

# **A Brief Analysis of the Alienation of Artificial Intelligence**

## **--Taking Marx's Theory of labor Alienation as an Analytical Tool**

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### **Abstract**

**We are in the wave of the fourth industrial revolution. Industry 4.0 has become a popular word in the field of production with its unique intelligent color. Artificial intelligence technology has not only brought benefits to human beings, but also posed challenges to human labor rights and sociality, resulting in a "digital divide" and a large number of "digital poor". The essence of these problems is the alienation of man from his own creation. In the face of the pains brought by emerging technologies, we must make full use of the logic of Marx's theory of labor alienation to analyze the alienation phenomenon of Artificial intelligence, and strive to provide the right direction for the development of human beings, the guidance of technology and the supervision of capital.**

### **Keywords**

**Marx's theory of labor alienation; Alienation of labor; Artificial intelligence (AI).**

## **1. Introduction**

Since the Dartmouth Conference in 1956, Artificial intelligence has been active in academia and people's lives. After a period of low development, Artificial intelligence technology continues to develop rapidly. Nowadays, Artificial intelligence technology not only benefits mankind, but also has a negative impact on people's labor and division of labor, spiritual life and social equity. The philosopher Dennett once said that "technology is philosophy", just like the phenomenon of labor alienation analyzed by Marx, the essence of the problem of Artificial intelligence is still the alienation of human beings from their own creations. Although the human condition is now similar to that of the British worker "threatened" by machines at the beginning of the industrial age, the historical facts tell us that the tide of science and technology is unstoppable. Therefore, we must actively accept change, find strategies and meet challenges.

## **2. Organization of the Text**

### **2.1. An overview of alienation theory**

Marx's theory of alienation of labor combines the theory of alienation of German classical philosophy with the problem of workers' labor in practice, and profoundly analyzes the alienation and opposition between workers and their own labor. As far as the concept of "alienation" is concerned, Marx's theory of labor alienation has extensive universality and applicability. Therefore, we can also use the theoretical framework of Marx's alienation of labor to analyze: Artificial intelligence technology created by human beings is alienated and opposite to human beings.

#### **2.1.1. The origin and development of the concept of alienation**

The original use of "alienation" was a political term. Hobbes theorized that people would cede their rights to the state through a social contract. Rousseau believed that "alienation" was

involved in the relationship between man and society, nature and economics. In terms of the relationship between human and society, "alienation" means that people transition from natural person to social person and transfer part of their private rights to the state to exercise public power instead of themselves. The "alienation" between man and nature is the transition from a natural person to a civilized person, and the culture created by man becomes a shackle restricting his own development. In economics, "alienation" is the "transfer" of property, and the final result of such "transfer" is that the property is concentrated in the hands of princes and nobles. The concept of alienation that is used today was invented by Hegel, based on Feuerbach, and by Marx. In order to further promote the development of Kant's knowledge, German Fichte used the term "alien" (the relationship between self and non-self) to express the relationship between subject and object, which is created by "self" and "non-self". Hegel used the concept of "alienation" to generally mean that the spiritual entity produces its own opposites through the process of splitting into two. After Fichte and Hegel interpreted and perfected the word "alienation", Feuerbach began to analyze religion with this concept. He believed that the essence of religion was "the division of man from his own essence". At the same time, he also advocated to return the nature of God to people, so as to solve the problem of religious alienation. In a word, Hegel's and Feuerbach's judgments on the concept of "alienation" have become the reference object of Marx's theory of labor alienation.

### 2.1.2. Marx's theory of labor alienation

According to the fusion of Fichte's and Hegel's views and Feuerbach's analysis of religion with the theory of alienation, we can see that the theory of alienation is universal. Marx saw that workers, as the subject of labor in capitalist society, were in opposition to their own labor and labor products, and were even controlled by their own labor and labor products. This accords with the two conditions mentioned above by Fichte and Hegel, so it can be summarized as alienated labor. Marx applied the alienation theory of The German classical philosophy to the actual labor problem of workers and formed the alienation theory of labor.

Marx's theory of alienation of labor also makes a profound analysis of the alienation of workers and their products, their process of labor and its extension: the alienation of workers and their similar nature, and the alienation of human beings. We can summarize these four aspects into two points: first, labor created man, is the essence of man, so man cannot do without labor. The alienation of labor comes from the workers' own labor but also makes the workers lose their own essence. Second, in the process of capitalist production, because the means of production are owned by capitalists, the workers' labor and their achievements become the capitalists' private property, thus alienating the workers themselves and becoming uncontrollable opposites of the workers, resulting in the alienation between people.

In short, Marx's analysis of these four aspects is a dynamic process starting from national economics and ending from the empirical world, from the rule of things over people to the rule of people over people. Although this theory has Feuerbach's humanism color, but for us to study the alienation problem provides the important analysis train of thought.

## 2.2. Artificial intelligence alienation phenomenon and the reason analysis

At present, Artificial intelligence technology is constantly developing, but in the process of its development and application, it is alienated and opposed to us. Due to the extensiveness of the concept of "alienation", we define the alienation phenomenon related to Artificial intelligence as the problem of intelligence alienation, and analyze the problem and its causes in the following four aspects according to Marx's logical analysis framework.

### **2.2.1. Human and Artificial intelligence in the intellectual achievements of intelligence alienation.**

The advent of Artificial intelligence shows that there is an intelligent alienation relationship between human beings and their own intellectual achievements. People's intellectual achievements do not have to be completely produced by people, but can be produced by Artificial intelligence, thus creating a unity of opposites between people and their intellectual achievements. For example, a general-use language algorithm developed by the Open AI team in San Francisco can be trained through massive amounts of text on the web to perform lip recognition, response counseling and other very practical tasks. Although these technologies are not yet mature, the memory function, speed of information processing and storage capacity of Artificial intelligence are far higher than that of human beings, so many of the intelligence results that Artificial intelligence produces with natural logic may also be higher than human intelligence results. But while the intellectual achievements produced by Artificial intelligence bring a lot of material wealth, it also causes the poverty of people's spiritual life. In the face of the powerful knowledge and information collection and processing capacity of Artificial intelligence, people are more and more inclined to "sit on their hands and reap the benefits", and more and more lack of inquiring spirit and rational thinking. As a result, the discriminating ability, innovation ability and aesthetic ability of human brain gradually deteriorate, plus the increase of people's free time and the human nature of greed and entertainment, so that people inevitably involved in the trend of pan-entertainment. As Postman pointed out, the politics, religion, education and other aspects of the current society are willing to become the servants of entertainment, and they keep turning silently, finally causing the emptiness of people's spiritual world [1].

### **2.2.2. Human and Artificial intelligence in the intellectual work of intelligence alienation.**

In 2007, the concept of "brain-like intelligence" was officially launched. It aims to achieve the "intelligence shown by highly evolved biological brains", which makes the connection between human and Artificial intelligence even closer. When Artificial intelligence technology reaches the stage of brain-like intelligence development, people's mental work is not limited to the brain organs, but can also be carried out in the "brain-like" internal work, so there is a dissimilated relationship between the two. And with the continuous development of technology, the brain in mental work better than the human brain is gradually highlighted. Although human brain has been gradually optimized and upgraded in terms of its structure and information processing mechanism, it is still subject to physiological limitations. Unlike brain-like intelligence, it can overcome the limitations imposed on human brain and continuously construct highly collaborative cognitive mechanisms. So much of the mental work that was previously done by humans has been entrusted to brainlike intelligence.

This means that the ability to think will no longer be the exclusive preserve of humans. Just as machines surpass humans in physical strength, Artificial intelligence is likely to surpass humans in "brain power," and humans will become increasingly dependent on it. From Lamarckian theory to the theory of obsolescence, we can predict that the human brain in this environment has a tendency to degenerate [2]. Then, people will change from actively handing over mental work to Artificial intelligence to having to hand over mental work to Artificial intelligence. Furthermore, the social division of labor, especially the vertical division of labor, will be reconstructed accordingly [3]. In order to pursue surplus value, more capital is invested in the technology industry at the top of the division of labor, which further intensifies the industry monopoly and leads to the inability of enterprises and workers at the bottom of the society to enter this industry. It will eventually lead to the widening of the gap between the rich and the poor, and even lead to the differentiation and fracture of the social structure.

### **2.2.3. Human and Artificial intelligence in the nature of human intelligence alienation.**

Aristotle points out that the essence of man lies in his ability to think rationally. Marx also mentioned that the life activity of man is the conscious life activity [4]. Therefore, the most fundamental difference between man and other animals is that man has consciousness. However, with the progress of Artificial intelligence technology, Artificial intelligence begins to take on more and more mental work instead of human beings. This process is not only a process of alienation between human beings and their own nature, but also a process of continuous degeneration of human thinking. As Kai-Fu Lee said in the "Five-second Rule", if a human worker can make a decision on a job that seems to be exclusive to human within five seconds, the professional worker will be likely to be replaced by Artificial intelligence [5]. Therefore, from the perspective of the alienation of man and his nature, under the trend of gradually handing over mental work to Artificial intelligence, man's ability to understand and transform the world, namely intelligence, will also be affected. We continue to find that people are in contradiction in proving that they are conscious beings: the more people continue to prove that they are conscious beings, and promote the development of Artificial intelligence, the more the human brain is alienated from its own thinking and consciousness. In the end, conscious life activities become a luxury for human beings. The initiative and creativity peculiar to human beings gradually disappear, and human beings will eventually become far away from the goal of comprehensive development, and then become people controlled by Artificial intelligence, with one-dimensional thinking and behavior patterns.

### **2.2.4. The alienation of intelligence between people**

Artificial intelligence has completed a great deal of rational work assigned by human beings, which leads to the difference in intelligence between different individuals and human relations, thus causing the alienation in intelligence between different individuals. The reason for this is that the people who create Artificial intelligence have an intellectual advantage over the people whose rational jobs are taken over by Artificial intelligence. So you have the intellectual domination of those who have the intellectual superiority over those who don't, as Marx said, the ruling class over the ruled class. From a closer look, it is the original equality of different individuals affected by objective factors and have a high or low. In the society in the era of Artificial intelligence, whether the Artificial intelligence can be controlled and whether their rational work can be guaranteed not to be seized by Artificial intelligence has become the standard to divide the ruler and the ruled.

In the context of the current era of intelligence, due to different levels of economic and social development and uneven application and development of Artificial intelligence technology, the spread and development of technology cannot achieve the popularization of the whole people, resulting in the differences in people's control and mastery of Artificial intelligence. These differences gradually form a "digital divide". Not only that, in the capital, to master the core technology of the developed countries, regions and enterprises, the key data resources and cutting-edge technology monopoly, cause the "digital divide" widening, social inequality, intensified development gap between regions, but also the lack of control and the ability to control the emerging technology, lack of creative "Numbers of the poor" in such aspects as political participation and the spiritual life cause social exclusion, such as unable to benefit from the massive construction of the e-government, unable to get online media information in a timely manner, etc [6].

### **2.3. The resolution path of Artificial intelligence alienation**

In the face of the further development of Artificial intelligence, we should not fall into the fallacy of dividing the future proletariat into useless classes in A Brief History of the Future, nor should we be too optimistic and blindly rely on the development of Artificial intelligence technology [7]. While guiding science and technology back to human nature, strengthening the supervision

of digital capital, and breaking the monopoly of technology, human beings should also make good use of the blessings of free time brought by Artificial intelligence, constantly enrich their spiritual world, strive to improve their innovation in labor, and do more intelligent work.

### **2.3.1. Strengthen the use of free time to enrich the spiritual world**

Marx pointed out that free time is the free time outside productive labor, which is the time for people to achieve self-development [8]. With the continuous development of science and technology and the increasing level of intelligentization in production, intelligent machines can replace human beings in production more efficiently, accurately and humanely, so as to promote people to get rid of monotonous and heavy compulsory production labor and provide more people with free time in the general sense. However, while people enjoy the benefits brought by Artificial intelligence, they also face the problems of social marginalization and spiritual poverty. The development of deep learning of Artificial intelligence reveals that the realization of self-development in the era of intelligence cannot be achieved overnight, and falling behind the innovative labor demand means being eliminated by the society. That requires us to find our place in the tide of intelligence, rather than smash machines like unemployed 19th-century British workers. Kant divided human abilities into three categories: knowledge, emotion and meaning. He believed that science was inferior to human beings in emotion and will, except that it was superior to human beings in cognition. Similarly, Artificial intelligence is better than human beings in data analysis and memory storage, but human beings still have advantages in emotion and intention. Therefore, human beings should renew their knowledge of their own abilities and give play to their creative and emotional strengths. Adhere to lifelong learning in practice, cultivate their own innovation ability, more intelligent labor, increase their irreplaceable. In addition, we should make full use of free time to achieve all-round development. We should apply the results of Artificial intelligence production to improve our ability of screening information and knowledge and aesthetic ability, take truth, kindness and beauty as our pursuit in life and study, return to human rationality, and avoid the risk that the pan-entertainment brings us lack of faith [9]. Only by constantly improving their own creativity and various abilities can they enrich their spiritual world, control and control Artificial intelligence, effectively resist the bad influence brought by fetishism in the age of intelligence, achieve human-machine harmony and promote the better development of human beings.

### **2.3.2. Strengthen the guidance of the use of technology and realize the humanized development**

Marx believed that man is the sum of all social relations. The dominant nature of science and technology is to use the mastery and control of science and technology to cover up the exploitation and slavery of human beings in capitalist social relations. Therefore, to strengthen the guidance of technology and promote the human-oriented development of information technology, we must put social benefit in the first place and realize the good combination of social benefit and economic benefit. At the national level, legislation should be strengthened to build a perfect legal system in the field of Artificial intelligence, so as to increase the standardization of The research, development and application of Artificial intelligence technology. We will strengthen the economic development of "digital poverty-stricken areas", formulate policies for technology investment in light of local conditions, and maintain the unimpeded flow of data and technology. Expand the reach of the "digital poor" to AI technology and provide training opportunities to improve their creativity and control and mastery of AI. In addition, it is necessary to strengthen the construction of education in the intelligent age and realize the cultivation of innovative talents. From the social perspective, the development of science and technology cannot be separated from the supervision of the society. We should actively build a supervision system for the development of social science and technology, and



strengthen the communication and interaction between official and non-official organizations. In the era of intelligence, no matter official institutions or social organizations, in the face of the alienation of Artificial intelligence, they must assume the corresponding responsibility, guide and educate the research and development personnel, supervise and standardize the research and development behavior, and promote the intensive development of society. At the individual level, researchers should adhere to the principle that the fruits of scientific and technological development should be Shared and owned by the people. In the process of technology development, people should be the center, with the goal of improving the scientific literacy of the citizens in the era of Artificial intelligence and meeting the needs of the public to master emerging technologies, so that the results of the development of Artificial intelligence will benefit the masses. Finally, Artificial intelligence technology will become the externalized and objectified product of human labor, eliminate the opposition and alienation between Artificial intelligence and human brain, and promote the people-oriented regression of science and technology development.

### **2.3.3. Strengthen the supervision of digital capital and break the monopoly of technology**

Classical Writers of Marxism reveal the inherent contradictions of capitalist society and the unsustainability of capitalist economy, and point out that the social division of labor of capitalism will produce alienation and hinder the development of human beings. Digital capital is a new form of capital which combines intelligent technology and capital deeply. Digital capital usually holds "general data", such as Google companies and amazon companies, which can analyze the needs and orientation of the market in detail and provide consulting services for capital that needs to be invested and produced [10]. Although the network virtuality of digital capital conceals labor in free time and blurs the boundary between necessary labor time and free time, it does not change the essence of capital's exploitation of labor. Therefore, we should strengthen the supervision and management of capital and break the monopoly of technology. First, it is necessary to strengthen the establishment and improvement of the legal system of digital labor protection in order to protect the legitimate rights and interests of workers in relevant fields. With the globalization of the world economy becoming increasingly close, digital capital and digital labor are moving more and more rapidly around the world. On the premise of improving the digital labor protection law of China, it is necessary to learn from the experience of formulating and improving digital labor protection laws of other countries or other regions, so as to enhance the synergy of international digital labor protection laws. Second, we should strengthen the sharing of data resources and build the anti-monopoly mechanism of data resources. As the basis of Artificial intelligence algorithm, data is the core of the development of Artificial intelligence technology. Therefore, it is necessary to prevent the monopolization of data resources, establish an anti-monopoly mechanism for data except those involving confidentiality, and maximize the sharing of data resources. Third, we should combine capital gains with public interests, strengthen the tracking of capital flows, and ensure that public interests are always put in the first place in the development of information technology. We will establish a strict and efficient mechanism for supervising the flow of capital, and continue to increase digital capital investment in less developed regions to further promote social equity.

## **3. Conclusion**

In essence, the social problems brought by Artificial intelligence technology are the alienation and antagonism between people and the things they create. Facing the alienation of Artificial intelligence, we should adhere to marxist theory as the instruction, resistance is similar to "will be the future of the proletariat is divided into useless class" fallacy, at the same time also cannot

blindly will own development relies on the development and application of Artificial intelligence technology, losing one's own nature, letting out of mankind's original intention of science and technology development, indulgence of capital control technology caused social injustice. Each time the progress of science and technology for human society development inevitable pain, we have only conform to the trend of historical development, transformation and upgrading of its own, to the technology development to standardize guidance, supervision and management on capital utilization and can lead to the humanistic development technology, can achieve the goal of human-machine harmony, can toward the ideal of communism better to go on.

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