DOI: 10.6918/IJOSSER.202301_6(1).0012

The Environment and Condition of Modern Social Technicalization

Jie Song

School for Marxism Studies, Shanxi University, Taiyuan, 030006, China

Abstract

As a social operation mode, social technicalization began at the birth of human society. After industrial revolution, entered the stage of modern social technicalization. Modern social technicalization is mainly manifested in two aspects: First, the operation and development of modern society highly rely on technology, technology is in the dominant position in society; Secondly, social technology is becoming more rational and perfect. Social technicalization develops continuously on the basis of continuous improvement of social technology system. Its development has gone through two stages: orderly society and technical society. Modern technological society follows acertain rules of evolution and forms different paths and modes in the process of development and diffusion. Society operates in a technological way, reflects the pursuit of efficiency and accuracy. The differentiation of social functions, bureaucratic management, legalization of the system and the monetization of the economy have become the social condition that maintains technicalization of modern society.

Keywords

Technology; Social Technology; Social technicalization; Environment and Condition.

1. Introduction

Social technicalization means that society is constructed and operated according to technical principles. As a mode of social operation, it started from the beginning of human society. After the Industrial Revolution, it has entered the stage of modern social technicalization. Modern social technicalization is mainly promoted in two aspects: First, technology penetrates into all fields of society with its powerful influence and becomes an important force dominating social operation. On the other hand, the social technology system is becoming more rational and perfect. The development of modern social technicalization needs corresponding social conditions, so far it has gone through two stages, in the process of development follow certain principles, and formed different patterns and paths.

2. The Two Stages of Modern Social Technicalization

With the development of natural technology and the perfection of social technology, the technicalization of modern society is also expanding. The technicalization of modern society has experienced two stages: orderly society and technological society. In the early stage of the development of capitalism, the social community proposed by Tonnies the organic solidarity proposed by Durkheim and the rational society proposed by Max Weber were all discussing how to promote the process of social technicalization through the improvement of social technology, and they were in the stage of building an orderly society. Ellul's technological society and Bell's post-industrial society focus on pointing out that modern society is constructed by technology, technology plays a dominant role in social operation, and this period has entered the development stage of technological society.

DOI: 10.6918/IJOSSER.202301_6(1).0012

2.1. The first stage of modern social technicalization: Orderly society

The development of capitalism has triggered great social changes, and the core problem in the early stage of this change is how to build an orderly society. Scholars explore how to establish an orderly society through the improvement of the system, achieve efficient operation, and then generate economic benefits, which is the early modern society of technology. The emergence of social division of labor and the application of bureaucracy in management constituted the core of social technicalization in this period.

The "community-society" proposed by Tonnies realizes the assimilation and universalization of people's communication. Society operates according to rational rules. Tonnies set the natural law to support the contract, and on the basis of the contract, rely on the system to regulate the relationship between people and standardize the operation of society. Tonnies' "Community-society" theory had a great influence on Durkheim, He defended modern society with the theory of "organic solidarity". He pointed out that under the premise of social division of labor, the transition from the traditional society to the modern society, the new social operation mode emerged. It divides the society into several systems through civic consciousness and realizes organic unity on the basis of social division of labor. When the society is faced with disorder and crime, morality and law to maintain and safeguard the social order.

The most representative theory of this period is the Weber's rational society. "Rationality" is Weber's high generalization of modern society. At the end of The Protestant Ethic and the Spirit of Capitalism, he offers an analysis of the "rationality" of capitalist economic and social organization. He believes that capitalist society pays too much attention to rational principles in the actual operation process, including social activities and organizational principles into rational calculation, and pays attention to maximizing efficiency. In analyzing the rationality of capitalism, Weber distinguishes between purposive rationality and value rationality. Purposive rationality is "the action decided by the expectation of the surrounding environment and other people's object behavior, and this expectation is regarded as the 'condition' or 'means' to achieve the goal pursued by the actor himself and rationally calculated".[1]Value rationality "is the act of consciously believing in the value of certain actions -- ethical, aesthetic, religious, or any other form -- regardless of their success, but solely determined by their beliefs." [1] Human actions supported by value rationality are unstable. Although he points out two forms of rationality, what Weber really wants to discuss is reason of purpose. It is under the support of purpose rationality that the operation of society shows a trend of rationalization, which is the biggest characteristic of modern society and has spread to politics, economy, culture, life and other fields. If rational society is highly abstract, computability is at its core. The orderly operation of market economy, the establishment of bureaucratic organization, the perfection of the rule of law, and people's attention to personal achievement and social life are all the results of operation under the domination of purpose rationality. In a rational society, bureaucracy and rule of law represent the order of modern society. Bureaucracy is the most perfect and technical organizational form in history. Its characteristics in specialization and objectification make the social system reach the highest level of "computability". The modern rule of law arranges people's activities in a strict legal design, constructs a rationalistic behavior mode, sets up people's communication form and organization's operation order. The more perfect the law is, the more accurate it can provide for the operation of human activities and social organizations. In this way, society will certainly show a trend of order and standardization. Both Tonnies's "community-society", Durkheim's "organic unity" and Weber's "rational society" emphasize a standardized social operation mechanism. The modern society is different from the traditional society. Its operating mechanism is no longer based on consanguinity and geography, but a rational rule under interest thinking and strict calculation. It is on the basis of these rational rules that society has embarked on a standardized and efficient path. The construction of an orderly society is the first stage of social technicalization.

DOI: 10.6918/IJOSSER.202301_6(1).0012

2.2. The second stage of modern social technicalization: Technologica society

In the late 1950s, the new technological revolution brought about a major adjustment in the global industrial structure. The developed capitalist countries in Europe and America took the lead in entering the "post industrial" era. Technology has become an important force supporting the operation of society. As Idhe said, when we want to understand our own life, "we have to face this huge technological reality assembled by various machines, devices, highly organized management system and all these echoes in the ideological field".[2] Technology has constituted the world of human life. At this time, the technology of modern society has entered the second stage: technological society.

In the book "The Coming of the Post Industrial Society", Daniel Bell described the changing society from five aspects. First, in the field of economic life, there is a transformation from commodity production to service; Second, in the occupational structure, there is a trend that white collars constantly replace blue collars; Third, theoretical knowledge becomes extremely important; Fourth, as human beings face the future, we should not adopt a blind attitude towards the development of technology, but should control and plan the development of technology, which means limiting the side effects of technological development; Fifthly, the rise of intelligent technology and its application in management and decision-making. [3]Some of these descriptions have been verified, especially emphasizing the development of modern science and technology and the importance of new technological achievements to politics, economy and society. In The Great Trend, Naisbitt discussed the important influence of information technology on economic development, political innovation, democratic development and personal lifestyle. He pointed out that technology, especially modern information technology, has become the background of people's life and is playing a role all the time.

The post industrial proposed by Bell and the information society proposed by Nisbitt all highlight a decisive factor: technology. Ellul calls modern society a technological society, and technology here shows two meanings: "One is to use technology as the 'acting factor' of society, that is, 'society with technology as the determining factor'; the other is to use 'technicalization' as the effect on society, that is, 'technologized society'".[4]The technical society is characterized by high efficiency. Modern technology has become a sophisticated network, in which all social relations are captured and replanned and rearranged. Taking modern politics as an example, Ellul described the technological process of politics in the technological society. The prominent feature of modern political life is democratization, which shortens the election cycle of leaders. In this fierce competition cycle, various technical means participate in election activities. The campaign slogan, campaign means, strategic analysis of the campaign and how to systematically package and expand the influence of candidates to attract potential voters have become a technical problem. The publicity of media, the production of campaign ads, the way of delivery, the time period of delivery and so on have all become important factors in the election process. These make the election activities reflect the trend of technicalization. This point is also described in The McDonald's Society. In the technological society, every aspect of social life shows a trend of technicalization.

Social technicalization is a true portrayal of the current world. With the development of modern technology, the technicalization of modern society has entered the second stage - technological society. At this stage, technology participates in the social operation in the form of an entity and becomes an important force to support modern civilization. At this time, the focus of research is how to realize the benign operation of modern society through the rational development of modern technology.

DOI: 10.6918/IJOSSER.202301 6(1).0012

3. The Internal Mechanism of Modern Society's Technicalization

Modern society's technicalization is the result of technological rationality's planning for modern society, which is manifested by the perfect social organization form, the scientific and normative social process form, and the strong constructiveness of natural technology to modern society. Modern social technicalization is developed according to certain principles. In the process of development and diffusion, different paths and models have been formed. These paths and models help to explore the inner development logic of modern social technicalization.

3.1. The path of modern social technicalization

Social technicalization is a gradual process. In the process of natural technology infiltrating into various fields of society, it has caused changes in the form of social organizations and social processes. On the basis of the continuous improvement of the social technology system, the social technology is also advancing. Analyzing the path of social technology from the perspective of its occurrence mechanism is the process of innovation and diffusion of social technology system, that is, the process of formation, dissemination and adoption of a social technology system.

3.1.1. The diffusion of natural technology to social technology.

The most profound and internal impact of natural technology on society is to make "social organization mode and social value constantly change to adapt to changes in the physical world".[5] After a natural technology innovation, it is necessary to establish relevant social organizations and set up relevant social processes to improve its operation. In this way, the social technology system is forced to innovate, upgrade and improve. Taking the invention and use of automobiles as an example, the production and use of automobiles are subject to the diffusion of natural technology to social technology. As a precision instrument, the automobile is composed of thousands of parts, and its production process must be strictly divided, thus adding new production departments. In order to assemble these parts into a complete vehicle, the production process needs to be rationalized to improve production efficiency. Both the establishment of new production departments and the rationalization of production processes are innovations in social and technological systems. After the automobile leaves the factory, it will spread to social technology again. In the process of driving, new traffic rules need to be formulated to ensure traffic order. In order to implement traffic rules, special traffic departments are needed. The car needs to be driven. In order to train people who are qualified to drive it, a special driving school must be established. The service life of vehicles needs to be reviewed, and a special vehicle inspection agency has been established. The vehicle has broken down and needs a maintenance station. The vehicle needs to be refueled. A gas station has been built. The construction of these organizations and processes is the innovation of social technology system. The diffusion of natural technology to social technology means that in the process of natural technology innovation and use, in order to coordinate and adapt to the development of natural technology, social organization and social process will make corresponding adjustments, thus promoting the process of social technology. Therefore, the diffusion of natural technology to social technology constitutes the path of modern social technicalization.

3.1.2. Internal diffusion of social technology system.

In order to solve specific problems in society, people will build corresponding social organizations and operation processes, which constitute an important part of social technology. In his article "Analysis of Social Technology and Its Status", Wang Bolu understood social technology as "a general term for all kinds of technological activities active in social life".[6] After a social technology is created, there will be a process of outward diffusion. Taking social policy diffusion as an example, Brewer pointed out that "policy diffusion can be divided

DOI: 10.6918/IJOSSER.202301 6(1).0012

into six stages: origination, evaluation, selection, implementation, evaluation and termination".[7]Generally speaking, this process is carried out on two levels: one is horizontal diffusion. When a social technology has certain operability and practicality, it will be followed and learned by other departments at the same level. This process is often accompanied by competition to find the best social technology; The other is vertical diffusion. For the overall benefit of society and the harmonious operation of society, higher level organizations usually need to "decentralize" the social technology they create. Only after the lower level organizations actually implement it can they achieve the organizational goals. At the same time, this process can also test whether the social technology is reasonable. This diffusion process includes not only the diffusion of social process technology forms, but also the diffusion of social organization technology forms.

3.2. Technological model of social technicalization

The mode of social technicalization is a description of the mode of diffusion and introduction of social technology system. After the innovation of social technology system, there is the possibility of diffusion and introduction. The mode of social technicalization is for the subject of introducing social technology system. Different subjects face different realistic conditions and have different attitudes towards social technicalization. Therefore, different modes have been adopted when introducing social technology system, forming different social technicalization modes. This model mainly includes self innovation, independent introduction and forced penetration.

3.2.1. Self innovation.

The self innovation of the social technology system often occurs in the period of more intense social change, which is a process of negotiation and compromise among multiple actors. Therefore, in the stage of self innovation of the social technology system, a strong ability to integrate social resources is often required to mobilize all forces to provide solutions to social problems in order to solve problems efficiently and reasonably. The motive force of independent innovation of social technology system mainly comes from social demand, social resources, social innovation spirit, improvement of social incentive system, etc. Social demand is the source of self innovation of social technology system. In a society where all needs are met, the possibility of social technology system innovation is very small. If the social demand is not met for a long time, it will cause serious social problems, so the innovation of social technology system is imminent. If social demand is regarded as a "bottom-up" driving force, then the social innovation spirit is a "top-down" driving force. The spirit of innovation is a social change driven by a strong sense of social responsibility and mission to achieve better social development. In the modern society, more and more people regard solving social problems as their own ideal and goal to transform the traditional society, constantly optimize the social technology system, and ensure social operation and solve social problems in a more efficient way. The innovation of social technology system is a process in which the social management method changes from concept to practical action, during which a large number of social resources need to be integrated and mobilized. Rich social resources promote the innovation of social technology system. The improvement of social incentive system makes the innovation of social technology system have positive material feedback, which is also conducive to the innovation of social technology system.

3.2.2. Independent introduction.

The mode of social technicalization is related to the way of introducing social technology system, as well as the development degree of natural technology in the introduced area. When a social technological innovation is produced, there will be a process of external diffusion. The mode that the social technology importing party introduces social technology to promote social technology through learning, learning and imitation is called autonomous introduction. In this

DOI: 10.6918/IJOSSER.202301 6(1).0012

mode, the importer is in an active position and can be regarded as a rational learning process under the guidance of experience. In the process of learning, it is a coevolutionary process to establish exchanges between innovators and importers of social technology, which is "interactive learning between producers and users".[8] This mode is usually formed when the introducing party faces a social problem and chooses to apply the social technology that already exists and has been proved to be practical and effective in other places to its own side so as to simplify the handling of social problems. Efficient and reasonable social technology is the key to the formation of this model. In terms of form, the independent introduction mode can be divided into two types: overall introduction and partial introduction. From the perspective of the cognition of the social technology introduced, the independent introduction can be divided into rational introduction and limited introduction.

3.2.3. Forced infiltration

The formation of forced infiltration is often associated with the top-down diffusion of social technology. It is a process in which the importer passively adopts the social technology system to realize social technicalization. The western developed countries hold the right to speak in the world by virtue of their economic advantages. Whether the Western European countries plundered the colonies during the industrial revolution or the ideological penetration of the western countries in modern society, it belongs to the forced penetration of the social technology system. Pfaffenberger pointed out when he discussed the destruction of colonialism to traditional society that "rather than saying that technological changes have destroyed traditional society, colonialism has destroyed the local political, legal and ritual systems".[9] This infiltration reflects the expansion of a form of advanced civilization. In modern society, the social technology model of forced infiltration often occurs between the upper and lower levels of social organizations and groups. Generally, the lower level organizations adopt a certain social technology system under the incentive mechanism and mandatory command of the higher level organizations.

3.3. The evolution principle of modern society's technicalization

In the real process, natural technology and social technology are advancing together. Social technology is based on social science, and its development must follow the law of social and historical development. Nielsen pointed out that "the process of economic growth should be understood as the evolution and development of physical technology and social technology".[10]Social development is the interaction between natural technology and changes in organization and management methods. Social progress is premised on the dual development of natural technology and social technology. Comparatively speaking, the evolution process of social technology is more complex and difficult than that of natural technology. In addition to adapting to the evolution of society, social technology should also follow the principles of realism, fairness, efficiency and rationality.

3.3.1. Principle of realism.

The principle of realism is manifested in two aspects: first, social technology is practical, and its existence is to solve certain social problems. Therefore, the design and R&D of social technology should be based on practical social problems. For example, we need to regulate the R&D and use of natural technology, which requires the establishment of corresponding laws and regulations. As social technology systems, laws and regulations, they should flexibly solve different social problems. In the face of disasters, they can be used to solve earthquakes, typhoons Tsunami can also be used to solve public social problems such as infectious diseases; On the other hand, an important role of social technology is to achieve social control, where social control easily reminds people of the manipulation of people and society, which requires that social technology must be based on reality and face the future in the design and operation process. Social technology is formed in the interaction between people and society, and is the

DOI: 10.6918/IJOSSER.202301 6(1).0012

product of human rationality based on experience. The design and formulation of social technology includes a certain social organization structure, social system setting, and reflects the goals of organizers and leaders. In order to better achieve the organizational goals, social technology must be designed with the collective consciousness of the members of the organization in mind. This can improve the operational efficiency of the organization, reduce the transaction costs between the members of the organization, and achieve the organizational goals as quickly as possible.

3.3.2. The principle of fairness and efficiency.

The design and adoption of social technology aims at improving efficiency and ensuring social equity. In his Philosophy of Science and Technology, Canadian philosopher Bunge regarded social technology as the fundamental way to solve social problems and maintain the stability of the social system. The social problems mentioned by Banger mainly refer to resource shortage, overpopulation, unemployment, crime, etc. The effective solution to these problems depends on the increase of social material wealth and the realization of social equity. In the reality of limited resources, the use of social technology must aim at improving efficiency, "promoting the production, application and diffusion of technology, so as to realize the function of technology".[11] In the reality of limited resources, the use of social technology must aim at improving efficiency, "promoting the production, application and diffusion of technology, so as to realize the function of technology". As an important part of social technology, the system is believed by economists to improve the efficiency of economic activities. In economics, efficiency is regarded as the basis of economic and social progress, but in the process of reality, a reasonable and orderly society does not simply emphasize efficiency. Equity is also an important social factor and an important force to maintain social stability. Therefore, the pursuit of social equity is also the goal of designing social technology. Natural technology focuses on efficiency. It increases the supply of total social products through the improvement of labor productivity, so as to promote and improve personal well-being, thus promoting social progress. Social fairness is mainly realized by political system, legal system, distribution system, etc. In social development, both efficiency and fairness should be pursued, so the evolution of social technology must follow this principle.

3.3.3. Rationality principle

Social technology is the product of rationality, so it should have both "purposive rationality" and "value rationality". The design and adoption of social technology should take into account the basic rights and interests of members of social groups as much as possible, but it must be based on economic rationality, that is, the principle of economic interests closely related to the survival and development of everyone. The social and technological rationality of western developed countries is based on private ownership, which is manifested by reasonable enterprise production organization, social management organization, market contract, competition and exchange mechanism with moderate efficiency, freedom of speech regulated by law and perfect social security system. Such a social and technological form is not determined unilaterally by the government or individuals, but is the result of interaction and game among various social forces such as politics, economy and culture, "determined by the basic institutional environment of social economy such as property rights and wealth distribution".[12]

The evolution of social technology is a complex process. In addition to following the rules of social technology evolution, it also needs to start from the development level of natural technology, the current situation of social development, and the development of human beings as the center on this basis.

DOI: 10.6918/IJOSSER.202301 6(1).0012

4. Social Conditions of Modern Social Technicalization

The technical development of modern society needs certain social conditions to support. The differentiation of social functions, the bureaucracy of management, the legalization of society and the monetization of economy have become the important social conditions for the social modernization.

4.1. Social differentiation

Differentiation is a core concept in social evolutionism, which is used by British sociologist Spencer to analyze social development and evolution. In the book Politics in Developing Regions, co authored by Almond and Coleman, this concept was first used to analyze political systems. In the traditional society, there are few special sub institutions, but a few institutional systems bear the undifferentiated social functions. However, in the modern society, there are legislative organs, judicial organs, administrative organs, political parties, social groups and mass media organizations in the political field. They perform their respective duties, cooperate with each other in functions, and form a balance between subsystems while being efficient and orderly. Therefore, social differentiation is the condition of modern social technicalization.

The social differentiation has put forward new requirements for the national governance system. In order to promote social differentiation and further refine the functions of various social subsystems, it is necessary to break through the shortcomings of blurring traditional social boundaries, transform the traditional social governance based on blood ties and personal charm into a democratic and rule of law governance based on equal civil rights, give different fields and groups some autonomy, and let them exercise their own power within the specified scope, In this way, a diversified social governance pattern has been formed.

In order to adapt to the reality of continuous social differentiation, national governance should not only scientifically face differentiation, but also timely achieve integration. After the society has been divided into several fields, it needs to be closely combined with each other to realize the orderly operation of the society. Therefore, national governance must integrate the divided society again. This requires modern countries to constantly improve their technology, systems and social security. The more they face social differentiation, the more they need to provide strong national defense, complete legal system and comprehensive public services, and establish a strong political order. In the face of the reality of social differentiation, the governance system of modern countries is to adapt to social differentiation, take corresponding technical means for social differentiation and complete a set of system construction, so as to build a balance between differentiation and integration.

4.2. Social bureaucracy

As a way of management, bureaucracy is not new. It has appeared in ancient China, Rome and Egypt thousands of years ago, but the trend of bureaucracy was developed only in the 18th century. The concept of modern bureaucracy was founded by Max Weber, a German sociologist, who believed that the structure of bureaucracy should be: (1) to determine the organizational goals and achieve professional work according to the division of labor; (2) Set clear grades and establish authority; (3) Formulate clear rules and procedures to facilitate the continuous promotion of organizational activities; (4) Whether in the rule or in the management, adhere to the rational characteristics of dehumanization; (5) Establish employment standards and make full use of talents. This structure ensures the reasonable and efficient management, and it has become the epitome of social technology.

The bureaucracy pursues efficiency and requires precision, continuity and uniform standards. The staff shall be selected to make the best use of their talents; Determine the operation process and strive to achieve efficiency first; The tools shall be strictly divided to ensure the best use. All these reflect the pursuit of rationality and efficiency in a technological society. As Max Weber

DOI: 10.6918/IJOSSER.202301 6(1).0012

said, the most basic basis of modern bureaucratic management is "technology optimization". Compared with other types of organizations in the past, bureaucratic organizations have technical advantages. "It is characterized by accuracy, rapidity, clarity, continuity, seriousness, unity, proficiency in documents and strict obedience to reduce friction and save costs".[13]It operates flexibly like a machine. Although in the process of practical operation, the overemphasis of bureaucracy has brought many drawbacks, and many scholars in the later period have also constantly put forward theories against bureaucracy, there is no doubt that bureaucracy is still the guarantee of efficient operation and management in our modern society.

4.3. Social Legalization

In the thousands of years of human civilization, the realization of the rule of law is the most ideal goal of thinkers in the field of social governance. Aristotle was an early thinker who advocated the rule of law. He believed that "the rule of law should include two meanings, that is, the established law is universally obeyed, and the law that everyone obeys is a good law". [14]Dicey, an English thinker, put forward three standards of rule of law: law is supreme; Everyone is equal before the law; Individual rights produce constitutions. [15]Dicey perfected the requirements of the rule of law, and proposed the standards of law formulation from the perspective of modern civil rights. Weber examined three forms of institutional power in history: traditional, glamorous and legal. Among the three forms, the traditional type has the worst efficiency. The charm type power system form is based on the extraordinary charm of individuals and the unshakable authority of the organization. The emotional factors maintain the relationship between the members of the organization. Weber believed that these two forms of power were irrational and not enough to be ideal institutional models. He pointed out that only the institutional form guaranteed by strict laws could become the basis of a real organizational system. Although bureaucracy has emerged as a management system in ancient China, it was not until capitalist society that Weber thought it was "reasonable". An important basis is that capitalist society is based on the rule of law, so "rule of law" is another social condition for social technicalization.

Modern law is the product of the combination of efficiency and technology, which not only reflects the process of democracy but also highlights the freedom of generations. Unger believes that the formation of modern rule of law depends on two conditions: group pluralism and the concept of natural law. Group diversification makes it impossible to hold power in the hands of one group forever. In order to regulate the interests between groups and achieve social stability, there must be laws to maintain social order and improve operational efficiency. The concept of natural law is based on transcendental religion, which lays a conscious foundation for the formation of modern rule of law. In Unger's analysis of the formation conditions of modern rule of law, we can see that modern rule of law is the combination of efficiency and technology.

In the process of social governance, the most effective way to regulate different interest groups is to rely on the law. At the same time, in the process of setting the law, we should maintain the legitimacy of the procedure, so that everyone believes that obeying such a law will protect their own interests. [16]In this process, technical thinking and technical means are used, so modern law is the product of the combination of efficiency and technology. The legalization of society is not only the condition of modern social technicalization, but also an orderly, reasonable and efficient governance mode in modern complex society.

4.4. Economic monetization

After entering the modern society, "compared with self-sufficient production and barter, the use of money is deepening".[17] With the deepening of economic monetization, the society is gradually moving towards quantification, the value of goods and labor is more clear, transactions are more orderly, and the operation of society is more reasonable. Economic monetization overcomes the randomness of physical transactions under natural economic

DOI: 10.6918/IJOSSER.202301_6(1).0012

conditions, making people's communication more rational and accurate. In the book "Economy and Society", Weber used a lot of arguments to explain the significance of monetary economy for a rational society, and from the perspective of official salaries to explain the irrationality of physical transactions. He pointed out that in the social management, the traditional natural economy took the material object as the reward as the basis for the distribution of bureaucratic interests. This kind of material object distribution has the randomness in form and the uncertainty in quantity, resulting in the privatization of bureaucrats and the dispersion of ruling power, which hindered the process of social rationalization. Under the condition of monetary economy, the economic operation of society The organizational structure and labor remuneration of workers are implemented under a unified standard, and society will naturally develop in a rational and technical direction.

Economic monetization has expanded the scope of people's exchanges, strengthened the cooperation of economic organizations around the world, and formed a global division of labor. After the Second World War, the Bretton Woods System was established, realizing "economic globalization", and the factors of production moved around the world. The economies of various countries and regions have been integrated to form a unified global market. The new competition and new environment make the management mode continuously innovated and objectively promote the process of social technology.

5. Conclusion

Modern social technicalization is the advanced form of modern technology movement and the basic trend of social evolution. As a mode of social operation, social technicalization started at the beginning of the birth of human society, but at that time, its development speed was slow and the level was low, and a scientific and stable system was not formed. The industrial revolution accelerated this process and made human society enter the technological stage of modern society. Under the two-way promotion of natural technology and social technology, the modern society's technology has followed certain rules and has gone through two stages of orderly society and technological society according to the corresponding model. The differentiation of social functions, the bureaucracy of social management, the rule of law of social governance and the monetization of economic exchanges have become indispensable social conditions in the process of modern social technology. Modern society's technicalization is an objective existence, which marks that modern society has embarked on the road of rationality, standardization and efficiency. It has promoted the development of society, but at the same time it has triggered many social problems. At present, the research on social technology is still at the initial stage, and many problems still need to be deeply studied and carefully excavated.

6. Author Biography

Jie Song has a PhD from Renmin University of China and is currently a lecture at the School for Marxism Studies of Shanxi University. Her research interests include Marxism in China, technology management and social management.

7. Corresponding Author

Jie Song, School for Marxism Studies, Shanxi University, 92 Wucheng Road, Xiaodian District, Taiyuan 030006, Shanxi Province, China,

Email:sj4919@sxu.edu.cn

Tele:18835470160

DOI: 10.6918/IJOSSER.202301_6(1).0012

Acknowledgments

Project supported by :Humanities and Social Sciences Research Youth Program of the Ministry of Education: "Research on the construction path of harmonious labor relations in the era of artificial intelligence" (22YJC710057); Philosophy and Social Science Project in Institution of Higher learning of ShanXi Province: "Analyzing the Trend of Ideological and Political Education in Colleges and Universities from the Perspective of Social technology Philosophy" (2021W012).

References

- [1] Max Weber : Basic Concepts of Sociology(Guangxi Normal University Press, China2010)p.51.
- [2] X.J.Li: Herbert Marcuse. Looking for the Hope of a Technological Society, Studies in Dialectics of Nature, (2006) No.10, p.67-70
- [3] Daniel Bell: The advent of post industrial society -- an exploration of social prediction (The Commercial Press, China1984) p.51.
- [4] R.K.Di,G.F.Cao: Jacques Eluer's Philosophy of Technology, Social Sciences Abroad, (2002) No. 4,p.16-21
- [5] Emmanuel G.Mesthene: How technology will shape the future, Science, (1968) No. 3837, p. 135-143.
- [6] B.L.Wang: Analysis of Social Technology and Its Status, Journal of Renmin University of China, (2006) No.6, p.122-127.
- [7] Howlett Michael, Ramersh M:Studying Public Policy Cycles and Policy Subsystems (Oxford University Press, London 1995)p.11.
- [8] Bengt-Ake,Lundvall: Product Innovation and User-producer Interaction (Aallborg University Press, Aallborg 1985) p.87.
- [9] Bryan Pfaffenberger: The Harsh Facts of Hydraulics: Technology and society in Sri Lanka's Colonization Schemes, Technology and Culture, (1990) No.3, p.361-397.
- [10] Richard R.Nelson: Bringing institutions into evolutionary growth theory, Jounnal of Evolutionary Economics, (2002) No.12, p.31-39.
- [11] Frank W.Geels: Co-evolution of Technology and Society: the Transition in Water Supply and Personal Hygiene in the Netherlands (1850-1930): a Case Study in Multi-level Perspective, Technology in Society, Vol. 27 (2005) No. 3, p. 363-397.
- [12] M.J.Piore, C.F.Sable :The Second Industrial Divide: Possibilities for Prosperity. (Basic Books, New York 1984) p.5.
- [13] G.Feng: Max Weber: Civilization and Spirit(Hangzhou Press, China 1999) p.161.
- [14] Aristotle : Politics (The Commercial Press, China 1965) p.119.
- [15] Dicey: The Essence of the British Constitution(China Legal Publishing House, China 2001) p.273-285.
- [16] R.M. Engel. Law in Modern Society. (China University of Political Science and Law Press, China 1994) p.61.
- [17] W. Arthur Lewis: Economic Growth Theory(Sanlian Bookstore, China 1990) p.277.