Reform and Development Trend for Research Paradigm of University Governance

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Abstract

Study on university governance has undergone three research paradigms, i.e. essentialism, structuralism and culturalism, and now is moving towards post-modernism research paradigm, the university governance under which paradigm focuses on co-governance by interested persons. Two propositions need to be demonstrated under the new governance pattern, the non-contradictoriness between democratic participation by interested persons and university governance performance, and the positive correlation between co-governance by interested persons and university governance performance.

Key words: University governance; Research paradigm; Reform and development

INTRODUCTION

With the continuous development of the society, the unicity and certainty of truth highly praised by modernity have brought about enormous impact on the fields of social politics and management, where the rational aspect of politics has established the central position of government and shaped the basic survival pattern of bureaucracy. However, in the face of the forthcoming of the post-industrial era, the features of mono-centralism, universality and meta-narration represented by such certainty, unitary and specialized system design have made increasingly meagre the management mode by government or administrative power at its core.

Higher education is a subsystem of the social system, and its government-dominated mono-centric management system has shown its obvious inadaptation to the current coexistence pattern of pluralistic stakeholders. The challenge we face is, therefore, how to build a scientific university governance model to adapt to the ever changing development of future universities. As some American scholars said when addressing the future of domestic universities,

in a stable period of development, leading and managing university has been no easy task; in the coming period of rapid changes, many traditional management mechanisms and leading methods will soon become obsolete, and it becomes more difficult to effectively respond to the constant changes... (James & Farris, 2004, August 25)

It is also based on such challenge that many Chinese scholars have put forth the proposition for university governance, using governance theory to re-examine the reform of university management system, with the hope of establishing a new partnership of equality and cooperation. Currently we have gone through the stage of reflection and debate over "whether universities can be governed", turning to the research boom of "how to improve the performance of university governance". The issue of university governance has been included as explicit policy discourse system in the "Outline of the National Plan for Medium and Long-Term Education Development (2010-2020)", and the requirement of "modernization of the capability for higher education governance" has been further proposed in the working points of the Ministry of Education in 2014. Such issues as enhancing the internal governance structure of the university, improving capacity for university governance and promoting corporate

governance of modern universities are hot topics among scholars, and university governance has become not only a challenge that has to be faced in the establishment of modern university system, but also a new opportunity and growth point for deepening the reform of university management system and expanding autonomy in running universities.

The current study aims to serve as a modest spur, and its main task is twofold, the first of which is to divide into phrases the studies conducted in recent years concerning university governance and to give summary comments to the research priorities of each phrase; and the second of which is to demonstrate the possibility of "co-governance by stakeholders" as future trend of post-modernism research paradigm.

1. DIVISION OF RESEARCH PHRASES OF UNIVERSITY GOVERNANCE: FROM PARADIGM'S PERSPECTIVE

Philosopher Thomas Kuhn put forward the concept of "paradigm" in his book "The Structure of Scientific Revolutions", which is defined as common rules formed by the members of a scientific community when thinking about and solving the major problems of the discipline. Paradigm, according to Kuhn's explanation, is not understanding of the objective laws, but a common faith with relative consistency formed by a scientific community under different historical conditions. After the putting forward of the proposition of university governance, China began to shift from the study of unitary management to diversified management of universities, going through research paradigm phrases of essentialism, structuralism, and culturalism, and moving towards post-modernism.

1.1 First Phrase: Essentialism Research Paradigm

There are three realms in higher education research paradigm, namely, paradigm, paradigm shift, and new paradigm. (Gao, 2009) University governance research paradigms are the epitome of higher education research paradigm, but also follow the same law of development. In the "paradigm phase", what is generally followed is a mode of thinking featured by essentialism, which means that the first thing to be considered in the study of university governance is to probe into the nature of university governance, and only by understanding the essence of a thing's development, can we find the law of development of such thing, and make the follow-up studies conducted on the same basis.

1.1.1 Theoretical Basis of Essentialism Research Paradigm

Since Socrates, western philosophers have been committed to the pursuit of eternal truth and the ultimate value of things, and have formed the essentialism mode of thinking, holding that the "essence" issue is the first issue that requires to be solved in any area of research, which is the first "threshold" to enter into such field of research. The Essentialism Research Paradigm is built on the basis of ontological philosophy that adheres to the idea that the development and evolvement of things are all determined by its nature, and the aim of scientific research is to understand the essence of such things, to reveal the underlying laws through superficial phenomenon of the development of such things, and explore the intrinsic links between such things. With regard to the ultimate state of presence of essence, there are two different philosophical directions, one towards materialism, believing that the nature of things exist in material; and the other towards idealism, holding that thing exists in the absolute idea. But be it materialism or idealism, they all stick to knowability in epistemology, i.e. the nature of things is knowable, and the difference is that materialistic epistemology takes a reductionist stance, upholding the basic position of perceptual knowledge and finally developed into empirical epistemology, (Jin, 2001, pp.669-670) while idealism considers perceptual knowledge as only a condition that activates rational knowledge, and that the perceptual knowledge is unreliable, and only rational knowledge is reliable, which therefore cannot be reduced back to sensory experience, and finally developed into rational epistemology. (Jin, 2001, pp.1506-1507) Empirical epistemology is widely used in the study of natural sciences, emphasizing the use of empirical research methods to determine the nature of things, while rational epistemology has been greatly developed in the humanities and social sciences, highlighting the research orientation of speculative philosophy.

Needless to say, the study of university governance must at the initial stage pay attention to the exploration of the nature of governance or university governance, and define it from the perspectives of different disciplines so as to present a "defining" research style. The author believes that the essentialism research paradigm is absolutely necessary due to the reason that denying the essential differences between university governance and corporate governance or government governance would render unnecessary the existence of the proposition of university governance. Therefore, only with explicit understanding of the nature of university governance, can we ensure that subsequent study would be carried out on the same logical starting point, and establish the concept system and theoretical system of this research field. Then, how to pull out the nature of university governance? This requires us to start from the most basic category of university governance, and to extract from many presentations the most basic common attributes, the completion of which must rely on speculative philosophy. Just as what some scholars have said:

The essentialism epistemology, based on the privative dualistic mode of thinking of emotion-reason, and phenomenon-essence, believes that what presented in the things' development and changes are just appearances, only the essence is fixed, constant and eternal, and successful understanding of things' nature cannot be obtained through the senses, but through rational thinking. (Wang, 2012)

With regard to the essence of university governance, there are two viewpoints in China, namely "interest oriented theory" and "power oriented theory". It is just based on different logical starting points that research of university governance are differentiated into two different research directions, one is to study university governance by learning from concept system and theoretical system, and the other is by taking use of the governance theory for public administration.

1.1.2 Research Priority for University Governance at the Stage of Essentialism Research Paradigm

At the stage of essentialism research paradigm, the study of university governance mainly focuses on the governance concept, value orientation and spiritual core of governance theory, etc., and, based on different logical starting point, the study of university governance evolves mainly into two schools: the school of public administration, and the school of economics. Chinese scholars such as Yu Keping, Mao Shoulong were the first to introduce the concept system of James N. Rasenau, J. Kooiman, M.Von.Vliet from the perspective of public administration, but great differences exists among scholars with regard to the understanding of "governance". R.Rhodes summarizes five common uses in public administration, referring to minimum state; corporate governance; the new public management, social-cybernetic systems; self-organizing networks; and good governance, (Yu, 2010) so that Bob. Jessop believes that "governance has become a meaningless buzz word that may cover everything" (Jessop, 1998). Economics-oriented governance was first proposed by Wilimson, and further studied by Fams and Jeneen afterwards, and generally speaking, the research nature of governance in the economic field is relatively unified, holding that governance is used to balance the interests among all the members of an organization to realize its organizational goals.

Different nature of university governance has led to their respective independent theoretical system. In general, what public administration-oriented governance examines is the relationship between organizations, especially the government-centered relationship with other organizations, and the research of university governance focuses primarily on the triple spiral relations among the government, universities and markets, and the establishment of its core concept system using such terms as multi-centered governance, complex co-governance, and multiple governance, by such words as negotiation, good governance, cooperation, and balance; while the perspective of economics-oriented governance is from within the organization, taking the conflicts of interest, interaction and gaming among stakeholders as its research content, with the relationship between the organization and the external environment being only a parameter, and establish its core concept system by mainly using such terms as governance mechanism and co-governance, and such words as interest and joint participation.

1.2 Second Phrase: Structuralism Research Paradigm

No matter the nature of university governance is "power-oriented" or "interest-oriented", after identification of the nature of university governance, it naturally follows the division of the powers, responsibilities and interests of those who govern, thus the importance of the study of university governance structure becomes more prominent. It is worth noting that, due to the different logical starting points of the nature of governance, the research of university governance structure is also divided into two trends, namely external university governance structure and internal university governance structure.

1.2.1 Theoretical Basis of Structuralism Research Paradigm

The theoretical basis of structuralism research paradigm is structural functionalism. Structural functionalism, starting from the relationship between structure and function, explores a series of important sociological theoretical issues, believing that the society is a system with certain structural and organizational forms, in which various components of society are arranged in an orderly manner and exert their functions towards the society. The complexity of modern society is embodied in the uniqueness presented by all social components in their features, functions and mutual relations, the mechanisms of affirmation and praise of structural functionalism, and the stability of its deep social structure.

Talcott Pasons' structural functionalism, once seen as a synonym of sociological research, regards the society as a overall system composed of multi-level subsystems with different functions, and he proposed the AGIL model, which means Adaptation, Goal attainment, Integration and Latent pattern maintenance. The four subsystems in the AGIL model separately communicate by use of such media as money, power, duty and influence to realize the stability and change of the society as a whole. Accordingly, the social organizations, according to their functions and targets with which they are established, are divided into organizations for economic production, organizations for political aims, organizations for integration, and organizations for maintaining aims, and their respective type of target is target adaption, target implementation, target integration, and pattern maintenance target. (Peng, 2007) Based on the above analysis, universities fall under pattern maintenance organizations, the study of which shall go beyond the

physical structure of each subsystem, and into the operation of interests and power concealed behind the structure. In other words, what is reflected in the surface university governance structure is the deep relationship of interests, powers, responsibilities and obligations among those engaged in university governance. This further confirms Parsons's view that Parsons' social system theory for the analysis of system structure does not merely stop at analysis and description of a variety of visible physical social structure, nor at analysis of the operation of these tangible social structure, but further emphasizes the permeation of such factors as idea, value and interest in a variety of complex social structure, be it tangible or intangible, through the veins of power operation.(Gao, 2005, p.2537)

From the perspective of structural functionalists, university governance structure is an important part of system structure, a distribution of decision-making power within universities among those different governance bodies. In his theory of social system, Parsons repeatedly describes the centrality of power concept, and stressed that only by relying on actual strong force and the operation of various institutionalized and hierarchical power structures, can we ensure a stable social order, and ensure treatment of all kinds of irregularities or morbidities possibly arising from the operation of the social order. (Gao, 2005, p.538) Thus, in the research paradigm of structuralism, it is generally believe by the scholars that the key point in the research of university governance is the establishment of scientific governance structure mainly by coordinating the allocation of decision-making, execution and supervision powers, and, through optimization of university's governance structure, we can meet the demands of different governing bodies, reduce costs management resulting from conflicts of interest, improve university governance capacity, and, further, maximize system functionality.

1.2.2 Research Priority for University Governance at the Stage of Structuralism Research Paradigm

Due to diverse origins of universities from home and abroad, at the stage of structuralism research paradigm, the directions of the research of university governance also differ. Foreign universities fall under the category of "pre-matured endogenous" organizations, where the institutional design of university governance structure is relatively well organized thus leaving little space for study, while, on the other hand, domestic universities are "late-maturing exogenous" organization, where university governance needs more regulation and protection. Therefore, there is more research on the construction of governance structure of domestic university in China, while there is more research on the conflicts of interest and power allocation in foreign countries. At this stage, the focus of the research of university governance includes the following two parts:

1.2.2.1 Research on the Coordination of Internal Powers in Universities

In the Academic Power - Patterns of Authority in Seven National Systems of Higher Education, Van De Graaff (1978) interprets the academic powers in universities as higher education management power enjoyed by management and staff of all levels from the top to the grassroots organizations, which are further divided into ten types, including personal rule, group rule, guild power, professional power, glamour power, director power, bureaucratic power from the government, bureaucratic power from higher education institutions, political power, as well as academic oligarchic power from higher education system. Burton Clark further deconstruct academic power into three major parts, namely discipline-rooted power (including personal rule, college rule, guild power and professional power), universities' power (including director power and bureaucratic power), and system power (including bureaucratic power, political power and system-wide academic authority power). (Burton, 1986) Foreign studies of administrative power began relatively early. American scholar Parsons Talcott, after comparison of universities with other organizations, describes the characteristics of the operation of U.S. executive power. He believes that executive power is different from bureaucratic system in that the universities are organization "against the authority" in some respects, so the administrative department may not interfere with the terms of reference of the teaching staff (Parsons, 1963). Birnbaum, in his How Colleges Work, designs the internal power structure of universities, the power structure composed of three main powers, i.e. management system (administrative system, bureaucracy), professional system (academic council or academic board, institutionalization or professionalism), and responsibility system (management committee and directors). The three powers are subject to checks and balances with each other, namely the management system exercise bureaucratic rights, professional system dominates academic authority, and the responsibility system is in charge of planning, finance and supervision (Birnbaum, 1991, July 29). Martin Trow summed up the American Universities' "power pyramid", which is from top to bottom the administrative staff with the principal as the core, college dean and chair professor, teachers, students, and the parents, spouses, children and other "back-up groups" of the groups mentioned above (Martin, 2005). In addition to the study of academic power and administrative power, foreign scholars are also concerned with the study of student power. For example, José (1991) from Spain in his Mission of the University clarifies his attitude towards student power that he would like to "deliver the mission of the university to the students, so that students can manage university like a big house." In recent years, domestic research on university governance has gradually shifted from paying close attention to

system design to focus on the study of power itself, mainly represented by three points of view. The first is dual power structure of the executive power and academic power, which is further divided into "integration theory" and "differentiation theory", the former of which believes that administrative power and academic power are functionally complementary, and each power has certain limitations to be supplemented by the other power, and the latter of which holds that the two powers are symmetrical concepts, with different properties and values. The second is ternary power structure of executive power, academic power and student power, which begin to focus on the once ignored study of student power, taking student power as an integral part of the power structure of universities. The third is quaternary power structure of political power, executive power, academic power and student power, regarding the internal political power in universities as an extension of government power. The fourth is multi-variant power structure that is of the opinion that, apart from quaternary power structure, universities are also penetrated by market power and the power of other stakeholders.

1.2.2.2 Classified Research on the Structure and Pattern of Universities Governance

Some scholars have deconstructed university governance structure from the microscopic point of view. For example, Dearlove (2002) emphasizes on the interpretation of the function of the council in university governance structure. Ehrenberg (2004) examines the problem in governance by university board, and discusses the selection methods of members of university board, and the role of administrators, teachers and otherwise in co-governance of universities. There are also some scholars who explore theoretically the university governance structure, dividing university governance patterns into four patterns of bureaucratic coordination, political coordination, market coordination and academic coordination (Clark, 1983). Bauer and Askling, taking authority (procedural autonomy) and objective (substantial autonomy) as indicators reflective of university autonomy system, constructs "authority-purpose" dichotomy, and deduces four patterns of university governance, including Humboldt pattern, Newmans liberal pattern, Bena's socialist pattern, and the market pattern (Gan, 2006). Braun critically inherited Clark triangular coordination model, and based on different combinations of the three elements of belief system, substantive rationality and procedural rationality, divides university governance patterns into shared pattern represented by United Kingdom, oligarch/bureaucratic pattern represented by Japan, and customer/market pattern represented by the United States (Braun & Merrien, 1999). However, Weick (1979) uses the "Coupled independence" to explain the decentralized governance structure. Some Chinese scholars classifies the UK universitiy governance structure into five patterns according to the historical

sequence of UK universities, which are "Oxbridge" pattern of academic autonomy, "City University" pattern of academic dominance, "Union University" pattern, "Federal" pattern of co-governance and "University After 92" pattern (Gan, 2002). Other scholars, based on institutional arrangement in universities, divides university governance into relational governance dominated by internal supervision, administrative governance dominated by the state, and mixed governance dominated by supervision of intermediary organs (Gan & Zhang, 2007)

1.3 Third Phrase: Culturalism Research Paradigm

During the shift of the research of university governance from "whether universities should be governed" to "how to improve governance performance", the research paradigm of structuralism has also changed due to suffusion of research space, giving rise to the research paradigm of culturalism. The so-called culturalism research paradigm is evolved on the foundation that the critical structuralism overemphasizes the institutional power, ignoring the impact of non-institutional factors on university governance performance.

1.3.1 Theoretical Basis of Culturalism Research Paradigm

The theoretical foundation of the research paradigm of culturalism builds on the humanistic philosophy. Despite complex composition of humanism, there still exists a "family resemblance", namely the irrational tendency. Irrationalism goes against taking sensual entities as the basis for the existence of the world, and goes for taking such irrational factors as value, emotion, will, etc. as the nature of the world. Humanistic philosophical thought exerts so much extensive influence that it gradually extended to the field of psychology, education, and management science, among which humanistic psychology represented by Maslow has the most far-reaching influence and also serves as the basis for the development of other disciplines, who through combination of human's biological factor and social factor emphasizes the interaction of psychology and social culture, and explores the mental activities of human being with culture as its essence. The concerns in the area of psychology with social culture directly contribute to the emergence of culturalism paradigm. American psychologist Gergen (1973) points that human psychology is different from materials being studied by natural sciences in that human psychology, as a product of history, changes over time, places, history, culture and history. Another American psychologist Sampson (1978) directly declares that the study of psychology has to realize the shift to the culturalism research pattern, for it is impossible for psychology to get rid of social culture, ideology and value. The viewpoint that human are living in a particular historical context, reflecting the specific social cultural implications, and it is not feasible to carry out any study

excluding human from cultural factors is gradually being accepted by literature, education, management and other disciplines. For example, in the study of pedagogy, more attention have been paid to the study of the emotion, attitudes, values, and other non-intellectual factors of the teachers and students; and in recent years the humanistic management boom sweeping the field of management science has driven the management science away from the barriers in the study of visible system and substance towards study of human and organizational culture.

Universities are also social organizations, with common attributes of enterprises and other social organizations, so the study of university organizations cannot be separated from human and cultural concerns. When studying university governance, researchers are faced with a common confusion: Why universities with the same governance structure are yielding different governance performance? Meanwhile, in practice, the absence of positive correlation between a sound university governance structure and governance performance is constantly being confirmed, forcing researchers to re-examine the research direction of university governance from a new perspective, to go beyond the institutional dimension towards cultural dimension in the research of university governance, and to shift their research hot spots from improving university governance structure towards such non-structural factors as improving university governance capability.

1.3.2 Research Priority for University Governance at the Stage of Culturalism Research Paradigm

The earliest foreign research on culturalism research paradigm of university governance cannot be attributed to Baldridge, who draws on sociology to introduce politics model into the research of university governance. The political governance model, proposed in his book Power and Conflict in the University, pays more attention to the formation of all the interested groups in universities, and the process and mechanism by which academic organizations make decisions. Baldridge (1971) believes that the influence and informal process will more often than not control the formation of policies, and policies arise from the conflicts of interest and games among interested groups. In addition, in his masterpiece How Colleges Work, Birnbaum (1991) presents four governance models, and in his opinion, academy pattern is more effective for small colleges while political governance model is more effective for universities with relatively large scale. The effect of university governance is different with the changes occurred to the university, and the history, value selection and culture of university will also exert its influence on university governance structure (Williams, 1987). Subsequently, there are more scholars concerning about the impact of non-institutional factors on university's decision making. For example, Williams (1987), Peterson and White (1999)

study the effect of the teachers' attitudes and values on university governance. Barbara (1994), from a cultural perspective, studies the attitudes of university teachers towards professor council. Apart from this, American scholars have conducted a series of empirical research, demonstrating the impact of non-institutional culture on university governance, among which more influential studies are those carried out by the University of Colorado and the University of Southern California. Caplan, from the University of Colorado, conducted a large-scale survey of 1,321 universities and colleges, and found that governance structure and university governance performance are not positively related, from which he draws three conclusions: First, formal governance structure is not so important than imagined, and over-emphasis on university governance structure is a malposition; second, governance performance of higher education may be more related to factors other than the governance structure itself; third, a particular campus culture will surpass governance structure (Kaplan, 2004). Tierney from the University of California, after surveying more than 2,000 students and teachers from more than 750 colleges and universities in the United States, reached the conclusion that effective governance does not entirely depend on an efficient governance structure or the times of teachers' voting within a particular year, but more relevant to the teacher's understanding of the core values (Gerry, 2004).

The author of this paper believes that culturalism research paradigm will easily leads to "cultural essentialism", which is incompatible with the pattern of multiple interests, and how to improve university governance performance on the pre-condition of meeting the basic demands of the diverse interests of the governing body will become a new growth point in future university governance. This also means that university governance is moving away from the culture-oriented research paradigm to the postmodernism research paradigm characterized by respect of cultural differences, digestion of authority, and diversity emphasis.

2. ROUTE SWITCH IN POSTMODERNISM RESEARCH PARADIGM: CO-GOVERNANCE BY UNIVERSITY INTERESTED PARTIES

The opportunities and challenges currently faced by university governance render it necessary to transform the existing research paradigm for university governance, and this paper argues that the research paradigm of university governance also has tripling realms, and follows and follows the spiral path of development, which signifies that a research proposition is gradually grow to maturity. Therefore, on the basis of existing research space being suffused, timely paradigm shift must be realized so as

to ensure responses to the ever-changing internal and external environment in practice in university governance. There is no doubt that the new research paradigm shall be based on philosophical thought of postmodernism, and postmodernism philosophy has formed its own position in the critique of modern philosophy: Oppose monism, identity, certainty and other meta-notion, advocate pluralism, uncertainty, diversity, and communication on the basis of dialogue, and emphasize the establishment of a new partnership featured by equality and cooperation. In a typical post-modernism "deconstruction" context, university governance is shifting from "unitary to diversity," and the post-modernism research paradigm is aimed to change the traditional vertical and linear management relationship, and move toward a horizontal, parallel and fragmented relationship, digesting the government's central authority and emphasize the power of different governing bodies.

So what are the priorities at the stage of postmodernism research paradigm? The present paper attempts to propose a new model of university governance that can not only meet the interest demands of different governing bodies, but also improve the performance of university governance: stakeholder co-governance. Chinese researchers have predicted that the future of university governance is co-governance with stakeholders, but they have not engaged in any theoretical construction, which leaves room for further research. The new governance pattern first needs to make the following argumentation from a theoretical perspective:

2.1 The Non-Contradictoriness of Democratic Participation by Stakeholders and University Governance Performance

In a modern society dominated by instrumental rationality, the dominant position of the "bureaucracy system" called by Max Weber has undoubtedly played a vital role for the increase of the efficiency in organization governance, but under the influence of the postmodernism ideological trend, the increasing consciousness of right of university stakeholders and the increasingly intense democratic demands for participation in university governance, no matter in the form direct democracy or representative democracy, all fall under the "ring-style democracy" established on the basis of "bureaucracy system", and will result in increased management costs for universities. The operation of university organizations faces a "dualist paradox" in management science, i.e. the contradiction between democracy and efficiency.

Stakeholder co-governance proposed in this paper is a multi-center governance pattern, with a significant attribute of post-modernism. Post-modern society is a risk society dominated by unknown and unpredictable consequences, and the administrative order, linear control, and vertical leadership can not cope with the complex governance environment, thus making stakeholder co-

governance undoubtedly become the best choice for the post-modern society. In the stakeholder co-governance pattern, democracy and efficiency are in a state of coordination, the roots of which are twofold: First, the advanced form of social efficiency and the purpose of democracy are becoming more consistent, where democracy and efficiency can form a "partnership" (Gerry, 2004); Second, In the process of university governance, stakeholder co-governance may make use of such governance tools as social capital, teamwork and other management tools to provide a practical basis for resolving the "dual paradox" in university governance. It should be noted that the efficiency stressed by post-modern society is more represented by social efficiency advocated by the school of new public management, which does not take the achievement of personal interests as the standard, but take the realization of public interests as the highest "good". On the other hand, the ultimate goal of democracy is to maximize public interest. The change of the form of efficiency renders efficiency consistent with the aim of democracy, thus co-governance by university stakeholders becomes the integrating point of democracy and efficiency.

The essence of stakeholder co-governance lies in the coordination and gaming of interests, where the contradictions and conflicts among different governing bodies can be balanced by means of deliberative democracy. Deliberative democracy, through communication and exchanges of ideas among different subjects, leads consensus and cooperation, and has incomparable advantages over "ring-style democracy" based on the "bureaucracy system", changing democracy in co-governance from participation to imbedding, and strengthening the degree of democracy in university governance. Meanwhile deliberative democracy can better achieve social efficiency, namely governance activities coinciding with social public interests. In theory, university governance includes three levels: governance concept, governance structure and governance tools, among which the selection of governance tools is the most complex one. The governance tools selected by stakeholders for co-governance are usually represented by teamwork and social capital, the former of which refuses authoritarian leadership and single-center decision-making, thus solving the democracy issue in the process of implementation, and the latter of which as mentioned above means trust, rules and network, which can promote social efficiency through coordinated action. Thus, the democracy and efficiency in stakeholder co-governance are not contradictory in nature.

2.2 Positive Correlation Between Stakeholder Co-Governance and University Governance

Stakeholder co-governance makes inevitable the joint decision-making in university governance. Theoretically, we can take university as a series of

contracts, and university governance is a process of marginal adjustments of such series of contracts, thereby maximizing the performance of university governance. From the perspective of theoretical deduction, as long as the stakeholders invest special assets in the university, be it tangible physical assets or intangible spiritual assets, they are entitled to participate in university governance, and with the increase of special investments, the demand for governance participation will be more intense. But the reality is that not all stakeholders can participate in university governance, partly because the scope of stakeholders is too large, which will easily lead to the loss of incentive for stakeholders and ambiguity of the boundary of university governance; and partly because co-governance will bring about benefits together with cost. We can illustrate this issue through a mathematical model: $SN=\int N0$（$F1(n)$d$nF2(n)$dn, $S1$-SN<0, (N>1), where $F1$ is the function for governance benefits, $F2$ is the function for organization cost (or transaction cost), when $N = 1$, there is too few governing body, thus resulting in the decrease of the level of total social income, further, when $N\rightarrow\infty$ (theoretically, the subject of right can be increased to an infinite number), because constant increase of right dimension will lead to continuous falling of transaction benefits, and the total social benefit may become negative, i.e., $S\infty=\int N0$（（$F1(n)$d$nF2(n)$）dn<0. Controlled by organizational transaction cost, changes in social yield curve will generally go through three stages of progressive increase, reaching perfection ($N=N1$) and progressive decreases, respectively, $n<N1$, $F'1(n)$>0, $n>N1$, $F'1(n)$<0. (Wang, 2002) Thus, it follows that, when the benefit brought about by the increase of the number of the governing bodies equals the increased organizational cost, the optimum number of effective governance structure is thus determined. Therefore, we can identify key stakeholders in universities according to Mitchell segmentation method in the study of stakeholders, and participate in university governance subject to the principle of combining the centrality of the right of different university governing bodies and the professionalism of decision making, so as to ensure the balance between the benefit brought about by the governing bodies and the increased organizational cost, thus achieving optimal performance in university governance.

Theory is gray, while the tree of practice is green. Although the above study explores co-goverances by university stakeholders from two perspectives of social sciences and natural sciences, it only serves as an initial attempt in theory, and the new governance pattern will still encounter a series of problems in practice, such as the selection of stakeholders, the breadth, depth and intensity of governance participated by stakeholders. Moreover, the correction of democratic participation and university governance performance shall be verified through empirical studies. Faced with changes and development trends of the research paradigm in Chinese

university governance, we have reason to believe that the reform of Chinese university management system will move towards democratization and scientization, whereby the problems caused by "uni-center governance model" that has plagued China for many years will be improved to some extent, and that China's higher education is walking down the journey of rational restoration.

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