Paradigm Academic Press
Studies in Social Science & Humanities
ISSN 2709-7862
JUL. 2024 VOL.3, NO.7

The Threefold Logic of Integrating Digital Intelligence Technology into the Construction of Chinese Mainstream Ideology

Guanghuan Gao[1]

[1] School of Marxism, Shijiazhuang Tiedao University, China

Correspondence: Guanghuan Gao, School of Marxism, Shijiazhuang Tiedao University, China.

doi:10.56397/SSSH.2024.07.03

Abstract

In the era of digital intelligence, the construction of Chinese mainstream ideology faces new opportunities and challenges, which can be further explored through theoretical analysis, practical application, and real-life experiences. From a theoretical perspective, Marxism's examination of the relationship between science, technology, and ideology along with Frankfurt School's theory on science and technology ideology serve as valuable references. In terms of reality, integrating digital intelligence technology into China's ideological construction is both feasible and necessary. Moreover, there exists a mutual need between digital intelligence technology and China's ideological construction. As for practice, we can focus on strengthening party leadership, emphasizing value guidance, optimizing system design, improving legal frameworks to illuminate the path towards integrating digital intelligence technology into the development of China's mainstream ideology.

Keywords: ideological construction, digital intelligence technology, logic

1. Introduction

With the rapid advancement of social digital intelligence construction, digital intelligence technology offers novel technical support for the establishment of mainstream ideology in China and emerges as a significant factor influencing its development. The construction of mainstream ideology should enhance the utilization of digital intelligence technology and continuously adapt to the evolving digital intelligence environment. The utilization of digital intelligence technology to enhance the construction of China's mainstream ideology necessitates a comprehensive elucidation on how this integration can be achieved as a scientific and technological endeavor, encompassing theoretical resources and practical foundations. In terms of theoretical resources, Marxism's comprehension of the intrinsic relationship between science and technology and ideology, as well as Frankfurt School's theory on the interplay between science, technology, and ideology, offer a profound theoretical foundation. On the basis of reality: on one hand, it is feasible for digital intelligence technology to integrate into China's ideological construction. On the other hand, there exists a reciprocal need between digital intelligence technology and our country's ideological construction.

2. Theoretical Logic: Theoretical Foundations for the Integration of Digital Intelligence Technology into Our Country's Mainstream Ideological Construction

The interplay between science, technology, and ideology has consistently captivated Marxist theorists, providing us with a wealth of invaluable theoretical resources. The Marxist perspective on the alienation of science and technology is intellectually stimulating, while the Frankfurt School's critical approach to science and technology ideology is unparalleled, offering theoretical guidance for integrating intellectual technology into the construction of mainstream ideology in China.

2.1 Marxism on the Internal Correlation Between Science and Technology and Ideology

2.1.1 The Development of Ideology Is Influenced by Science and Technology

Marx recognized the interconnectedness between technology and ideology, rejecting the notion that they exist in isolation from each other. On the one hand, Marx believes that science and technology are the constituent elements of productive forces. Capital presupposes a certain present historical development of the productive forces — which also include science, Marx said. (Central Compilation and Translation Bureau [CCTB], 2009, p. 188) Obviously, the significance of science and technology in advancing the development of productive forces is undeniably acknowledged by Marx. Marx, on the other hand, voiced apprehension regarding the potential alienation caused by technology. As Marx put it, the hand mill gives rise to a society characterized by feudalists, while the steam mill leads to the emergence of a society dominated by industrial capitalists. (CCTB, 2012, p. 340) He believes that the advent of technological advancements has precipitated the emergence of a capitalist society. In his analysis of the capital's mode of production, he highlighted that the advancement in labor productivity resulting from mechanization has transformed into a mechanism for capitalists to appropriate surplus value generated by workers. Technology undoubtedly assumes an ancillary role in facilitating the operation of capital's relations of production. This suggests that Marx possessed an awareness of the potential for technology to assume a dominant role in exerting control over workers.

The productive forces, as we all know, constitute the decisive driving force that determines the trajectory of social development. Meanwhile, the dialectical interplay between productive forces and production relations shapes the essence of economic foundation and superstructure. From the perspective of Marxist theory, science and technology facilitate the transformation of superstructure by integrating into productive forces and engaging in the dialectical movement of productive forces and production relations, subsequently influencing the reform of ideology. The integration of technology into productive forces exerts a profound influence on the construction of ideologies.

2.1.2 The Ideology Hinders the Progress of Scientific and Technological Advancements

While calling for the improvement of social productive forces through scientific and technological progress, Marx stressed the need to bring into play the dynamic reaction of ideology to social existence. That is, through the utilization of scientific theory to guide the practical development, science and technology into a revolutionary force to promote social change. On the one hand, science and technology as a form of practice is influenced by politics. "Politics, especially the specific social system, political environment and the political ideology of the ruling class based on it, can determine the direction of scientific and technological development, and influence and even dominate scientific and technological practice in an all-round way." It shows that the development of science and technology practice is influenced by political forces, and ideology affects the practice of science and technology. On the other hand, science and technology as ideological forms belong to the superstructure. The aforementioned ideological superstructure can respond to the economic foundation and thus fulfill an ideological function in the advancement of science and technology, reflecting the ideological response to the progress of science and technology.

It goes without saying that there is a significant connection between science and technology and ideology from the perspective of Marxism. On one hand, the integration of technology into productive forces facilitates the advancement of ideology; on the other hand, ideology exhibits a dynamic response to science and technology.

2.2 Frankfurt School Science and Technology Ideology Theory

The study of the relationship between science and technology and ideology is one of the core contents of the social critical theory of Frankfurt School. It's view that science and technology is ideology has strong theoretical vitality.

2.2.1 Science and Technology Is Ideology

Max Horkheimer, founder of the Frankfurt School, first put forward the view that science and technology is ideology. He argues that any human action that obscures the true nature of society is ideological, "because science retains a form that prevents it from discovering the true causes of the crisis." (Max H, 1997, p. 161)

The representative of the Frankfurt School, Herbert Marcuse, argued that technology could serve as an ideological apparatus whereby its rationality is transformed into political rationality. This integration enables the control over both nature and humanity, rendering science and technology a novel form of governance. As Marcuse points out, "political intentions have infiltrated the technological logos in the progressive technology and been transformed into the logos of the still existing state of slavery." (Herbert M, 2006, p. 145) He believes that technological rationality propagandises, indoctrinates and brainwashes the masses by playing its ideological function, paralyzes people's critical reflection consciousness, converts people's affirmation of science and technology into political affirmation, thus defending the rationality of the capitalist system, and ultimately makes people and society one-dimensional.

The representative of the second generation of Frankfurt School, Jürgen Habermas, explicitly posited that science and technology constitute an ideology based on preceding scholars. He argues that in the context of late

capitalism, science and technology functioned as an ideology more effectively than any previous ideologies, serving to uphold the existing power structure and perpetuate human oppression. He highlights that the reason for science and technology becoming an ideology lies in state intervention in both the economy and scientific advancements, resulting in their emergence as primary productive forces. Furthermore, he emphasizes that the prevalence of "technocracy" represents a significant manifestation of science and technology functioning as an ideology.

2.2.2 The Revelation of the Digital Technology Ideology by Frankfurt School

The Frankfurt School has been passed down to the fourth generation, and its research scope covers many fields. Among them, David·M·Berry has a special interest in the criticism of digital technology, and has made certain theoretical achievements, which provides a theoretical mirror for us to think about the influence of contemporary digital intelligence technology on ideological construction.

First, Berry argues that digital technology intensifies instrumental rationality. He argues that "The move towards an informationalisation of society, particularly in the over-developed economies in the twenty-first century, has intensified this process, with the growth of a computational world overlaying the physical world, and which, to a greater extent, has been delegated with the logic of rationalization and instrumental reason." (David. M. B, 2014, p. 2) Second, Berry reveals the pattern of digital technology ideology. He argues that digital technology has morphed into a computational ideology. On the one hand, digital technology is seen as a "panacea." Using the financial crisis as an example, Berry (2014, p. 84) notes that "technology can solve the problem of financial instability itself, but also a belief by traders and companies that the crash was caused, to some extent, by a lack of technology rather than a surfeit." In short, there is widespread digital anxiety. On the other hand, computational ideology is protected by digital technology. Berry (2014, p. 197) makes it clear that "Computational ideologies are protected in computationality by the more subtle apparatuses and more terrible armed guards of drones, algorithms, software and code." Finally, Berry sees the digital humanities as a way to save rational consciousness. In the face of the loss of public reason in the digital age, Berry emphasizes that "digital humanities have enough technical capacity and cultural capital to really change the direction of these projects, change the way instrumental logic is embedded, change the way interventions are implemented." (David. M. Berry & Anders Fegjord, 2019, p. 183) It can be seen that Berry has great expectations for the digital humanities.

To sum up, the Frankfurt School's ideological theory of science and technology reveals that science and technology have replaced the traditional political coercive means to become a new form of governance. This form of "technocracy" serves a more potent and efficient political defense function, leading individuals to become fixated on enhancing their material living standards, ultimately settling for the status quo and ceasing rational contemplation. The consistent theory of science and technology ideology of Frankfurt School indicates that the rapid development of digital intelligence technology has exerted inestimable influence on ideological construction.

3. Realistic Logic: The Practical Basis of Integrating Digital Intelligence Technology into the Construction of China's Mainstream Ideology

The advancement of digital intelligence technology has made significant strides in the realms of industrial upgrading, economic development, and cultural enhancement, giving rise to emerging domains such as the digital intelligence economy and digital intelligence culture. On one hand, digital intelligence technology has the potential to be integrated into China's ideological construction. On the other hand, there exists a mutual need between digital intelligence technology and China's ideological construction.

3.1 The Practical Possibility of Integrating Digital Intelligence Technology into China's Ideological Construction

3.1.1 Requirements of the Times for the Digital Transformation of Mainstream Ideology Construction

With the progress of the times, the environment for the dissemination and exchange of ideas has undergone great changes, and ideological construction needs to keep pace with the times. The ideological construction needs to adapt to the new stage of digital intelligence survival as the human economy and society gradually enter the era of digital intelligent technology. First, the internal need to expand the carrier of ideological transmission. As the future media, digital intelligence technology is not only the future public opinion field, but also the main carrier of ideological information. Digital intelligence technology can improve the efficiency of ideological communication, and digital intelligence technology space can broaden the depth of ideological communication. In short, digital intelligence technology provides an excellent digital intelligence carrier for the dissemination of mainstream ideology. Second, the specific consideration of innovative ideological content forms. The intelligent core and virtual design of digital intelligence technology provide greater opportunities for the innovation of ideological content and form. By promoting the virtualization and immersion of ideology, users' all-dimensional

perception of ideology can be enhanced, thereby bolstering digital intelligence technology users' alignment with mainstream ideology and effectively elevating the level of mainstream ideology construction in China. The inevitable choice to secure the ideological audience. The advent of digital intelligence technology has given rise to a novel form of Internet characterized by a vast user base and a high level of openness and publicity. Wherever there are individuals, an audience is present. The mainstream ideology must establish a strong presence in the densely populated digital intelligence space of users if it aims to expand its audience. By influencing the virtual world and then the real world, the audience base of mainstream ideological identity is constantly expanded.

3.1.2 The Digital Intelligence Technology Foundation of Mainstream Ideological Construction Has Been Consistently Strengthened

The social consciousness is shaped by the dynamics of social existence. The ideology, as a collective consciousness of society, does not actively undergo changes but rather necessitates adaptation to alterations in the social foundation. The integration of digital intelligence technology into ideological construction cannot be achieved in isolation; instead, it requires a solid foundation of realistic digital intelligence technology.

On the one hand, the scale of China's digital intelligence technology industry continues to expand. This is reflected in two aspects: policy support and industrial financing. In terms of policy support, the central government has issued relevant support policies and industrial planning for digital intelligence technology, and the digital intelligence technology industry has been given key support. The 14th Five-Year Plan for Digital Economy Development issued by The State Council, the Three-year Action Plan for Industrial Metaverse (2022-2025) issued by the Ministry of Industry and Information Technology, and the Action Plan for Integrated Development of Virtual Reality and Industrial Applications (2022-2026) all involve industries related to digital intelligence technology. According to the China Digital Development Report (2022), the scale of China's digital economy will reach 50.2 trillion yuan in 2022, ranking second in the world in terms of total volume, with a year-on-year nominal growth of 10.3% and its share in GDP rising to 41.5%. With the intensive introduction of relevant policies involving the digital intelligence technology industry in many places in China and the expansion of financing scale, the digital intelligence technology industry will achieve further development. The foundation of digital intelligence industry in China's ideological construction is becoming more and more solid. On the other hand, digital intelligence technology has garnered significant attention in terms of research and application. It encompasses various core technologies such as artificial intelligence and big data, which have now reached the strategic stage of national key research and development tasks. At present, breakthroughs have been made in the research and development of big data, computing power and network communication technologies. In 2021, the total number of big data-related patents accepted in China accounted for more than 50% of the world, ranking first; A new generation of quantum chips enters the mass production stage; The sixth generation of mobile communication technology (6G) leads the world. In brief, China's ideological construction is bolstered by an increasingly robust foundation of digital intelligence technology.

3.2 The Practical Necessity of a Reciprocal Construction Between Digital Intelligence Technology and China's Ideological Development

Digital intelligence technology and China's ideological construction are facing the realistic needs of mutual construction. The healthy development of digital intelligence technology needs the guidance of mainstream ideology, and the progress of ideology construction cannot be separated from the participation of digital intelligence technology, and the two need two-way positive interaction.

3.2.1 The In-Depth Expansion of China's Ideological Construction Necessitates the Utilization of Digital Intelligence Technology

The development of digital intelligence technology continues to provide favorable factors for the construction of mainstream ideology in China. As a way of existence, numerical intelligence technology can enhance ideological workers' digital intelligence thinking. In the age of digital intelligence, the digital intelligence and intelligent logic are reflected everywhere, and ideological workers need to learn the number intelligence thinking mode. As a means of communication, digital intelligence technology can broaden the depth of ideological communication. Digital intelligence media is a full-dimensional media, and its transmission efficiency is qualitatively different from that of traditional media. As a security variable, digital intelligence technology can build an ideological security barrier. Digital intelligence technology competition has national political attributes and is a hard power competition among world powers that cannot be ignored. As a technical means, the application of digital intelligence technology can enhance the efficacy of ideological governance, as its diverse and multifunctional nature significantly expands the range of available means for such governance. In a word, digital intelligence technology has opened up unlimited space for the construction of China's mainstream ideology.

3.2.2 The Development of Digital Intelligence Technology Needs the Direction and Guidance of China's

Mainstream Ideology

On the one hand, China's mainstream ideological construction provides soft guidance for intellectual technology. As an ideological system, mainstream ideology provides value norms and direction guidance for the construction of digital intelligence technology in China. In fact, digital intelligence technology represents the convergence of technology, industry, and capital. It cannot be simply perceived as a natural outcome of technological integration; rather, its development necessitates a firm grasp on the Marxist standpoint. In the West, digital intelligence technology is generally regarded as a new driving force for economic growth and a new channel for capital growth. This shows that the development orientation of digital intelligence technology in different countries reflects the difference of their own ideological ideas, leading to their different ideas of digital intelligence technology construction. In China, the mainstream ideology needs to assume the responsibility of guiding the development of digital intelligence technology in line with socialist ethical norms. On the other hand, the construction of China's mainstream ideology clearly requires the development of digital intelligence and technology. As a socialist country, China must take the fundamental interests of the vast majority of the people as the premise, and the development of digital intelligence technology is no exception. Mainstream ideology bears the important mission of standardizing and guiding the development of digital intelligence technology. Therefore, the mainstream ideology needs to put a "straitjacket" on digital intelligence technology and restrict the development direction of digital intelligence technology. In other words, the development of digital intelligence technology should be in line with national interests and enhance people's happiness as a hard premise.

To sum up, the construction of China's mainstream ideology bears the important responsibility of providing the necessary value guidance and ethical norms for intellectual technology.

4. Practical Logic: The Realization Path of Integrating Digital Intelligence Technology into China's Mainstream Ideological Construction

In the face of the dualistic nature of digital intelligence technology, characterized by both advantages and disadvantages, measures can be implemented across four dimensions: strengthening the Party leadership, enhancing value guidance, optimizing top-level design, and establishing a robust legal framework. These actions aim to optimize the practical approach towards integrating digital intelligence technology into China's mainstream ideology construction while emphasizing its vitality.

4.1 Strengthen the Party's Overall Leadership in the Process of Integrating Digital Intelligence Technology into Ideological Construction

"Party control over propaganda, party control over ideology and party control over the media are important aspects of upholding party leadership." (Xi Jinping, 2020, p. 181) The leadership of the Communist Party of China (CPC) is a favorable guarantee for the realization of the socialist cause and a leading force to promote the correct construction of digital intelligence technology. In essence, the Party's leadership is a prerequisite for the healthy development of digital intelligence technology. It is imperative to enhance the Party's leadership in all aspects throughout the entire process of integrating digital intelligence technology into mainstream ideological construction, while upholding the Party's guidance over ideological work. On the one hand, improve the party's leadership mechanism in the process of integrating digital intelligence technology into ideological construction. Put the Party's leadership in the first place in the ideological construction of Yuanyu, and constantly innovate the system and mechanism of realizing the party's leadership in the era of digital intelligence technology. On the other hand, the party's initiative of integrating intellectual technology into ideological construction should be fully utilized. Under the premise of upholding the Party's overall leadership, proactively and boldly take action to ensure that the development of digital intelligence technology effectively facilitates the construction of socialist spiritual civilization, propagates socialist values, and disseminates advanced socialist culture.

4.2 Strengthen the Value Guidance of Digital Intelligence Technology into China's Ideological Construction

First, adhere to the guiding position of Marxism. Marxism is the foundation of the establishment of the Party and the state, a scientific theoretical principle and a correct guideline, and we must firmly uphold the guiding position of Marxism in the field of ideology and consolidate the fundamental system of Marxism in the field of ideology. Second, adhere to the people-centered value position. Adhering to a people-centered value stance necessitates that the application of digital intelligence technology be oriented towards benefiting individuals. This entails: Firstly, adhering to the concept of utilizing science and technology for societal good, guiding digital intelligence technology towards benefiting individuals, and promoting comprehensive human development; secondly, employing digital intelligence technology to enhance individual well-being, foster social equity, and augment individuals' "sense of achievement" and "happiness". Third, the leading role should be given to core socialist values. We must insist on utilizing the digital intelligence platform to lead the main discourse and disseminate positive energy, guiding the ideological content and public opinion orientation of digital intelligence

technology in line with socialist core values. This will foster a vibrant, healthy, and constructive value ecosystem for digital intelligence technology while uniting our hearts and efforts towards advancing the comprehensive construction of a modern socialist country.

4.3 Optimize the Top-Level Design of Integrating Digital Intelligence Technology into China's Ideological Construction

Firstly, formulate a digital intelligence technology development strategy that conforms to China's reality. Actively study the development strategies, development plans and development status of digital intelligence technology of various countries in the world and accelerate the construction of digital intelligence technology strategic planning with Chinese characteristics and in line with China's reality on the basis of fully absorbing the development experience of digital intelligence technology of various countries. Secondly, a digital intelligence technology content supervision mechanism should be established. On one hand, a unified leadership mechanism should be put in place to end the current chaotic pattern of digital intelligence technology development in China and establish the "backbone" of digital intelligence technology supervision. This will allow for the advantages of socialist mechanisms that concentrate efforts to do big things to be fully utilized while avoiding problems such as repetitive construction and waste of resources. On the other hand, a comprehensive digital intelligence technology supervision system should be built to study and judge ideological risks associated with digital intelligence technology content. This will ensure effective management as the ultimate "gatekeeper" of such content. Thirdly, a digital intelligence technology public opinion governance mechanism should be established. On one hand, an early warning mechanism for ideological public opinion applicable to digital intelligence technology should be developed to predict the development of public opinion and prevent risks at an early stage, thus providing a safeguard for ideological security. On the other hand, an emergency mechanism for handling and resolving public opinion issues related to digital intelligence technology should be established to reduce governance costs and enhance ideological governance capabilities.

4.4 Build a Legal System for Integrating Digital Intelligence Technology into China's Ideological Construction

The rule of law serves as a crucial instrument in upholding ideological security and constitutes an integral component in establishing an environment conducive to ideological security. The advancement of digital intelligence technology and the preservation of ideological security necessitate a robust legal framework. In this regard, it is necessary to expand from the following dimensions: Firstly, at the legislative level. In accordance with the characteristics and developmental process of digital intelligence technology, laws and regulations adapted to the era of digital intelligence technology should be promptly enacted. The interpretation of laws and regulations regarding digital intelligence should be updated, enhancing their applicability in relation to digital intelligence. Furthermore, further promotion of systematizing laws and regulations is required. Secondly, at the law enforcement level, due to the public nature of digital intelligence technology, it is imperative for law enforcement agencies to promptly address and rectify any issues that may arise in order to maintain a high level of scale and visibility. This requires: The transformation of the law enforcement system into digital intelligence, enhancement of digital intelligence supervision, and combat against digital intelligence crimes are imperative. Additionally, it is essential to enhance the technical proficiency and numerical intelligence of law enforcement teams in order to improve their efficiency and effectiveness. Thirdly, at the judicial level, the establishment of digital intelligence courts and technology courts is crucial in meeting the demands of a society driven by digital intelligence technology. This will effectively enhance the fairness of digital intelligence through an improved application of judicial practices specific to this field. Additionally, it is essential to expand legal aid services related to digital intelligence, promote widespread understanding of legal knowledge pertaining to digital intelligence technology, raise awareness about digital intelligence law, and facilitate the development of a society that embraces both digital intelligence technology and its corresponding legal framework.

References

Central Compilation and Translation Bureau, (2009). *Essays by Karl·Marx & Friedrich·Engels* (Volume 8), Beijing: People's Publishing House.

Central Compilation and Translation Bureau, (2012). *Selected Works of Karl·Marx & Friedrich·Engels* (Volume 3), Beijing: People's Publishing House.

David. M. B & Anders F, (2019). *Digital Humanities: Knowledge and Criticism in the Age of Digital Intelligence*. Translated by Wang Xiaoguang et al. Dalian: Dongbei University of Finance and Economics Press.

David. M. B, (2014). *Critical Theory and the Digital*. New York: Bloomsbury.

Fan R & Du B, (2023). Big data is embedded in the theoretical premise of our country's socialist ideology construction. *Journal of Chongqing University of Posts and Telecommunications (Social Science Edition)*. (01), 171-180.

Herbert M, (2006). *One-dimensional Man: A Study on the Ideology of Developed Industrial Society*. Liu Ji translated, Shanghai: Shanghai Translation Publishing House.

Horkheimer, (1997). *Notes on Science and Its Crisis*. Cao Weidong selected and edited. Shanghai: Shanghai Far East Publishing House.

Xi Jinping, (2020). *On the Party's Propaganda and Ideological Work*. Beijing: Central Literary Publishing House.