

# ***Digital Twin and Digital Avatar—The Characteristics of College Students' Ideological Dynamics in the "Metaverse" Era and the Reflection on the Ideological and Education Methods of Counselors***

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**Abstract:** the arrival of the era of the universe is inevitable, young college students also become the generation of college students under the universe, college counselors as the backbone of college students' ideological and political education, how to use the universe brought by the new technology requirements and student characteristics effectively carry out ideological education has become a key problem to be solved. Starting from the concept of the metaverse, this paper analyzes the challenges faced by ideological and political education in universities, including "de-concretization," "de-authorization," and "decentralization." Based on the perspectives of digital twinning and digital avatars, it explores the characteristics of college students' thoughts and behaviors in the metaverse era, such as datafication of existence forms, layering of interpersonal relationships, and silicon-based cognitive styles. It also reflects on the methods of ideological and political education for university counselors in the metaverse age.

With the acceleration of digital transformation, it is possible to reintegrate science and technology and build a new digital form of social space, and the concept of "meta-universe" is gradually rising. In 2021, with the entry of many Internet leading enterprises and the layout of "metauniverse", the global "metauniverse" research and development boom and technological competition were opened. The arrival of the metaverse era is inevitable, and young college students will undoubtedly become a generation of college students under the metaverse.

In 2022, the Party's 20th Congress pointed out that we should give priority to the development of education, self-reliance and self-improvement, and the guidance of talents, promote the digitalization of education, and comprehensively improve the quality of independent training of talents. In 2021, the CPC Central Committee and the State Council issued the Opinions on Strengthening and Improving Ideological and Political Work in the New Era, which also pointed out that the deep integration of traditional advantages of ideological and political work with information technology, so that the Internet, the biggest variable, should become the biggest increase in career development. The CPC Central Committee has clearly defined the long-term goal of becoming a strong education country with the development of artificial intelligence and other technologies, which also provides new guidelines for ideological and political education in colleges and

universities. In the metacera era, the phenomenon of digital twin and digital double exists in the process of using digital new technology. Then, college students present new behavior modes and ideological characteristics. How college counselors use the new technical requirements and students' characteristics to enhance the discourse power of ideological and political education, and make the socialist core values better into the brain and the heart is particularly important is also the meaning of this paper.

## 1. The concept of the metaverse is proposed and characterized

The concept of "meta-universe" first appeared in Neal Stephenson's novel *Snow Crash*, published in 1992, where the plot is set in which real humans live with virtual people in the virtual space of the future through VR devices. This space Metaverse is translated as the "meta-universe". In 2003, the game *Second Life* was released, creating the first phenomenal virtual game world, in which people could socialize, build and do business and buy real estate through the virtual currency in the game. Sweden and other countries even officially established embassies in the game, and the concept of the universe was further developed. In 2020, human society entered the critical point of virtualization, and accelerated the social virtualization under the catalysis of the epidemic. In 2021, the "cluster effect" of the elements of the "meta-universe" began to change from quantitative change to qualitative change, showing explosive imagination and creating the "first year of the meta-universe". In 2021, China Newsweek released the "Top 10 Hot words of the year", among which reflects its unprecedented popularity. According to relevant industry research reports, the market size of Yuanyuan will reach 800 billion US dollars in 2024 and 1.5 trillion US dollars in 2030. Yuanyuan is rapidly integrating into everyone's life.

What exactly is the metauniverse? The current study is also mixed. According to the Research Report on the Development of the 2020-2021 Yuan Universe released by the New Media Research Center of Tsinghua University, the yuan universe is a new type of virtual and real Internet application and social form generated by the integration of various new technologies, and is a high-level stage of Internet development. Based on science and technology, it provides immersive experience, generates a mirror image of the real world, builds a virtual system of economy, and realizes the close integration of the real world and the virtual world through the economic, social, and identity systems. And here points out that a variety of new technologies mainly include: virtual reality (VR) to realize the migration of the virtual world, augmented reality (AR) to realize the projection to the virtual world, artificial intelligence technology (AI) to improve machine learning and way of thinking, 5G technology is committed to efficient and real-time, etc., to different directions of technology provides a unified vision. The meta-universe realizes the expansion of the human survival dimension, and the extension of the real world to the virtual world, which is the expansion of the human sensory dimension, and the development of the real senses to the virtual experience. Therefore, the meta-universe presents the following characteristics:<sup>[1]</sup>

1) Digital twin. Digital twin is to record the relevant data in real time in the process of using the network, and then "copy" it to the meta-verse through 3D modeling technology. In short, the "traces" and "preferences" of individuals on the Internet will be stored in the form of data packets. Over time, this data packet will form a "virtual self" highly similar to that of real people in all aspects, and gradually develop from digital portrait to digital twin.

2) Digital body doubles. The meta-universe presents a living state of parallel and interinfiltration between virtual and real. People are also keen to express their views in the virtual world and participate in social events and social life, which constitutes a double-digital double in the real world. People use digital body doubles to communicate with each other, to create a large number of virtual groups and virtual communities, real, efficient, free, multiple, multi-scene to participate in

the content of detached time and space.

3) Immersion experience. Whole body immersive experience, is committed to the virtual scene and real scene, different from text, images and other two-dimensional sensory experience, yuan universe through XR technology to wear equipment, such as touch gloves, eye mask, immersive headphones and olfactory simulator and so on, make a person feel the virtual scene and real scene is not too big difference, realize what you see is perception, want to try. Metaverse concept and characteristic logic

## **2. The realistic challenge of integrating universe into ideological and political education in colleges and universities**

The progress of science and technology has undoubtedly added new energy for the ideological and political education in colleges and universities. In recent years, colleges and universities are constantly exploring the new mode and mechanism of network ideological and political education, and have made certain achievements. However, with the update and iteration of technology, ideological and political education and the need to keep up with the development trend of The Times. The Outline of the 14th Five-Year Plan for National Economic and Social Development of the People's Republic of China and the 2035 Vision Plan also emphasizes the welcome of the digital era, accelerating the digital transformation, and activating the potential of digital elements. The universe era will be the digital technology and the era of massive digital resources, ideological and political education in colleges and universities will reshape on the fast lane of the universe, to the wisdom, simulation, virtual permeability, interconnected interaction direction, enhance the level of ideological education, but also must face the realistic challenges brought by the yuan universe era.

### **2.1 Real people to the "real image"—derepresentation**

The important feature of the universe is the immersive experience, relying on XR technology and wearable equipment to realize the integration of virtual and reality, the subject of education and the object without direct contact, through delay and high simulation sense, from real to "like" in the form of digital double, interaction in education of virtual scene, this kind of virtual space can be the classroom, and even some events of virtual real scene reduction, let the real people in the virtual space sensory stimulation of the present. To a certain extent, this can promote the immersive expression, reflection and enhance the effectiveness of ideological and political education. However, in the final analysis, education is the work of being a person, and face-to-face communication is the most primitive and direct way. The interaction between the subject of education and the object body, language, expression and activities is an important way to play the educational effect. Therefore, how to use the de-representation brought by the meta-universe to achieve effective empathy experience, balance the real-time communication and virtual communication of the university ideological and political education must grasp the scale.<sup>[2]</sup>

### **2.2 Broadening knowledge channels- -deauthority**

Under the traditional ideological and political education mode, teachers as ideological education subject, students as the object, in the same real space, through knowledge sharing and transmission, scene simulation and representation, the construction of the spirit and shaping, let students deeply feel and form emotional resonance, and resonance with the age, eventually produce ideological and political education efficiency, in this mode, the teacher is both knowledge authority and discourse authority. But in the emergence of universe technology, AI, VR, AR, holographic projection

technology increasingly mature, changed the students know the world and the way of education, they can through new technical channels to obtain the field of professional, cutting edge, the latest knowledge, clear the latest theory information, sometimes even in some aspects related knowledge reserve will be more than teachers, impact on the teacher's knowledge authority. At the same time, college students, as "players" and "wanderers" in the universe, have broadened their personal knowledge and horizon, and the timeliness and interactivity of communication have also changed the relationship between the subject and object of traditional ideological and political education. The relationship between education and education has evolved into the same dialogue, and the discourse authority will also be impacted. As the product of technological change, the authority status of ideological and political educators is gradually reduced, and their role positioning will be reshaped. Therefore, how to use meta-cosmic technology to understand the thoughts of educators and reconstruct their easy to accept educational discourse system has become an important thinking in the work.

### **2.3 Freedom of communication and expression, and- -decentralization**

The universe's goal is to build a virtual real exchange, real-time interaction, the world, in the highly fusion and free space, everyone has "microphone" can any voice and discussion, this will lead to in the universe space we received information, presented the content will no longer be from a single portal, not limited to a specific crowd, but is all individuals in the space. The traditional ideological and political education mode of "centralized indoctrination" education will be challenged. Everyone can express themselves fully and freely, forming different views to impact the centralized transmission of theoretical values. At the same time, as the object of ideological education students in the universe space due to the freedom of communication, they accept the transmission of information and values, tend to join their own subjective understanding, resulting in new ideas and understanding, however, college students are still in the values of exploration and shaping period, the understanding of related things is not comprehensive enough, also vulnerable to all the influence of thoughts, tend to blindly follow suit or one-sided understanding, adverse influence even disturb normal network order. Therefore, the centralization of ideological and political education and mainstream values is still very necessary. Therefore, how to guide the education to participate in the interaction correctly, keep absolutely sober on the position, and effectively put the mainstream values and ideas into the brain and heart is an art needed to master.

## **3. The ideological dynamics and behavior characteristics of college students in the metaverse era**

General secretary pointed out that "science and technology has never like today so profound influence the national destiny, never like today deeply affect the people's happiness", the contemporary college students are growing up with the development of the Internet generation of college students, can say they are the indigenous network, in the moment, they will undoubtedly become the force and main force of the universe. It is of great significance to explore the new ideological dynamics and behavioral characteristics of young college students in the metacosmic era to carry out targeted ideological and political education.

### **3.1 There is morphological data**

College students cannot live their daily life without the Internet. The Internet has become an extremely important way for their daily life, entertainment, leisure and study. Their profound interaction with the Internet, lead to generating and creating data all the time. And that massive

amount of data will be recorded and stored. Form the unique "digital DNA" of each college student to form a digital twin. By analyzing and analyzing the relevant data. Enterprises and businesses will be able to accurately analyze the personality characteristics of students, Push them with services that meet their individual needs. The "information cocoon room" effect follows. And it makes college students further increase their dependence on the digital world, presents a digital way of existence. According to the 47th Statistical Report on the Development of China's Internet released by the Cyberspace Administration of the People's Republic of China, as of December 2020, China's Internet users aged 20-29 accounted for a relatively high proportion of the total Internet users, reaching 17.8%, and the total proportion of college students accounted for nearly 20%. College students have become an important and fixed user group of the Internet. According to the 2020 TikTok College students data report, the data generated by the creation and release of college students on TikTok platform reached 311 trillion times, more than 118.4 billion times and more than 2.7 billion times, and the data generated was immeasurable. The digital existence mode of college students cannot be ignored or ignored. This face for 200 students with network use survey questionnaire, effective recovery sample 177, Sample statistics shows that the overall time spent more than 3 hours online students proportion 73.45%, among them, 4-6 hours for normal proportion as high as 54.24%, even 4.52% of students spend time on the network more than 10 hours, shows that students for network dependence is high degree, most of their spare time is occupied by the network. Sample statistics shows that although most students spend a long time on the Internet, 85.31% of the students pay attention to ideological and political education content within one hour every day, and the ideological and political space is squeezed, and their influence and appeal are obviously weak. It is worth thinking about, in the case of the digital existence of college students, enterprises and businesses can use data to carry out accurate services, whether ideological and political workers can also understand students, be close to students, think what students think, and do the ideological and political work that students enjoy, so as to enhance the effectiveness<sup>[3]</sup>

### 3.2 Circle of interpersonal communication

The social circle of college students is a common way of communication and existence of college students in the network. It mainly refers to that in a large number of virtual communities, students only carry out information interaction in specific circles according to their interests and hobbies. Due to the existence of the "information cocoon room" effect, the more college students pay attention to the content they are interested in, the more they will push a lot of homogeneous content in large numbers, leading to the further narrowing of the circle layer and reducing the possibility of college students receiving other external information. In this social circle, similar age between members, even in the thinking mode, values, cognition, discourse system is very close to, members in the circle of close communication, based on the common interest information to communicate, can say they are a strong common, focus on the content of the convergence. Under the influence of circle stratification, it is easy to form a strong and unified values and the core opinion leaders. There is a certain stimulating effect on the occurrence of online public opinion events, the occurrence of network subculture, and the network blindly following the trend.

### 3.3 Silicolization of cognitive methods

The so-called silicon-based is also a vivid metaphor. Because the relevant digital technology is realized based on the basis of silicon-based chip, the silicon-based generation is used to describe the cognitive way of college students are influenced by digital technology, which has the characteristics of rational and one-sided. In the digital age of the metaverse, Many of the values and thinking modes accepted by college students are calculated by "artificial intelligence". Such as when looking



for a solution to a single thing, Students' common first reaction is whether it can be achieved through computers and other equipment, Without the process of self-thinking, Or directly input the relevant data and content into the system to export the solution of the event. Such solutions are often the most direct and rational ones to achieve the goals, And college students are often dealing with people, The most rational solution is not necessarily the most effective solution, This also constitutes the disadvantages of the way of understanding is too rational. At the same time, college students in the process of cognitive things, also often by means of digital technology, such as want to learn a professional field of a particular knowledge, with the means of data capture technology, they often do not need to understand the theory of the field can complete the goal, lead to college students in the process of understanding things is often one-sided, only focus on a characteristic point lack of lost global.

#### **4. Based on the ideological and political education mode of "digital twin and digital double" for counselors**

Counselors are the backbone of ideological and political education for college students. Ideological and theoretical education and value guidance are the important contents of counselors' work responsibilities, and counselors are the main personnel in the field of ideological and political education in colleges and universities. As General Secretary has pointed out, " We are living in an era full of challenges and one full of hope." Yuan universe is such an era, bring serious challenges to college students ideological education, but as a counselor should seize more based on, using digital double, digital twin and immersion interaction, explore the new possibilities of ideological education, more thought party education for the country, aspire to cultivate ideal ability to bear new era.

##### **4.1 Digital twin- -Student information and intelligence transfer station**

As mentioned above, college students left huge amounts of data on the Internet, due to the existence of digital twin phenomenon, formed a highly similar with reality university "virtual self", business enterprises use the "virtual self" accurate push and service can hit students be fond of, produce good effect. Similarly, in the ideological and political education, counselors can also rely on the digital twin phenomenon, use it as an information transfer station for students 'information, ideas and characteristics, go deep into the student group, deeply understand students' thoughts, extensively collect students 'feasible opinions and suggestions, and respond to students' concerns. Counselors use information to explore the ideological and political education content close to students' ideological thinking, so that they can easily accept and resonate with the same frequency. At the same time, after fully understanding, as a counselor we may can more understand the students 'mentality, more can understand the starting point and demands on the network, to be more tolerant more patient, can timely grasp the thoughts behind the practical problems, do timely solve complaints and complaints, timely correct mistakes, timely resolve complaints, timely explain they don't understand policy content, guide them correctly, effective prediction and prevent public opinion events in advance. What's more, the digital twins and portraits of counselors are also effective ways for students to understand us, making the application scenario of the universe a new platform to promote the interaction between teachers and students, and a space for teachers and students to understand and close.<sup>[4]</sup>

##### **4.2 Digital body double- -Scene perception in remote participation**

With the existence of digital doubles, people in reality can transcend time and space, and

participate in real, efficient, free, diversified and content in various scenes. In the later education field, the digital surrogate will be normalized as the intermediary of learning and communication. However, although the separation of the body and the digital identity is realized in this scene, it is still controlled and influenced by the subjective will, and it is the projection and mapping of real people in the virtual space. Therefore, counselors can make full use of digital body doubles to achieve effective education for college students in developing ideological and political education. Yuan universe era broke the closed of the space and time, realize the open and integration of time and space, under the influence of the outbreak, some students in different not back to school, in the future scene, more likely to be long distance to participate in classroom teaching and interactive activities, at this point, can different practice teaching terminal students can use holographic projection, virtual simulation technology to participate in the local teaching environment. At the same time, in the specific ideological and political education scenario, we can also participate in the specific education scene through digital surrogate, immerse and interact and comprehensively perceive the rich educational scenes as much as possible, so as to improve the effectiveness of ideological and political education.<sup>[5]</sup>

### 4.3 Balance and moderate- -effectively supplement non-blind obedience

The ultimate goal of science and technology development is to provide convenience for human beings and improve the efficiency of work and study, but it needs to avoid falling into the trap of over-reliance on science and technology. For ideological and political education, ideological and political education in the final analysis is human work, both in the reality of education or in the virtual space, ideological and political education are set up the correct and tend to be unified positive values, need the mainstream consciousness, because college students also for the values of exploration and shaping period, the core values and mainstream values still need through the way in college students form stable psychological structure, so as to realize internalization in externalized in line. The new technological environment and new experience often lead to the blind worship and worship of young people who are still curious and strong psychology. It should be clear that the universe is not an "idealist" nor a "utopia", and cannot become a substitute for ideological and political education. Therefore, as a counselor, when carrying out ideological and political education for college students, he can be good at using, trying and giving play to the advantages and experience brought by technology. However, if they blindly follow and abandon the necessary indoctrination education, it will also lead to the emergence of new problems and even the loss of educational effect. We should always adhere to the "indoctrination" education of ideological and political education into the brain and heart, and the meta-universe technology as an effective supplement to make the virtual world serve the education of the real space.

"For the party education, for the yuca" college counselors shoulder the responsibility of training the socialist qualified builders and reliable successors, the arrival of the universe college counselors network ideological education, only in the face of the situation and new challenges constantly explore and improve work, college counselors can really contribute to build comprehensive education power.

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