

# Technological Progress and Conceptual Progress

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## Abstract

After thousands of years of development, science and technology of human beings have improved significantly. However, there are still controversies about the progress of concepts. Many people believe that technological advancement has not brought about conceptual advancement, and the concepts of mankind have just stayed in place since ancient times. For example, we cannot say that we are wiser or kinder than Socrates. However, as a reflection of subjective consciousness, science and technology have improved objectively. Therefore, we cannot deny the view on conceptual progress. In order to resolve this dispute, we need to refine "concepts" or "ideas". In fact, the concepts of our human beings are composed of three aspects: epistemology, ethics, and aesthetics. In this way, we will find that the original controversy is based on people's different understanding of concepts, and the conceptual advancement brought about by technology is mainly focused on epistemology, rather than existing in the others.

## Keywords

Technology, Idea, Progress, Epistemology.

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## 1. Introduction

After thousands of years' development, science and technology of human beings have improved significantly. However, there are still controversies about the progress of concepts. Many people believe that technological advancement has not brought about conceptual advancement, and the concepts of mankind have just stayed in place since ancient times. For example, we cannot say that we are wiser or kinder than Socrates. Is this really true? How should we examine the relationship between technological progress and conceptual progress? This is what we will discuss next.

## 2. Some arguments between technological progress and conceptual progress

Talking about the topic of "the relationship between technological progress and conceptual progress" is often accompanied by different voices. In fact, the focus of people's debate is mainly on the following two aspects:

Firstly, they doubted the existence of "conceptual progress" and believed that technological progress and conceptual progress had no necessary connection. G. G. Iggers thought, "We can hardly talk about laws, and it is even harder to talk about progress in an evaluation sense." "We must frankly admit that, as a scientific explanation of historical movements, the notion of progress is untenable." Furthermore, he denies that the progress of concepts is a historical process, because people's current ideas are "not based on what happened objectively in the past, but based on his decisions toward the future."<sup>[1]</sup><sup>18</sup> W.H. Walsh also pointed out, Unless we presume some propositions about human nature and apply some concepts that are in line with human behavior and morality, we cannot even begin to understand the past.<sup>[2]</sup>

In addition, Iggers did not believe that the influence of technological progress on the progress of concepts constitutes a positive correlation. "Many neo-historicism theories recognize the possibility of civilization (scientific, technological, and even organizational) progress, but deny cultural

(spiritual or moral) progress." "The advancement of concepts due to technological advancement is actually an issue that is difficult to prove, because the advancement of concepts actually means the advancement of human nature."<sup>[1]18</sup>

Furthermore, technological progress and conceptual progress even constitute a negative correlation. "The value of modern civilization that we regard as progress may lead to our own destruction." Because we "underestimated the destructiveness and irrationality of mankind, this is a big failure for the progressive prophet. The failure of historicism and neo-historicism lies in the misunderstanding of the rational and moral roles in human behavior. " "So far, Progress is only a hypothesis, even a controversial one." "In the era of totalitarianism and wars, how can we speak of progress in a moral sense? End resolution seems to spell out the complete absurdity of progress, which to some extent shows that the use of modern technology in brutality has reached its culmination."<sup>[1]19-20</sup> Popper also warned us, "The concept of progress, as a belief in the ruthless law of historical destiny, has led to the sacrifice of countless men and women on the altar of totalitarianism."<sup>[3]</sup>

Secondly, our concepts has exactly improved, and technological progress is a strong proof. R.S.Wolper thought, "Whatever the origin of the Idea of Progress-the historical relativism of Renaissance humanists, the technological writings of superior artisans, the early Christian teleology of progressive redemption-implicit in the conception is a comparison between past and present (or past and future) ... Of all the accomplishments, none perhaps helped the apologists for modernity more than the inventions."<sup>[4]</sup> William Wotton deepens the views of R.S. Wolper, "So that, though it may be always debated, who have been the best Orators, or who the best Poets; yet it cannot always be a Matter of Controversie, who have been the greatest Geometers, Arithmeticians, Astronomers, Musicians, Anatomists, Chymists, Botanists, or the like; because a fair Comparison between the Inventions, Observations, Experiments and Collections of the contending Parties must certainly put an end to the Dispute, and give a more full Satisfaction to all Sides."<sup>[5]</sup>

Otherwise, a Chinese Chinese scholar, Zhao Yinghuan expressed more direct views in terms of technological progress promoting conceptual progress, "The advancement of science and technology has caused earth-shaking changes in human thoughts and concepts... On the surface, it appears to be the development of material means, but in fact it has given birth to changes in human concepts. Human beings have developed from the original understanding of the sacredness of life to The pursuit of the quality of life...From the sacred thinking of life to the pursuit of the quality of life, to the thinking of the meaning of life, people's outlook on life has undergone a substantial change. If there is no scientific and technological progress in medicine and pharmacy, there is no guarantee of material and technical means, the pursuit of human ideals is undoubtedly a castle in the sky... It can be seen that scientific and technological progress promotes the transformation of human concepts."

In the face of the above controversy, we can find that technological progress is indeed related to conceptual progress, but is it positive or negative? "Concept" and "progress" are not substantive words with actual references. How should we understand the two? This is a question worth considering.

### **3. Conceptual Progress based on Epistemology**

Focusing on Marx's view of social existence and social consciousness, it is clearly and straightforward that conceptual progress can be proved by technological progress as a social existence. However, it is still ambiguous, because it means that we are still perceptually using the two subjective notions of "concept" and "progress", which are only meaningful to people themselves. Therefore, facing the problems, people can refute such views from different angles by putting forward counterexamples. As mentioned above, many scholars have made fierce criticisms from the perspective of ethics. With the continuous development of mankind's technological means, have our moral and practical values improved or regressed? This will be a very controversial topic. In fact, it is not difficult to understand: the advancement of technology has not only facilitated the survival of human beings, but also expanded the desires for further benefits seeking. In that way, how do we understand concepts? What

is conceptual progress? How to understand that technological progress is a proof of conceptual progress?

First of all, the composition of "concepts" and the connotation of "progress" must be clarified, for further clarification of "conceptual progress".

There are three components to the human's concepts:

First, how do we perceive the world—the concepts of truth.

Second, how do we practice in this world—the concepts of moral law.

Third, how do we reflect on the world from the perspective of cognition and practice—the concepts of emotion and aesthetics.

As far as the concept of "progress" is concerned, it implies a contrast between two stages:

The first stage is the comparison between the existed and the desired within the subjective scope;

The second stage is that in the time interval, the expected value of satisfaction achieved by the new things is greater than the expected value of satisfaction achieved by the existing things.

Therefore, conceptual progress means that there is an increase in the expected value of satisfaction compared with the existing ones on the three levels. That is to say, the new concept further satisfies our three inner expectations:

First, expectations for understanding the nature and laws of this world;

Second, expectations for improving our own moral level;

Thirdly, expectations of enhancing the universal aesthetic taste.

On this basis, it is time to talk about technological progress and the connection between technological progress and conceptual progress. From the definitions of above, technological progress means that new technologies can better meet our certain expectations than existing technologies.

If this expectation is to pursue aesthetics, will technological advancement prove that people's aesthetic tastes have improved? Maybe it will, but we can never make this view a universal view, because aesthetics is a subjective concept rather than an objective and measurable one. Therefore, the progress of technology can only mean that the ways and means for people to express emotions are enriched and deepened, and aesthetics samples can be better preserved. Therefore, it can only reflect the progress of artistic methodology, rather than the advancement in aesthetic epistemology. All in all, for technological progress, it is clear that it has generally improved our methods of creating and preserving beauty, but cannot reliably prove the progress of our aesthetic concepts.

If this expectation is to satisfy practice, will technological advancement prove that people's moral level is generally elevated? Maybe it will, but the dispute over this view will always exist. Because the actual proof brought by technological progress is the satisfaction and expansion of human's desires. Whether satisfying desires proves morality has always been a question. The debate about the relationship between desire and morality has not yet been concluded.

On the one hand, the satisfaction of desire needs to be constrained by the moral law, rather than to prove the moral law itself. The relationship between the two is that desire satisfaction is on the premise of, rather than tracing back to the proof of morality. Because desire has the limitation of experience, while morality has the universality of law. Therefore, there are desires that conform to moral laws and desires that do not conform to moral laws. When the advancement of technology satisfies people's desire to violate the laws of morality, people's moral level has not progressed but regressed. Technological progress has become a counterexample to people's moral regression. On the other hand, the universally applicable rational moral law has not yet been determined, which has always been a controversial issue. Therefore, it is difficult for people to come to a unified conclusion when judging conclusive technological progress with inconclusive rules. In addition, the advancement of technology does not bring about the universal satisfaction of all people's desires, but the satisfaction or even expansion of some people's desires. At this level, the advancement of technology only proves that human beings are driven by desire, not self-love that respects moral laws.

Therefore, in practice, it is difficult for us to draw the conclusion that technological progress brings about conceptual progress.

Since in the field of aesthetics and practice, we cannot draw the conclusion that technological progress will be sufficient to prove that conceptual progress can be universally recognized, can we make a breakthrough in the field of cognition? Is the advancement of technology sufficient to justify the progress of our concepts? It depends on our expectations on this concept of cognition. As far as cognition is concerned, our expectation is to explore the true nature of this world, That is to say, the closer our ideas are to the true nature of this world, the greater the satisfaction of our expectations is. Therefore, the most direct and powerful proof of the conceptual progress is the progress of scientific theories, if we regard scientific theories not only as knowledge on book, but as our rational understanding of the phenomenal world and the laws of nature. The more objective and complete the scientific theory is, the more undisputed it proves the conceptual progress in the field of cognition. There is a close connection between technology and science. For one thing, the more advanced the scientific theories are, the higher our level of production technology using the laws of nature. Therefore, as the externalization of concepts, technology progress indirectly proves the progress of our concepts. For another thing, with the development of technology, there will be more efficient means for us to propose, verify and disseminate scientific theories. By which, technological advancement will be a better promotion to conceptual progress. Therefore, technological progress can prove the progress of our concepts, but it is not indisputable, only limiting to the cognitive and indirect field.

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