



Analysis on subject frame and status of China entrepreneurship from perspective of scientific transformation

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ABSTRACT

As a way of thinking and behaving, entrepreneurship is management process with inherent law rather than scattered random event. More and more active practice activities of entrepreneurship under transition economy provide opportunities for perfecting knowledge system of China entrepreneurship. Based on the logical discussion of science and scientific transformation, the work discussed basic characteristics of China entrepreneurship framework. Three aspects were involved in the analysis: relative and systematic study objects, diversified methods, and multi-direction discipline knowledge hierarchy. Finally, three conclusions were obtained. Firstly, establishing subject status of China entrepreneurship is the inevitable requirement of Chinese economic and social development. Secondly, it is the inevitable result of knowledge integration in business field. Finally, the establishment of subject status is also the pre-conditions of establishing entrepreneurship with Chinese characteristics.

Keywords: Science-based; scientific transformation; entrepreneurship; China entrepreneurship; subject frame

INTRODUCTION

Since human society enters the 21st century, innovation, entrepreneurship and creativity have become the mainstream of economic and social life. "Developing entrepreneurial economy is the key to win the war of global economy in the 21st century", said Larry Farrell (2001), praised as master of entrepreneurial management by World Managers. Entrepreneurship, causing a global concern in fields of politics, academy and business, is a way of thinking and behaving rather than an operation, which emphasizes seizing opportunities, making good use of resources, taking risks, and creating values; Entrepreneurship, the management process with inherent law rather than scattered random event, focuses on opportunities, resources, and the dynamic balance between entrepreneurial teams. The researches on entrepreneurship aim at complying with the change and challenge of social and economic practice in new period. In addition, the inner mechanism of entrepreneurship can be explored; the traditional management theory can be reexamined to seek innovation of theories. Therefore, entrepreneurship education can be promoted to cultivate more innovative talents.

Silicon Valley of United States is the best example of global entrepreneurship practice. The development of market economy in emerging economies has activated entrepreneurship. Since the 1980s, literatures of entrepreneurship research have been rapidly increased with lots of related topics. The perspectives and analysis level of research have become more and more diversified. However, legitimacy of entrepreneurship research, an independent academic field, is questioned by the pessimists, because some basic problems on entrepreneurship research have not yet reached a consensus. They hold that new phenomenon can be explained through existing theories of organization, behavior, and strategy. In contrast, the optimists are committed to seek evidences on the uniqueness of entrepreneurship, continuously exploring the research space cannot be explained the existing theories.

Currently, entrepreneurship, still as a broad label, lacks a unified conceptual framework to interpret the phenomenon. As a result, it is difficult to distinguish the contributions of entrepreneurship researches for the mainstream business

researches. Thus, the legality of entrepreneurship is unacknowledged. The current entrepreneurship research is still in the state of hotchpotch, which has not formed a clear boundary and theme, said Murray Lou—director of Entrepreneurship Center in Columbia University, and Iain Macmillan—director of Minnesota University Entrepreneurship Research Center, 1988. They believed that the future entrepreneurship research should earn respect from the following aspects. Firstly, scholars of other fields should be welcomed and strengthened to explain entrepreneurship with their own theories. It helps to identify unique interpretation of space in entrepreneurship research, thus forming the basis for building its own theory. Secondly, unique analysis framework and logic of entrepreneurial field should be built to define core issues, boundaries and methods of entrepreneurship research. Meanwhile, accumulating own theory knowledge should be focused to create sufficient conditions to win legitimacy of the field. The work will reexamine the subject status of entrepreneurship from scientific transformation, based on the viewpoint of Liu Xiaoqiang about science-based and scientific transformation in 2008.

Inner logic of science-based and scientific transformation

In general, subject is considered to be a branch of scientific knowledge system with specific research object. Therefore, the definition of science should be confirmed before studying subject—science is a multi-level and stereo unity, an activity and a system of knowledge. Liu Xiaoqiang described the nature of science from ontology, epistemology and methodology in 2008. Ontology refers to the view and understanding of the world, epistemology the opinion on nature of human thought and knowledge, and methodology the understanding of the ways of knowing. Science-based is defined as scientific form with structural features, which is constituted and produced by logically consistent answer to ontology, epistemology and methodology of science.

Science-based guides and standardizes metaphysical assumptions and premise produced by scientific knowledge, which hides the specific, scientific knowledge. Science-based is hidden, subconscious, and self-evident. Only when science encounters unprecedented challenges and problems difficult to be justified by science-based can the type axiom or premise hidden be realized through the reflection of people.

Currently, similar embarrassment exists in many fields of science. For example, management is still in a state of jungle with one hundred years of development. Scholars of different disciplines look on a research object from different perspectives—management activities and organizations exist as a complex system. However, a unified paradigm cannot be formed because of diversified research methods. For another example, in higher pedagogy, the complex object higher education can also be understood from perspectives of multiple subjects such as sociology, psychology and pedagogy. The phenomenon is common in the field of humanities and social science, indicating the necessity and urgency of scientific transformation. Scientific transformation refers to the change from one type of science to another. In brief, the transformation is the transition of scientific ontology, epistemology and methodology (Liu Xiaoqiang, 2008).

Basic characteristics of China entrepreneurship from perspective of scientific transformation

Scientific transformation and change of subject framework naturally emerge with continually understanding of an object. Traditional mechanical ontological is gradually replaced by organic holism due to the increasing knowledge level of the outside world. The requirements and assumptions in old subject framework, including objective and unique research object, sole and single research method, and linear, one-dimensional knowledge system, are bound to encounter new challenges. Therefore, Science will face a new transformation period. Under the background of scientific transformation, subject frame of future China entrepreneurship should have the following characteristics.

Conditional and systemic research object

Scientific ontology has developed from mechanism to organic holism with the progress of scientific knowledge and technology. The world is revealed as a whole and system in relationship, rather than a mechanical combination combined freely without losing the essence. Additionally, a research object of subject is no longer unique, but a system in internal and external relations, which cannot be absolutely closed, independent and clearly deferred from other subjects. The same objective phenomenon can be a research object of different subjects. Different interpretations are allowed on the same objective phenomenon. Therefore, the distinction research objects among different subjects should be conditional rather than absolute.

Research object of China entrepreneurship is also a systemic issue. It contains separate researches on key elements of entrepreneurship, e.g., entrepreneur characteristics, entrepreneur behavior, entrepreneurial process, entrepreneurial environment, under the Chinese cultural, economic and social background. Moreover, researches on the interaction relationship and systemic performance between the above factors are also involved. Meanwhile, related scholars and disciplines of psychology, organizational behavior, and strategic management are welcomed to contribute to the field. Therefore, the research object of China entrepreneurship is conditional and systemic, rather than absolute and isolated.

Diversified research methods

Free development of various methods and theories are respected by Pluralism, and effective ways matching the theories and methods are also explored. Changes in ideas of research object have brought fundamental transition in subject research methodology. Objects of subject research are no longer isolated but interlinked. The same object can be understood from multiple disciplines and ways. The idea—subject is perspective—clearly indicates the possibility and necessity to study an object from variety of perspectives. Meanwhile, research methods of different subjects should draw lessons from each other. Multidisciplinary research methods are inevitable choice for understanding objective things.

Corresponding to the complex entrepreneurship phenomenon, research methods of entrepreneurship have some significant changes in recent ten years. Firstly, the qualitative analysis method, such as literature analysis and case analysis, tends to be the combination of quantitative method and qualitative method. Multivariate statistical analysis and structural equation model are involved in quantitative methods, while event history analysis, real-time quantitative method, case analysis, grounded theory and multiple decoding technologies belong to qualitative methods. Secondly, there emerges multiple data clustering, critical incident technique, several rounds of coding technique, and more lasting theory model, subsequent analysis and vertical analysis. The adoption of many research methods indicates the diversity of research methods in entrepreneurship. The further development of research on China entrepreneurship requires to be connected with the world in terms of the diversity of research methods.

Spherical and multidimensional subject knowledge system

Liu Xiaoqiang, in 2008, thought that coexistence of many paradigms and methods was allowed in spherical knowledge system, which was more advantageous to the growth and production of knowledge. Currently, scholars focusing on entrepreneurship mostly came from different disciplines, including sociology, economics, management, organizational behavior, etc. The wide application of social network theory in entrepreneurship researches was the symbol of sociological perspective; Economics researchers based on the structure paradigm thought that the whole structure of industry and competition rules had been modified when new enterprises obtained resources from the competitive environment. Attention should be attributed to industrial structure, new corporate strategy, and the relationship between organizational structure and new business performance. From resource-based theory in management, entrepreneurship research focused on how the resource stocks in creating new businesses affect the destiny of the organization; Baker and Nelson, in 2005, organizational behavior researchers thought that the assembled ability of entrepreneurs provided a survival advantage for entrepreneurial enterprises with resource constraints. Sarasvathy and Dew in 2005 considered entrepreneurial behavior logic as effectual rationality—a variety of possible outcomes can be made under the established methods. Series of knowledge subsystems have been formed for the complex research object of China entrepreneurship. For example, entrepreneurship subject system was divided into three major parts (theory of entrepreneurship, entrepreneurial knowledge and entrepreneurial behavior) and 10 courses by Xi Shengyang in 2004. Entrepreneurship creates constant entrepreneurial drive, while entrepreneurial practice requires necessary and complementary knowledge of entrepreneurship. Moreover, entrepreneurial behavior is the design and simulation of entrepreneurial process based on entrepreneurship spirit and entrepreneurial knowledge.

Subject status of China entrepreneurship from perspective of scientific transformation

Entrepreneurship was in the golden age as a research subject, said Shane and Venkatarman in 2000, world famous scholars in the field of entrepreneurship research. They even predicted that the relationship between entrepreneurship and other subjects would like the relationship between economics and finance after ten years—correlated and equal, but different in essence. Entrepreneurship will be transformed from a research field worth being investigated into social science discipline with proposing questions. This shift will make entrepreneurship become a rigorous discipline with a core defining problem. For instance, the focus of strategy is the relative performance of enterprise, and the interest of histology is explaining individual behavior under organization environment. They believed that entrepreneurship would become an independent department worth being invested with resource in school of business after entrepreneurship became a social science discipline. Entrepreneurship will keep pace with mainstream social science and business research. When the research methods and theory develops to a certain height, entrepreneurship will take a place in the mainstream academic journals as finance and sociology. Thus, it will no longer be limited to the so-called entrepreneurship research publications.

The current entrepreneurial studies are gradually become completed to build own system, aiming at building subject framework with conditional and systemic research object, diversified research methods, and global, multidimensional, spherical knowledge system. Under the background of entrepreneurship research being in full swing in the world, academic status of China entrepreneurship should be established as soon as possible. It is beneficial not only to the perfection of subject system, but also to the theoretical guidance for China entrepreneurial practices.

Inevitable requirement of economic and social development

The employment situation of Chinese labor market is serious in recent years. There are three main reasons that lead to the pressure. Firstly, contradiction between supply and demand has been a long-term problem. About 25 million jobs require to be arranged in cities and towns every year during the period of the 12th Five-Year Plan, while only 9 million jobs are available. Secondly, contradiction of employment structural has been more prominent. It is closely connected with the transformation of development pattern in economy along with the industrial structure adjustment in China. Thirdly, rural labor transformation enters an acceleration period. There are still more than 100 million surplus rural labors, though 240 million have been transferred. Therefore, research and education of entrepreneurship is necessary to be conducted. And the entrepreneurial ability of labor is improved to alleviate employment pressure, thus stabilizing society. Moreover, with the relief of constraints from culture and system on innovation potential, innovation and entrepreneurial spirit are inspired, therefore improving national innovation.

Result of knowledge integration in entrepreneurial field

It is a key turning point for entrepreneurship research during 1980s. The transition from focusing on entrepreneur qualities to entrepreneurial process has greatly broadened the research vision of entrepreneurship field. The situation that entrepreneurship was dominated by behavioral science scholars has been fundamentally reversed. Much attention was attributed to entrepreneurial phenomena by scholars of sociology, economics, psychology, management. Different theoretical perspectives and methods were brought to widely cover most topics of entrepreneurial phenomena. Hot study atmosphere existed in fields of social science research in the world, thus accumulating lots of cumulative knowledge pieces. The cumulative knowledge pieces urgently need a systemic and open subject framework for further growth and development. The existing knowledge integration of entrepreneurship research will become the powerful driving force for the discipline construction of China entrepreneurship.

Uniqueness of entrepreneurship practice is the precondition of establishing subject status of entrepreneurship with Chinese characteristics

Entrepreneurship is accompanied with the growth and development of many small and medium-sized enterprises. The uniqueness of China entrepreneurship practice is reflected on the threats and challenges for small and medium-sized enterprises. Chinese small and medium-sized enterprises are faced with lots of challenges, according to the growth planning of small and medium-sized enterprises in Twelve-Five planning published by the Ministry of Industry and Information Technology. Firstly, Chinese small and medium-sized enterprises are mostly traditional industry, which makes it difficult to optimize industrial structure. Secondly, constraints of resources and environment are continually intensified. Small and medium-sized enterprises are in low end of the industrial chain with low additional value of products and weak digestion of cost. The resource utilization of some small and medium-sized enterprises is low, along with environmental pollution and security risk. Thirdly, market competition tends to be more intense. The technology and management in many small and medium-sized enterprises is backward with product convergence. There is no fundamental change for homogenous and unfair market competition. Fourthly, limiting factors of constitution still exist in the growth of small and medium-sized enterprises. Small and medium-sized financial institutions lack enough development, leading to financing problem of small and medium-sized enterprises; Violation charge is hard to avoid, thus making a heavy burden on small and medium-sized enterprises; Infrastructure of public service is weak with the service quality to be improved; Industry monopoly still exists with high access conditions for some industry; Entrepreneurship threshold is high because of complex pre-approval in enterprises.

According to GEM(Global Entrepreneurship Monitor), elements of entrepreneurial environment include financial support, government policy, support of government project, education and training, research and development transformation, infrastructure of business and profession, market openness, availability of physical infrastructure, cultural and social norms. The challenges of small and medium-sized enterprises mainly refer to business environment. Therefore, the favorably sustainable development of entrepreneurial activity cannot be realized in China without improving the entrepreneurship environment.

RESULTS AND DISCUSSION

Accordingly, establishing subject status of China entrepreneurship is conducive to calling for a group of experts with different professional and practical background. Thus, topics of entrepreneurial environment, entrepreneurial process and entrepreneurial behavior can be deeply researched, contributing to the establishment of subject system and the guidance of entrepreneurship practice.

Currently, the aspects--active entrepreneurship practice and education in China, much attention from multidisciplinary perspectives paid to this complex social economic phenomenon, and large quantities of

entrepreneurship knowledge segments, shows that the existing subject system cannot contain all entrepreneurship theory and practice. A new subject is urgently needed to emerge with an open, inclusive subject system. Thus, the existing knowledge fragments will be connected and systematized to guide the increasingly active entrepreneurship practice and education. The realistic circumstance will promote the constant perfection of subject system and the establishment of subject status of Chinese entrepreneurship. The viewpoint of scientific transformation—conditional, systemic research object, diversified research methods, and spherical, multidimensional subject knowledge system, provides a new research perspective to form and improve the subject of China entrepreneurship.

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