, independently mine multiple basic data, penetrate the connection between basic entities of ideology, trace the logical transmission mechanism of ideology, and accurately analyze the meaning. Recognize the situation of the morphological struggle, predict the evolution of research and judgment trends, plan production action plans, deploy actions at the right time, evaluate the action effect, and provide technical support for maintaining national ideological security in the new era. The creation of the artificial intelligence application model of ideological work in the new era strives to realize the organic application of artificial intelligence technology to the whole process of ideological work, form a closed loop of national ideological security maintenance, and support the practice of ideological work in the new era.

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