

# Ethical Thinking of the Development of Science and Technology

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**Keywords:** Science and Technology, Ethical Thinking.

**Abstract:** Since the middle of the 20th century, science and technology to realize the combination of the close in the social production, science and technology in promoting the development of social productivity at the same time, a series of negative effects, hence on the social function of science and technology academic debate. Is closely related to human survival and development of science and technology, it is not only to human survival and development bring great happiness, also make the sustainable development of the human face difficulties. To eliminate the development of science and technology of the negative impact of ecological environment and human beings must change to guide the development of science and technology ethics.

## Introduction

The rapid development of science and technology, like a raging waves, impact all areas of human society. Especially in the 21st century, such as atomic energy technology, network information technology, such as the development of modern high-tech biological genetic techniques, are profoundly changing the face of the nature and human fate, it is to human survival and development bring great well-being of at the same time, and science and technology and ethics of "dilemma" : on the one hand, we know that science is rational and the highest achievement of human culture, on the other hand we also afraid of science development has already become a kind of beyond the control of immoral and inhuman tools, a devouring everything in front of it without the spirit of the ferocity of the machine. How to implement the necessary for the development of science and technology moral constraints, in order to make the development of science and technology to meet the orbit of humanity, has become the core issue of science and technology ethics. If not properly solve this problem, not only the development of science and technology itself, and the development of science and technology human and nature will also lead to negative effect of the abyss of destruction, causing huge ethical disaster.

## The Interaction of Science and Technology and Ethics

### The Dual Role of Ethics of Science and Technology

On the one hand, the development of science and technology has a promoting effect on the development of ethics, displays in: first, science and technology to broaden the field of ethics, and provides a new way for the study of the ethical and moral, the new way. With the development of science and technology, science and technology ethics put forward many new problems. Such as the atomic bomb, the development of nuclear weapons, the serious environmental pollution problems, "human cloning", "test-tube baby" etc, in order to solve these problems, ecological ethics, ethics of nuclear, biological ethics, bioethics and other new technology arises at the historic moment. Put forward the ecological ethics of respect for life and human norms and requirements of sustainable development, and the development of nuclear ethics is the embodiment of the strong desire of human pursuit of peace in the world, the rise of life ethics, reflects the new technology used to control the social demands. With the development of science and technology, some technology related ethics also will continue to produce, ethics has is not only a code of conduct, to standardize the relations between human beings and animals, plants, and even inanimate objects, that is, all

nature is there a potential moral relations, widen the researching field of ethics of science and technology.

Secondly, science and technology to promote the transformation of the ethical and moral standards. Every major discoveries or inventions of science and technology, is the impact on the old ethics, leads to profound changes in ethical. Such as Copernicus' heliocentric theory", "evolution" of Darwin's strongly shocked "creationism" and Europe for nearly one thousand years to rule a heavy blow to the medieval religious moral, promote the changes on people's morality. The rapid development of modern science and technology, people's living environment, great changes have taken place in the way of life, this kind of change is bound to be penetrated into people's moral concept, make it inevitably on the branding of the era of science and technology.

On the other hand, science and technology and has obvious negative impact on the ethical and moral. With the use of computer technology, some criminals use computer theft bank funds, steal defense secrets, the use of network transmission, to paralyze the important system; Network application, the individual dealing with end, all the daylong caused tensions, interpersonal alienation withdrawn apathy and other unhealthy symptoms; Due to the development of biomedical technology, human intervention human reproduction process (such as in vitro fertilization, borrow palace birth) and life processes, such as organ transplantation, euthanasia, etc.) caused by the ethical and moral, property inheritance relation with segmentation, social problem such as the ownership of the human face a difficult choice; The emergence of gene recombination technology, people can not only produce no new species on the earth, possibly by changing the genes to change any species upon earth, including man itself. These technologies such as abuse, probably brings the huge disaster to human beings, human value confusion and the lack of faith.

### **Dual Role of Ethics in Science and Technology**

Throughout human history, the history of science and technology and social ethics can be found, ethical and moral effect on the development of science and technology have not allow to ignore. First of all, ethic for the development of science and technology and the use of scientific and technological achievements plays a correct guidance and specifications. Exactly where to development of science and technology, how to bring benefits to human beings, it is not determined by the science and technology itself can, and must use the power of the ethical and moral. Good ethics, through the moral evaluation and value judgment, guiding technical personnel to the science and technology activities to make moral choices, so that in the direction of the benefit of human development of science and technology. Human knowledge is now endowed with human almost can bend natural ability, past many could not do now can do.

Ethics as a kind of social ideology, is through the power of public opinion, make people gradually formed a certain beliefs, habits, traditions, and to the society, to the development of science and technology to the profound influence. The development of science and technology if lost the social ethics of public opinion support, its existence and development is a great deal of oppression and block. Nearly one thousand years of western "the darkness of the middle ages, feudal ruling class of religious superstition dominant, scientists in scientific works as banned books, seriously hindered the development of science and technology, scientific development of asphyxiated. In ancient Chinese history, Confucianism dominated for a long time, the one-sided emphasis on the humanities, and despise despise even the development of science and technology and economy. Han dynasty has a "dong ousted hundred" the author argues that "is the yi (righteousness) and not for its bright by it regardless of its work", and even recently after the opium war, the qing dynasty the die-hards oppose on learning and the development of modern science and technology. As a result, since the Ming dynasty, China's science and technology lag behind the west.

### **About the Position and Role of the Science and Technology in Social Development**

With the arrival of knowledge economy, science and technology leading role in the social

production is increasingly protruding, while brings the enormous growth of the material wealth, caused a growing number of social problems, make the development of modern social civilization facing many potential crisis. Academia has seen and heard as well as to the evaluation of science and technology.

### **Anti-scientism and Technological Pessimism of Criticism and Criticism of Science and Technology**

With widely used in the production of social science and technology, its effect on human society than ever, the positive impact of at the same time, also produced a series of social problems, such as environmental pollution, ecological imbalance, energy crisis, an arms race, workers, and the threat of nuclear war, etc. So some people doubt to the function of science and technology, to accuse, of which the most anti-scientism and technological pessimism typical. According to the German scholar Hans sacks of summary analysis, and the criticism of science and technology set mainly in three aspects: namely, political criticism of science and technology, criticism and romanticism.

As a result of science and technology critics also. This criticism, the result of the science and technology refers to the criticism of damage and the progress of science and technology has brought about harmful. It is intended to remind people, cheering science and technology can improve labor productivity, and promote economic growth at the same time, should be aware of the negative effects. Technology is criticism of western scholars put forward early jay w. f Leicester, he in his book the impulsion, expressed in a mathematical model of the population, material resources, capital investment and the dependence of the pollution of the environment. Chinese scholars she Zheng-rong also pointed out that: in the 1990 s technology way due to its construction mechanism of the industrial civilization the nature of the defects and flaws in the social and cultural conditions, to nature, society and man's existence a devastating effect.

### **Summary**

In a word, science and technology is still the dominant force in social progress, in open - conflict civilization system, how to build and confirm the value rationality of science and technology, how to eliminate the development of science and technology the negative effect on the ecological environment and human beings, the relationship between coordinator and nature, not the without developing problems in the development of science and technology itself, but decided to the problem of how to change the direction of the development of science and technology ethics. Weak anthropocentrism ecological consciousness to the sustainable development of human beings as the goal, to care about nature, respect for life, protect the environment as the core content, it is required that every person, every enterprise, group, every government, organization, their behavior under the restriction of ecological ethics, provides methodology basis for solving this problem. Ecological consciousness is not only the development of science and technology of moral consciousness, is also the rational consciousness of human civilization; The relation between man and nature is not only the value of consciousness, is also the value of human group and intergenerational relations.

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