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The Integration of Wang Yangming's Philosophy and New Quality Productivity: Modern Practice Driven by Knowledge Innovation

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The Integration of Wang Yangming's Philosophy and New Quality Productivity: Modern Practice Driven by Knowledge Innovation

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Abstract: This article explores the relationship between Wang Yangming's philosophy and the new quality productivity, revealing how the new quality productivity, while inheriting the core ideas of Yangming's philosophy, achieves a higher level through innovation and development. The new quality productivity emphasizes the integration and innovation of knowledge, technology, and information, characterized by knowledge-driven innovation, information technology support, sustainable green development, and global collaborative development. The fusion of Yangming's philosophy and the new quality productivity holds significant theoretical and practical implications.

Keywords: Wang Yangming's philosophy; new quality productivity; Inheritance and Surpassing; Deep Integration

1. Introduction

Wang Yangming's philosophy, created by the Ming Dynasty philosopher Wang Yangming, is a brilliant gem in the history of Chinese philosophy[1–4]. Its core ideas are “the extension of innate knowledge” (致良知) and “the unity of knowledge and action” (知行合一), emphasizing inner awareness and moral cultivation[5–9]. Wang Yangming's philosophical system profoundly impacted ancient Chinese society and provided valuable intellectual wealth for future generations[10]. The extension of innate knowledge requires individuals to achieve moral self-perfection through inner reflection, while the unity of knowledge and action emphasizes the integration of theory and practice. Through these concepts, Wang Yangming emphasized that true understanding and moral virtue come from an inward journey of self-discovery and continuous reflection, which then must be manifested through practical actions in the external world[11].

The new quality productivity, proposed in September 2023, aims to reveal the development characteristics and intrinsic logic of modern productivity[12]. Unlike traditional productivity, which primarily relies on the accumulation and use of material factors such as labor, capital, and natural resources, new quality productivity focuses more on the integration and innovation of knowledge, technology, and information[13–15]. President Xi Jinping has emphasized the importance of new quality productivity on multiple occasions, identifying it as a crucial driver of high-quality development in the contemporary era[16]. This paradigm shift underscores the significance of intellectual capital and technological advancement as central pillars in modern economic growth.

From the research of President Xi and scholars, it is clear that the new quality productivity has the following significant features[17–21]:

1.Knowledge-Driven Innovation[22,23]: This aspect emphasizes the continuous accumulation and innovative application of knowledge, with technological progress as its core driving force. Through relentless technological innovation, new quality productivity aims to continuously improve production efficiency and product quality, thereby promoting industrial upgrading and structural optimization. This includes not only advancements in high-tech sectors but also the application of cutting-edge research in traditional industries, ensuring they remain competitive and sustainable.

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2.Information Technology Support[24–27]: Information technology provides crucial support for new quality productivity. The application of big data, cloud computing, and artificial intelligence transforms the production process, making it more intelligent, efficient, and adaptable. These technologies enable real-time data analysis, predictive maintenance, and streamlined operations, which collectively enhance productivity and reduce costs. They also facilitate the creation of smart factories and intelligent supply chains, which are integral to modern production systems.

3.Sustainable Green Development[20,28,30]: This feature emphasizes the protection of the ecological environment and the efficient use of resources, advocating for environmentally friendly production modes. New quality productivity seeks to achieve economic benefits while also ensuring social and environmental sustainability. It promotes the adoption of clean energy, waste reduction, and the development of green technologies that minimize environmental impact. This approach not only addresses the urgent need for environmental protection but also opens new avenues for innovation and economic growth.

4.Global Collaborative Development[31,32]: A significant feature of new quality productivity is globalization and collaborative development. Through technological exchange and cooperation, countries can collectively promote productivity growth, achieving mutual benefits. This involves international partnerships in research and development, sharing of best practices, and coordinated efforts to tackle global challenges such as climate change and public health crises. By leveraging global networks and resources, nations can enhance their productive capacities and foster inclusive and sustainable development.

Wang Yangming's philosophy emphasizes moral cultivation and the unity of theory and practice, which deeply aligns with the development principles of new quality productivity[33,34]. The new quality productivity not only inherits the core ideas of Wang Yangming's philosophy but also innovates and advances them, reaching unprecedented heights. The extension of innate knowledge requires individuals to achieve self-perfection through inner reflection, aligning with the knowledge-driven innovation model of new quality productivity. This process of knowledge innovation is essentially an extension of innate knowledge, continuously deepening and expanding self-awareness and world understanding. Similarly, new quality productivity embodies the unity of knowledge and action, translating knowledge into productivity through technological practice, thereby driving comprehensive social progress. This dual alignment of moral and intellectual growth with practical application forms a robust foundation for sustainable and inclusive development.

This article aims to explore the relationship between Wang Yangming's philosophy and the new quality productivity, demonstrating how the new quality productivity, inheriting the core ideas of Yangming's philosophy, achieves a higher level through innovation and development. The discussion will start from the core ideas of Wang Yangming's philosophy, providing a detailed analysis of the concepts of “the extension of innate knowledge” and “the unity of knowledge and action.” It will then elaborate on the connotations and characteristics of the new quality productivity, highlighting its key features and their implications. Finally, the article will explore the integration and innovation of the two, showing how Wang Yangming's philosophical insights can inform and enhance modern practices of productivity and innovation, ultimately contributing to a more ethical, efficient, and sustainable global economy.

2. Core Ideas of Wang Yangming's Philosophy

2.1. The Extension of Innate Knowledge

Wang Yangming's philosophical system places significant emphasis on the concept of “the extension of innate knowledge” (致良知), a profound insight into human nature, morality, and cognition[35–38]. This concept asserts that every individual possesses an intrinsic moral awareness, or “innate knowledge,” which serves as the standard for discerning right from wrong and forms the foundation of all moral behavior. This innate moral awareness is believed to be universally present in all humans, regardless of their external circumstances. The extension of innate knowledge requires individuals to engage in continuous inner reflection and enlightenment, a process through

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which they achieve moral self-perfection. In Wang Yangming's view, this process is not merely a method of moral cultivation but also a way of understanding the world. Through inner reflection and enlightenment, individuals can perceive the true essence of things, gaining a profound understanding of the world that transcends superficial appearances.

This method of cognition, which Wang Yangming describes, applies not only to personal moral cultivation but also to the understanding and grasp of the objective world. By turning inward and reflecting on one's own innate knowledge, individuals can align their actions with their moral compass, thus achieving a state of moral self-perfection. Wang Yangming believed that innate knowledge is the essence of the heart, characterized by supreme goodness and beauty. When individuals engage in the process of extending their innate knowledge, they can achieve a state of moral excellence and harmony with the world, often referred to as the "unity of heaven and man" (天人合一)[39,40]. This concept underscores the intrinsic connection between the individual's moral state and the broader cosmos.

Wang Yangming's idea of extending innate knowledge is rooted in the understanding that "the mind is principle" (心即理). This philosophical standpoint posits that the mind is both the essence of the universe and the source of morality[41–44]. According to this view, the mind is not only a tool for understanding the external world but also the basis for moral judgment. As the essence of the mind, innate knowledge possesses inherent self-evidence and universality, serving as the root of all moral actions. The process of extending innate knowledge involves continuously uncovering and manifesting the innate knowledge within the heart, thus achieving moral self-perfection. This inner journey is not passive but requires active reflection and enlightenment. Through this process, individuals can perceive the essence of things, gaining not only moral awareness but also a comprehensive understanding and grasp of the world around them.

In practical terms, this means that the process of extending innate knowledge involves a lifelong commitment to self-examination and moral cultivation. It requires individuals to constantly question their motives, actions, and beliefs, striving to align them with their innate sense of right and wrong. This inner work leads to a deeper understanding of oneself and the world, fostering a sense of harmony and alignment between one's inner moral compass and external actions. In doing so, individuals can achieve a state of moral self-perfection, where their actions are guided by their innate knowledge, leading to a harmonious and fulfilling life.

2.2. The Unity of Knowledge and Action

"The unity of knowledge and action" (知行合一) is another fundamental concept in Wang Yangming's philosophy, highlighting the inseparability and interdependence of knowledge and action[45–48]. This concept posits that knowledge can only be truly validated and perfected through practice, with practice serving as the ultimate criterion for testing truth. Wang Yangming believed that knowledge and action are intrinsically linked; true knowledge inevitably guides people's actions, and correct actions are invariably guided by correct knowledge. This idea is a direct critique of Zhu Xi's view that "knowledge precedes action" (知先行后), which Wang Yangming argued separates knowledge from action and hinders moral realization and the promotion of practice.

Wang Yangming's critique of Zhu Xi's perspective stems from his belief that knowledge and action are two aspects of a single, unified process[49]. He argued that within knowledge, there is action, and within action, there is knowledge. They are inseparable and mutually reinforcing. This integrated approach emphasizes that theoretical understanding must be applied and tested in the real world to be meaningful and effective. The unity of knowledge and action thus applies not only to personal moral cultivation but also to broader contexts such as social governance and national management.

In personal moral cultivation, the unity of knowledge and action means that individuals must practice what they understand to be morally right. Moral principles and ethical insights must be put into action in daily life. Only through continuous practice can individuals validate and perfect their knowledge, making it more aligned with their innate moral awareness. This process leads to moral self-improvement and a more authentic and fulfilling life. For instance, if someone understands the

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importance of honesty, they must practice honesty in their interactions to truly grasp its value and impact.

In social governance and national management, the idea of the unity of knowledge and action holds significant practical significance. Effective governance requires that policies and decisions be grounded in sound theoretical understanding and be tested through practical implementation. Wang Yangming emphasized that governing a country requires not only theoretical guidance but also practical actions. Through continuous practice and reflection, national governance can become more effective, achieving harmonious social development. This means that policymakers must base their actions on thorough knowledge and adapt their strategies based on practical outcomes and experiences. For example, environmental policies should be informed by scientific research and continuously adjusted based on their practical impact on the environment and society.

Wang Yangming's philosophy underscores that only by putting theory into practice can its true value be realized[50]. This approach requires a dynamic interaction between thought and action, where each informs and refines the other. It also demands a commitment to ongoing learning and adaptation, as knowledge and circumstances evolve. This dynamic interplay between knowledge and action fosters a more responsive and effective approach to both personal and collective challenges.

2.3. The Dialectical Unity of the Extension of Innate Knowledge and the Unity of Knowledge and Action

The extension of innate knowledge and the unity of knowledge and action are two pivotal components of Wang Yangming's philosophy, each complementing and dialectically unifying the other to form the core ideas of his philosophical system. These concepts are not merely isolated principles but are deeply interconnected, creating a holistic approach to understanding and living.

The extension of innate knowledge emphasizes moral awareness and inner reflection, requiring individuals to engage in continuous self-examination and enlightenment to achieve moral self-perfection. This process involves turning inward to uncover and cultivate the innate moral sense that Wang Yangming believed exists within every person。

This process involves turning inward to uncover and cultivate the innate moral sense that Wang Yangming believed exists within every person. By continuously reflecting on their thoughts and actions, individuals can align themselves more closely with their inherent moral principles, achieving a state of moral excellence. This practice is not just about personal morality but extends to a deeper understanding of the world. Through the extension of innate knowledge, individuals gain insights into the nature of reality and human existence, achieving a harmonious state of being that Wang Yangming described as the “unity of heaven and man.”

The unity of knowledge and action, on the other hand, emphasizes the inseparability of theoretical understanding and practical application. Wang Yangming argued that true knowledge is only realized when it is put into practice. This principle underscores the belief that intellectual insights and moral principles must be actively applied in everyday life to be validated and perfected. The unity of knowledge and action is therefore not just a theoretical concept but a practical guide for living a virtuous and effective life. It requires individuals to continuously test and refine their understanding through real-world actions, creating a dynamic process of learning and growth.

The dialectical unity of these two concepts means that they are not separate but deeply intertwined. The extension of innate knowledge provides the moral and intellectual foundation upon which the unity of knowledge and action is built. Without a deep understanding of innate knowledge, actions may lack moral direction and coherence. Conversely, the unity of knowledge and action is the practical realization of the extension of innate knowledge. It is through the continuous application and testing of knowledge in practice that individuals can truly extend and perfect their innate moral understanding.

For instance, consider the practice of honesty. An individual might reflect on the moral principle that honesty is essential (extension of innate knowledge). However, this principle must be tested and validated in daily interactions (unity of knowledge and action). Through honest behavior, the individual can see the positive effects of honesty on relationships and trust, thus deepening their

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understanding of why honesty is morally right. This cycle of reflection and action helps to refine and perfect both the principle and the practice, leading to moral growth and self-improvement.

This dialectical relationship also extends to broader societal and governmental contexts. In social governance, policymakers must base their actions on sound ethical principles (extension of innate knowledge) and continuously adapt their policies based on practical outcomes (unity of knowledge and action). For example, an environmental policy aimed at reducing pollution should be grounded in the ethical principle of protecting the environment for future generations. The effectiveness of this policy must then be evaluated through its implementation, with adjustments made based on its real-world impact. This ensures that policies are not only ethically sound but also practically effective.

The integration of these concepts creates a robust framework for understanding human behavior and societal development. It encourages a holistic approach where moral principles and practical actions are seen as two sides of the same coin. This approach fosters a continuous cycle of learning, reflection, and improvement, both at the individual and collective levels. It highlights the importance of aligning one's inner moral compass with external actions, creating a harmonious and effective way of living and governing.

In summary, the extension of innate knowledge and the unity of knowledge and action are foundational to Wang Yangming's philosophy. Together, they provide a comprehensive approach to moral cultivation and practical wisdom, emphasizing the importance of aligning inner moral principles with external actions. This dialectical unity offers valuable insights for personal growth, social governance, and the pursuit of a harmonious and ethical life. By understanding and applying these principles, individuals and societies can achieve greater moral clarity and practical effectiveness, contributing to the overall well-being and progress of humanity.

3. Connotations and Characteristics of New Quality Productivity

3.1. Knowledge-Driven Innovation

A crucial characteristic of new quality productivity is knowledge-driven innovation[51]. With continuous scientific and technological progress, knowledge has become the most important production factor in modern society. New quality productivity continuously accumulates and innovates knowledge, driving technological advancement and improving production efficiency. This knowledge innovation includes both basic scientific research and the development and promotion of applied technologies.

In the knowledge economy era, knowledge innovation has become the core driving force of economic growth. Traditional productivity relies on factors such as labor, land, and capital, while new quality productivity relies more on knowledge, technology, and information. Through knowledge innovation, production processes can be automated and intelligent, significantly increasing production efficiency and product quality. For example, the application of artificial intelligence and machine learning technologies enables the automation of many complex tasks in production, reducing labor costs and increasing efficiency. Knowledge innovation also promotes industrial upgrading. Continuous technological innovation and product development enable traditional industries to upgrade, and emerging industries to rapidly rise. For instance, information technology, biotechnology, and new energy technology industries have rapidly developed through knowledge innovation. These emerging industries not only enhance the quality and efficiency of economic growth but also drive the transformation and upgrading of traditional industries, injecting new vitality into economic development.

Knowledge-driven innovation extends beyond individual industries and impacts the overall economic structure. By fostering an environment that encourages continuous learning, experimentation, and the application of new ideas, economies can become more adaptable and resilient to changes. Furthermore, knowledge-driven innovation encourages a culture of creativity and problem-solving, essential for addressing complex global challenges. For instance, in the healthcare sector, advances in medical research and biotechnology have led to significant

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improvements in diagnostics, treatment, and patient care, showcasing the transformative potential of knowledge innovation.

3.2. Information Technology Support

The development of information technology provides crucial support for new quality productivity[52]. The application of big data, cloud computing, and artificial intelligence makes the production process more intelligent and efficient. These technologies not only improve production efficiency but also change traditional production models, promoting industrial upgrading.

With the support of information technology, the production process has achieved comprehensive digitization and intelligence. Through sensors and the Internet of Things (IoT), production equipment and production lines can be monitored, and data collected in real time, achieving precise control and optimization of the production process. The application of cloud computing and big data technologies makes the storage and processing of massive data more efficient, providing data support for optimizing production processes. The application of artificial intelligence technology makes complex decisions and predictions in the production process more accurate, thereby improving production efficiency and product quality. Additionally, information technology promotes collaboration across various industries. Information technology blurs the boundaries between different industries and fields, closely connecting the industrial and value chains. Through information technology, different enterprises and organizations can achieve real-time information sharing and collaborative work, thereby improving overall production efficiency and competitiveness. For example, in manufacturing, through intelligent manufacturing and industrial internet technologies, different stages of production can seamlessly connect, forming a highly collaborative production system.

Information technology also facilitates the development of smart cities, enhancing the efficiency and quality of urban life. Smart city initiatives use IoT devices, data analytics, and AI to manage urban infrastructure, improve public services, and optimize resource use. These technologies enable cities to respond more dynamically to the needs of their residents, improving everything from traffic management to energy distribution. Moreover, the integration of information technology into educational systems enhances learning experiences, making education more accessible and personalized through online platforms and digital resources.

3.3. Sustainable Green Development

New quality productivity emphasizes the protection of the ecological environment and the efficient use of resources, advocating for environmentally friendly production modes[53]. With the increasing prominence of global environmental issues, sustainable green development has become a goal pursued by all countries. New quality productivity achieves a win-win situation in economic and environmental benefits by promoting clean energy and circular economy production methods. Sustainable green development is not only a production mode but also a development concept. It requires us to pay attention to environmental protection and resource conservation while pursuing economic growth, ensuring the sustainable development of the economy and society.

The promotion of green production methods significantly improves resource utilization efficiency and reduces pollutant emissions. For example, the widespread application of solar and wind energy reduces dependence on fossil fuels and lowers greenhouse gas emissions such as carbon dioxide. The promotion of the circular economy significantly increases resource recycling rates, reducing resource waste and environmental pollution. Sustainable green development also drives technological innovation and industrial upgrading. To achieve sustainable green development, continuous technological innovation and the development of new production processes and equipment are necessary. For example, the development and application of clean energy technologies, new material technologies, and energy-saving and environmental protection technologies not only improve production efficiency and product quality but also reduce negative environmental impacts. Through the innovation and application of green technologies, economic growth and environmental

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protection can achieve a win-win situation, promoting sustainable development of the economy and society.

Sustainable green development also encourages corporate social responsibility (CSR). Companies are increasingly recognizing the importance of adopting sustainable practices not only for regulatory compliance but also for enhancing their reputation and competitiveness. By investing in green technologies and sustainable practices, businesses can reduce their environmental footprint, engage with their communities more effectively, and contribute to global sustainability goals. Additionally, consumers are becoming more environmentally conscious, and businesses that prioritize sustainability can better meet the demands of this growing market segment.

3.4. Global Collaborative Development

A significant feature of new quality productivity is globalization and collaborative development[54]. In the context of globalization, economic ties between countries are becoming closer, and technological exchange and cooperation are becoming more frequent. New quality productivity achieves optimal allocation of resources and maximizes production efficiency through global collaborative development. Global collaborative development not only promotes the common prosperity of national economies but also advances scientific and technological progress and innovation worldwide. Through cooperation, countries can share technological achievements, jointly address global challenges, and achieve mutual development.

Global collaborative development also promotes the collaborative effects of global technological innovation. Through international scientific and technological cooperation and exchange, countries can share technological achievements and jointly address global challenges. For example, in dealing with global issues such as climate change, energy crises, and environmental pollution, countries can cooperate through technological collaboration and technology transfer to develop and apply green technologies, achieving sustainable global development.

The benefits of global collaborative development extend to creating more resilient and diversified economies. By participating in international collaborations, countries can mitigate risks associated with economic downturns and market fluctuations. This interconnectedness allows for more flexible supply chains and access to broader markets, fostering economic stability and growth. Additionally, global collaborative efforts in scientific research, such as large-scale projects like the International Space Station or global health initiatives, illustrate how pooling resources and expertise can lead to significant advancements that benefit humanity as a whole.

3.5. Development Paths of New Quality Productivity

Industry-academia-research collaboration is an essential path for promoting the development of new quality productivity[55]. Through industry-academia-research collaboration, rapid transformation and application of knowledge can be achieved, accelerating the industrialization process of scientific and technological achievements. Universities and research institutions are vital sources of knowledge innovation, providing continuous innovation power for the development of new quality productivity through basic scientific research and applied technology development. Enterprises apply knowledge innovation, transforming scientific and technological achievements into actual productivity, realizing the industrialization and marketization of knowledge. The government promotes the in-depth development of industry-academia-research collaboration through policy support and funding.

Scientific and technological innovation platforms are crucial supports for promoting new quality productivity. By building innovation platforms, innovation resources can be aggregated, innovation capabilities can be enhanced, and the transformation and industrialization process of scientific and technological achievements can be accelerated. These platforms include science parks, innovation centers, and technology transfer institutions. Through these platforms, scientific and technological resources can be shared and coordinated, improving the efficiency and effectiveness of innovation. Innovation platforms also promote technological exchange and cooperation between different fields and industries, achieving cross-disciplinary and cross-industry technological innovation. By

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integrating the innovation resources of universities, research institutions, enterprises, and the government, a collaborative innovation ecosystem can be formed, promoting the comprehensive development of new quality productivity.

International scientific and technological cooperation is a crucial path for promoting the development of new quality productivity. In the context of globalization, international cooperation and exchange in science and technology are becoming more frequent. Through international scientific and technological cooperation, technological achievements can be shared, and global challenges can be jointly addressed. This cooperation includes international scientific and technological exchanges, technology transfer, and joint research and development. Through these collaborations, the global allocation of scientific and technological resources can be achieved, improving the efficiency and effectiveness of technological innovation. International scientific and technological cooperation can also promote the coordination and unification of scientific and technological policies and standards between countries, providing a favorable policy environment and institutional guarantees for global scientific and technological innovation. By realizing the collaborative effects of global scientific and technological innovation through international cooperation, the globalization and development of new quality productivity can be promoted.

Furthermore, fostering a culture of innovation and entrepreneurship is essential for the sustained development of new quality productivity. Governments and institutions should support startup ecosystems, providing funding, mentorship, and infrastructure to nurture new ideas and businesses. Encouraging a spirit of innovation among the youth and creating avenues for young entrepreneurs to experiment and grow can lead to significant breakthroughs and drive economic growth. Initiatives such as innovation hubs, incubators, and accelerators can play a pivotal role in this ecosystem, providing the necessary support for innovative ideas to flourish and be transformed into viable products and services.

In conclusion, new quality productivity represents a comprehensive approach to modern economic development, integrating knowledge-driven innovation, information technology support, sustainable green practices, and global collaborative efforts. By leveraging these components and fostering a robust innovation ecosystem, societies can achieve higher levels of productivity, economic growth, and sustainable development. This approach not only addresses current economic and environmental challenges but also paves the way for a more resilient and prosperous future.

4. Inheritance and Surpassing: New Quality Productivity and Wang Yangming's Philosophy

4.1. The Extension of Innate Knowledge and Knowledge Innovation

The idea of extending innate knowledge aligns closely with the concept of knowledge innovation. Knowledge innovation is not merely a manifestation of technological progress but also a continuous process of re-understanding and re-interpreting the world. Through knowledge innovation, individuals and societies constantly break through existing cognitive boundaries, discover new laws and phenomena, and thus promote the development of productivity and social progress. This process of knowledge innovation is essentially an extension of innate knowledge, as it continuously deepens and expands self-awareness and understanding of the world.

In the modern era, as science and technology continue to advance, knowledge has become the most critical production factor. New quality productivity emphasizes the importance of promoting technological progress and improving production efficiency through the continuous accumulation and innovation of knowledge. Knowledge innovation includes both fundamental scientific research and the development and application of new technologies. Universities and research institutions play a pivotal role in this process by fostering industry-academia-research collaboration, which accelerates the rapid transformation and application of knowledge.

The process of knowledge innovation is, in reality, a continuous process of extending innate knowledge. Researchers engage in constant reflection and critique of existing knowledge systems, identifying their limitations and proposing new theories and methods. This iterative process aligns closely with the internal logic of extending innate knowledge: achieving continuous self-recognition

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and world recognition through inner reflection and enlightenment. For example, significant breakthroughs in fundamental scientific research often stem from researchers' deep reflection and questioning of existing theories, leading to the proposal of new hypotheses and theories that drive scientific advancement.

Knowledge innovation relies not only on individual reflection and enlightenment but also on team collaboration and interdisciplinary exchange. In the context of modern technological development, the accumulation and innovation of knowledge often require crossing disciplinary boundaries and achieving interdisciplinary integration and collaboration. Universities and research institutions facilitate this process by establishing interdisciplinary research teams that promote the rapid accumulation and innovation of knowledge. For instance, the integration of artificial intelligence and biotechnology has given rise to numerous new research fields and application directions, significantly advancing productivity and social progress.

Industry-academia-research collaboration is a vital pathway for practical knowledge innovation. Through such collaboration, the rapid transformation and application of knowledge can be achieved, accelerating the industrialization process of scientific and technological achievements. Universities and research institutions play a crucial role in this process by fostering partnerships with industries, thus promoting the swift transformation and application of new knowledge. For example, new technologies developed through university-enterprise collaborations can quickly be transformed into practical productivity, facilitating industrial upgrading and structural optimization. This collaborative approach ensures that theoretical advancements are rapidly and effectively translated into real-world applications, driving both technological progress and economic growth..

4.2. The Unity of Knowledge and Action and Technological Practice

Technological practice embodies the idea of the unity of knowledge and action, a central tenet of Wang Yangming's philosophy. New quality productivity transforms theoretical knowledge into practical productivity through technological practice, thereby promoting comprehensive social progress. Technological practice is not only the embodiment of knowledge but also the result of continuous practice. The two aspects complement each other, jointly promoting the development of productivity.

Technological practice requires both theoretical guidance and continuous testing and improvement of theories in practical applications. For example, the development and application of artificial intelligence technology necessitate theoretical innovation as well as extensive practical testing and refinement of algorithms and models. In this iterative process, theory and practice mutually reinforce each other, jointly driving technological development and application. Through continuous theoretical innovation and practical testing, artificial intelligence technology has rapidly advanced, promoting the intelligentization and automation of various industries.

The idea of the unity of knowledge and action is evident throughout the entire process of technological innovation. From basic research to applied development and industrialization promotion, every stage requires the close integration of theory and practice. For instance, in the development of new drugs, the process spans from the design and synthesis of drug molecules to clinical trials and market promotion, with each stage necessitating both theoretical guidance and practical testing. Through this unity of knowledge and action, new scientific and technological achievements continuously emerge, driving productivity and social progress.

The iterative process of technological practice ensures that theoretical insights are rigorously tested and refined in real-world applications. This dynamic interplay between knowledge and action fosters a culture of continuous improvement and innovation, which is essential for maintaining competitive advantage in rapidly evolving technological landscapes. Moreover, this approach facilitates the development of robust, scalable solutions that can address complex challenges across various sectors, from healthcare to manufacturing to environmental sustainability.

4.3. The Unity of Knowledge and Action in Social Governance

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The idea of the unity of knowledge and action applies not only to personal moral cultivation but also to social governance and national management. In modern society, effective national governance requires a harmonious integration of theoretical guidance and practical actions. Through continuous practice and reflection, national governance can become more effective, achieving harmonious social development.

In the realm of national governance, the idea of the unity of knowledge and action helps policymakers continuously test and improve policies in practice. For example, when formulating and implementing environmental protection policies, it is essential to combine theoretical research with practical realities. This continuous process of reflection and adjustment ensures that policy measures are effective in achieving a win-win situation for both environmental protection and economic development. In this context, theory and practice promote each other, enhancing the effectiveness and scientific basis of national governance.

By applying the principle of the unity of knowledge and action, governments can create more adaptive and responsive policy frameworks. This approach encourages a cycle of learning and adaptation, where policies are regularly reviewed and updated based on their practical outcomes and new insights from ongoing research. Such a dynamic approach is particularly valuable in addressing complex, multifaceted challenges such as climate change, public health crises, and economic inequality.

Furthermore, the unity of knowledge and action in social governance fosters greater accountability and transparency. By grounding policy decisions in both rigorous theoretical understanding and practical experience, governments can build trust and legitimacy among their constituents. This integrated approach also facilitates more effective collaboration between various stakeholders, including public agencies, private sector entities, and civil society organizations, ensuring that diverse perspectives are considered in the policymaking process.

In summary, the extension of innate knowledge and the unity of knowledge and action are foundational concepts in Wang Yangming's philosophy that find meaningful application in the realms of knowledge innovation, technological practice, and social governance. By integrating these principles, individuals and societies can achieve continuous moral and intellectual growth, drive technological and economic progress, and foster effective and equitable governance. This holistic approach not only enhances individual and collective well-being but also contributes to the sustainable and harmonious development of society.

5. The Fusion of Wang Yangming's Philosophy and New Quality Productivity

5.1. The Integration of Morality and Technology

The core ideas of Wang Yangming's philosophy have been inherited and further developed in the context of new quality productivity. The combination of the extension of innate knowledge and scientific exploration continuously enhances human morality and cognition. Similarly, the integration of the unity of knowledge and action with technological practice mutually reinforces knowledge and practical application, driving social progress. This fusion of Wang Yangming's philosophy with new quality productivity provides powerful ideological motivation and practical guidance for the development of modern society.

The integration of morality and technology ensures that technological development is guided by ethical principles, thereby preventing the misuse and alienation of technology. New quality productivity emphasizes not only technological advancement but also the social responsibility and ethical value of technology. This integration does not merely enhance material productivity but also promotes comprehensive social progress and development. For instance, ethical considerations have always been paramount in the development of artificial intelligence and biotechnology. By incorporating moral principles into the development and application of these technologies, we can ensure that technological progress aligns with societal ethical standards, achieving sustainable development.

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The development of artificial intelligence (AI) provides a concrete example of the integration of morality and technology. AI technologies have the potential to revolutionize various industries by automating tasks, improving efficiency, and enabling new forms of data analysis. However, the ethical implications of AI, such as privacy concerns, bias in decision-making, and the potential for job displacement, must be carefully considered. By embedding ethical principles into the development and deployment of AI, developers and policymakers can address these concerns proactively. This includes creating transparent algorithms, ensuring data privacy, and promoting equitable access to AI technologies.

Biotechnology, particularly in the realm of genetic engineering and medical research, also highlights the importance of integrating morality with technology. Advances in biotechnology can lead to breakthroughs in disease treatment, agricultural productivity, and environmental sustainability. However, these advancements come with ethical dilemmas, such as the potential for genetic discrimination, the moral status of genetically modified organisms, and the implications of human genetic modification. By adhering to ethical guidelines and fostering public dialogue, the biotechnology sector can navigate these challenges and ensure that its innovations benefit society as a whole.

Furthermore, the integration of morality and technology can drive the development of sustainable and socially responsible innovations. For example, the push for renewable energy technologies is driven not only by the need for technological advancement but also by a moral imperative to address climate change and reduce environmental impact. Solar, wind, and other forms of clean energy are developed with the aim of reducing greenhouse gas emissions and promoting energy equity. By aligning technological development with ethical goals, society can achieve a balance between economic growth and environmental stewardship.

In the context of social media and digital platforms, the integration of morality and technology is crucial for maintaining social harmony and protecting individual rights. The ethical use of technology in this domain involves ensuring user privacy, combating misinformation, and promoting respectful and inclusive online interactions. Technology companies are increasingly being called upon to adopt ethical practices in their operations, reflecting a broader societal demand for responsible technology use.

Overall, the integration of Wang Yangming's philosophical principles with modern technological development underscores the necessity of guiding technological progress with a strong ethical foundation. This approach ensures that advancements in technology contribute positively to societal well-being and align with broader moral and ethical standards.

5.2. Knowledge Innovation and Social Responsibility

In the development process of new quality productivity, knowledge innovation serves not only as the driving force behind technological progress but also as a crucial means of fulfilling social responsibility. Continuous knowledge innovation can lead to the development of more efficient, environmentally friendly, and sustainable technologies and products, thereby promoting comprehensive social progress.

For instance, the development of green energy technologies through knowledge innovation demonstrates a win-win scenario for energy efficiency and environmental protection. Innovations in solar, wind, and other renewable energy sources reduce reliance on fossil fuels, decrease greenhouse gas emissions, and promote energy security. These advancements are crucial for achieving global sustainable development goals, such as reducing carbon footprints and combating climate change. Green energy technologies exemplify how knowledge innovation can address pressing environmental issues while fostering economic growth.

Knowledge innovation also plays a pivotal role in promoting social equity and justice. Technological advancements can make essential services like healthcare and education more accessible and affordable, thus narrowing the gap between rich and poor and promoting social equity. For example, the development of telemedicine and mobile health technologies enables remote medical consultations, diagnostics, and treatments, making healthcare accessible to people in remote

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and underserved areas. This reduces health disparities and ensures that high-quality medical services are available to a broader population.

In the field of education, knowledge innovation has led to the creation of online learning platforms and educational technologies that provide flexible and personalized learning opportunities. These innovations make education accessible to people of all ages and backgrounds, particularly those in remote or economically disadvantaged areas. By offering online courses, virtual classrooms, and interactive learning tools, educational technologies help bridge the educational divide, providing everyone with the opportunity to acquire knowledge and skills necessary for personal and professional growth.

Moreover, knowledge innovation can drive the development of socially responsible business practices. Companies that leverage technological advancements to create sustainable products and services can contribute to social welfare and environmental sustainability. For instance, the fashion industry has seen the rise of sustainable fashion brands that use eco-friendly materials and ethical production methods. These innovations not only reduce environmental impact but also promote fair labor practices and contribute to a more equitable global supply chain.

The development of smart city technologies is another example of how knowledge innovation can promote social responsibility. Smart cities use data and technology to improve urban infrastructure, enhance public services, and optimize resource management. By integrating technologies like IoT, big data analytics, and AI, smart cities can enhance the quality of life for their residents, reduce environmental impact, and promote sustainable urban development. These innovations support the efficient use of resources, reduce pollution, and create more livable and inclusive urban environments.

In the agricultural sector, knowledge innovation has led to the development of precision farming techniques that increase crop yields while minimizing resource use and environmental impact. Technologies such as drones, satellite imagery, and IoT sensors enable farmers to monitor and manage their crops more efficiently, reducing the need for water, fertilizers, and pesticides. These advancements contribute to food security and sustainable agricultural practices, ensuring that future generations can continue to produce food without depleting natural resources.

In conclusion, knowledge innovation is a powerful driver of both technological progress and social responsibility. By continuously developing new technologies and products that address environmental, social, and economic challenges, societies can achieve comprehensive progress and development. The integration of knowledge innovation with a commitment to social responsibility ensures that technological advancements benefit all members of society, promoting equity, justice, and sustainability. Through this approach, new quality productivity not only drives economic growth but also contributes to the well-being and prosperity of communities worldwide.

6. Conclusion

The core ideas of Wang Yangming's philosophy, such as the extension of innate knowledge and the unity of knowledge and action, deeply align with the connotations and characteristics of new quality productivity. By combining the self-reflection and enlightenment of the extension of innate knowledge with the process of knowledge innovation, we can promote the continuous accumulation of knowledge and technological progress, achieving a comprehensive enhancement of productivity. This integration emphasizes that knowledge innovation is not just about scientific and technological advancements but also about deepening our understanding of the world and ourselves. The extension of innate knowledge encourages a reflective approach that aligns with the continuous quest for innovation, pushing the boundaries of what is known and understood, and fostering a culture of intellectual curiosity and moral integrity.

The idea of the unity of knowledge and action, through continuous testing and improvement of theories in technological practice, achieves the organic integration of theory and practice, driving comprehensive social progress. This principle highlights that knowledge must be actionable to be truly valuable. Theories and concepts are refined through practical application, leading to better and more effective technological solutions. This cyclical process ensures that theoretical advancements

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are continually tested and validated in real-world scenarios, leading to more robust and reliable technologies. In this way, the unity of knowledge and action fosters a dynamic environment where theoretical and practical advancements go hand in hand, each driving the other forward.

The integration of Wang Yangming's philosophy and new quality productivity has significant theoretical implications and practical value. By incorporating moral principles into technological development and application, we can ensure that technological progress aligns with societal ethical standards, achieving sustainable development. This integration means that technology is developed and used not only for its own sake but also with a clear understanding of its impact on society and the environment. Ethical considerations become a guiding force in the innovation process, ensuring that new technologies contribute positively to human well-being and ecological balance. For example, developing AI technologies with built-in ethical guidelines can prevent biases and ensure fair use, while sustainable engineering practices can minimize environmental footprints.

Through knowledge innovation, more efficient, environmentally friendly, and sustainable technologies and products can be developed, promoting comprehensive social progress. Innovations in renewable energy, for instance, can reduce dependence on fossil fuels, lower greenhouse gas emissions, and create new industries and job opportunities. Similarly, advancements in healthcare technologies can improve access to medical care, enhance treatment outcomes, and reduce healthcare costs. These innovations contribute to a more equitable and sustainable society by addressing critical challenges such as climate change, healthcare disparities, and resource depletion.

In conclusion, the combination of Wang Yangming's philosophy and new quality productivity provides powerful ideological motivation and practical guidance for modern society's development. By deeply studying and practicing the ideas of the extension of innate knowledge and the unity of knowledge and action, we can achieve greater progress in knowledge innovation and technological practice. This approach not only advances scientific and technological frontiers but also ensures that these advancements are grounded in ethical and moral principles. It encourages a holistic view of progress that includes both material and moral dimensions, recognizing that true progress is measured not just by technological achievements but also by the well-being and ethical integrity of society.

This fusion of philosophy and productivity offers a solid theoretical foundation and practical guidance for achieving comprehensive social progress and development. It suggests a pathway where technological and scientific advancements are harmoniously integrated with ethical and moral considerations, leading to a sustainable and just society. By adopting this integrated approach, we can ensure that our pursuit of knowledge and innovation leads to meaningful and positive outcomes, addressing contemporary challenges while upholding the values of integrity, responsibility, and respect for all forms of life. This vision of progress aligns with the highest aspirations of human society, where technological excellence is matched by ethical wisdom, creating a balanced and flourishing world for future generations.

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