

INSTITUTIONAL CHANGES IN CHINESE HIGHER
EDUCATION AND THEIR IMPLICATIONS

CENTRE FOR NEWFOUNDLAND STUDIES

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DAN QIN



Institutional Changes in
Chinese Higher Education and Their Implications

by

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ABSTRACT

From the beginning of the twentieth century, Chinese higher education has experienced successive experiments with, and abandonment of, Japanese, German, American, Russian, and Chinese revolutionary structures of educational institutions. Each structure was fundamentally different from the previous one.

In this study, this phenomenon is examined by using a conceptual framework of educational change and reform, synthesized and developed by the author, drawing mainly from the work of Fullan (1991), Hargreaves (1991), and Ginsburg (1991). Within this framework, Fullan (1991) contends that educational change is essentially a political and cultural process. The political orientation of educational change imparts more power to educational reform, but simultaneously produces unrealistic expectations, simplistic solutions, misdirected efforts, and inconsistencies. Fullan also maintains that the culture is a crucial part of educational reform and often decides the success or failure of the reform concerned. Hargreaves (1991) argues that educational change is a means of improving the system's efficiency, effectiveness and quality through professional development. Ginsburg (1991) considers educational reform in the context of economy, ideology and the state. To Ginsburg, educational reform aims at adjusting the educational system to social transactions such as the changes in the economy, the political system and the culture, and is always concurrent with social change dynamics. Ginsburg's equilibrium

paradigm maintains that functional integration, harmony, social consensus and stability are the core of social existence. Social development disturbs the harmonious social existence and breaks the consensus. To restore normality, society must restore social consensus through education. Educational reform is therefore a means of social readaptation to both the new national growth and international convergence caused by an upgraded level of development. Ginsburg's conflict paradigm contents that education, as one of the superstructural institutions, is both the site of class conflict and a medium to enhance or resolve the social and economic contradictions. It finds that although the source of social crisis lies in the economic system, education usually become the target of criticism.

The findings of this study reveal that political, cultural, social, economic and ideological factors combine to play an important role in the frequent changes in Chinese higher education. To be specific, Chinese education presents a specially strong political orientation, partly due to the influence of Confucian values. This orientation and desire for economic development form the major causes of the repeated changes. The ideological ideals of the nation-state are closely correlated with the centralizing or decentralizing approaches to the educational system. The desire for a new national identity in the formation of a nation-state is also a critical cause of the frequent changes. This desire is expressed in different ways during different periods through higher educational institutions. Lastly, the contemporary educational

reform is observed undergoing a renewal of the knowledge structure, which seems to promise new social progress in the near future.

The above findings are contextual and interpretive by nature. A further[†] understanding of the change issues in Chinese higher education can be reached by empirical studies and further studies into the Confucian tradition.

To my mother Yue Jingfang,
whose dedication to education encourages me,
and to my daughter Wu Danying.

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CHAPTER I

NATURE OF THE STUDY

The path of progress has not followed a straight ascending line, but a spiral with rhythms of progress and retrogression, of evolution and dissolution.

Goethe

Defining the Problem

In reviewing the short history of modern Chinese higher education, what is most noticeable is the frequent changes in the process of the formation of the modern university. The changes took place in both form and content, that is, in both institutional and knowledge structure. The changes happened concurrently with the imitation and introduction of miscellaneous foreign educational patterns. Before the form and content of modern higher education was introduced to China in the late 19th century, China was still in a highly developed feudal imperial system. The form and content of education and higher education in that system were so distinct that in no way did they resemble the educational patterns being introduced. Modernization is a global tendency and suggests a higher stage of civilization. China, like most nations, felt obliged to harmonize with the advancement. The approach used, as

in other developing countries, was to reform the education system first. The educational reforms in China involved imitating the educational systems in Western countries, and rejecting the system already in place. What makes China unique is the number of changes which have been attempted. Since the first introduction of the Japanese education system in 1902, Chinese education system as a whole has changed, and in the process of reforming the education system, Chinese higher education has changed six times as new patterns have been adopted.

This stimulates a curiosity for the causes of this phenomenon. Knowledge of European and North American universities further stimulates the curiosity. The European university is known for both its conservatism and academic freedom. Husen (1990) observed that it has a tradition that "embodied the paradox of being conservative as an institution, but with regard to its intellectual orientation the hotbed of new ideas and innovations and very often of political radicalism" (p. 147). Since the university emerged in the medieval times, it has undergone few institutional changes. Conservative as it was, in the process of social civilization, the European university has espoused modern technology, switched gracefully into its modern form, and satisfied the national demands of development. At the same time, its academic study has always been advanced and academic research has been integrated. Across the ocean, North American universities underwent a progression from religious colleges to their modern form. The sources of their reform included the emergence of modern science which has helped to

form a pragmatic philosophy, and the German university tradition of profound pure knowledge and academic freedom. North American universities have successfully consolidated the German tradition of profound pure knowledge and academic freedom with their own pragmatism. Reform efforts were made afterwards, but few institutional changes took place.

These phenomena raise some questions. Why have Chinese university patterns changed six times? What caused the repeated abandonment of previous experiences? What are the characteristics of the changes? How can these phenomena be explained? An awareness of these questions would be significant both in educational research and in educational development.

Examination of these questions reveals a contradiction between modernity and Chinese tradition. It seems that tradition is robust, that it hardly ever gives way to the new. However, tradition has many aspects, and not every aspect is in contradiction with modernity. Then, what is the critical part in the tradition that is in conflict with modernity? The examination further reveals that the desire for a new national identity plays an important role in the contradiction. The desire originates from the formation of the nation-state in China.

Stepping into the last decade of the 20th century and preparing for the 21st, China is undergoing a new phase of higher educational reform. The enthusiasm and motivation for this reform are as high and strong as before. This again raises questions. Will this reform resemble the old experience? Where is this reform

heading? Does the tendency of contemporary reform of Chinese higher educational institutions forecast a harmonization with the contradictions between modernity and Chinese tradition or an increase of it? Will the identity issue finally find expression in the newest attempt at reform?

Purpose of the Study

This study begins with an assumption that educational development is always rooted in its tradition, and the contemporary higher educational reform in China does not mean a complete break away from the existing system and the previous ones. To understand what has happened in Chinese higher education, it is necessary to examine both the changes which have occurred and what is known about the change process itself. For this purpose, this study will concentrate on the two major questions which have grown out of the questions raised:

1. Why have Chinese higher educational institutions changed so frequently and radically?
2. How can the literature on educational change and reform help in the understanding of the change issues in Chinese higher education?

Other questions stated in the previous section will be addressed respectively in the process of discussing these two major

questions. This study intends to provide an understanding of the achievements and failures of the Chinese higher educational changes in various periods through a portrait of institutional change history. It seeks to show that education is both a contemporary product and a heritage of historical accumulation, and that examining the changes from economical, historical, cultural, and comparative perspectives instead of from a single ideological viewpoint provides a broad and comprehensive understanding. It will also try to illustrate that Chinese higher educational reform and development are always related to preserving the essence of Chinese tradition.

Significance of the Study

There is a poverty of research on planned educational change in higher education. Though researchers such as Goodman and Kirke (1981), and Cannon and Lonsdale (1987) did propose theoretical and organizational perspectives for changes in higher education, they found that a general theory of change in higher education is hardly accessible. This means that to explain changes in Chinese higher education, which is the intention of this study, there is need for a conceptual framework. A selected literature review on educational change and reform in Western countries reveals that educational change is discussed mainly within a framework of improving effectiveness and efficiency, first of institutions, and then of individuals, in the K-12 public school system (Fullan, 1991).

Educational reform is addressed mainly in the context of technological, societal, political, ideological and cultural changes, such as is found in the works of Hargreaves (1991) and Ginsburg (1991). In the context of Chinese educational research inside China, the Chinese researchers tend to concentrate on explaining policies, assessing the achievements and success of the policies, and exploring the significance of the achievements in connection with benefits brought by the achievements to economic development, usually from a political-economic perspective. Western researchers have conducted extensive research on Chinese education in a descriptive, historical, interpretive and analytical manner, such as Bastid (1988), Cheng (1994a, 1994b), Orleans (1987), Cleverley (1985), Hawkins (1983), Epstein (1991), and Pepper (1991). However, the issue of changes and reforms of higher institutions has not been their focus. Nevertheless, Hayhoe (1984, 1986, 1987, 1989, 1992 & 1993) of the Ontario Institute of Studies in Education has conducted intensive studies and written extensively on Chinese higher education reform. She has contributed tremendously to this field, especially in the way of providing an alternative insightful viewpoint to the Chinese researchers. One of the themes of her research is that changes in Chinese higher education can be explained as a contradiction between modernization and the Chinese organization of knowledge.

Influenced and led by the findings of Fullan (1991 & 1993), Hargreaves (1991 & 1994), Ginsburg (1991), and Hayhoe (1984, 1986, 1987, 1989, 1992 & 1993), this study intends to develop a

conceptual framework based on the Western literature of educational change and reform. The conceptual framework explains the complexity of educational change, and it is used in the explanation of changes in Chinese higher education.

With the conceptual framework, this study ventures to proceed a step further than Hayhoe in examining the decisive factors in the Chinese educational tradition that are accountable for the conflict which caused the change. It also examines the issue of national identity in the clash of values of different cultures. Since the formation of the nation-state, the strong value system in the Chinese society has resisted modernization efforts. Important as this issue is, there is little discussion of it in the reform literature.

Additionally, educational reform in the 90s, though still not much discussed in the relevant literature, unfolds a new panorama of issues untouched by Hayhoe. The implications of this reform adds significance to the investigation of the research questions guiding this study. Finally, this study provides an alternative view of Chinese higher educational institutions which will contribute to understanding of the Chinese context. If this work can add one more insight into the meaning of changes in Chinese higher education, and contribute to the current research in this field, its mission will be fulfilled.

Design of the Study

From a research of the relevant literature, this study identifies two major research questions: (1) Why have Chinese higher educational institutions changed so frequently and radically? (2) How can the literature on educational change and reform help in the understanding of the change issues in Chinese higher education? To answer these two questions, the literature on educational change and reform was reviewed and synthesized, and a conceptual framework was developed and applied to an examination of the frequent changes in Chinese higher educational institutions. With the application of this conceptual framework, the study focuses on the relevant literature, chronologically traces the history of changes in Chinese higher educational institutions, analyzes the transitions, and finally finds the implications of the frequent changes from the observation of the changes. In this sense, this study is creative and original, as well as descriptive, interpretive and analytical.

Chapter arrangement is in the following order. Chapter One, Defining the Problem, presents the concerns, the problems, the purposes, the significance, and the limitations of this study. Chapter Two, The Conceptual Framework of the Process of Educational Change, is a selected review of the literature of educational change and reform theories, focusing on the complex process of educational change and reform from different Western perspectives. From this review, a conceptual framework is developed, and it

guides, in the remainder of the study, the examination and explanation of educational practice in China. The major sources for this chapter are from Fullan (1991), Ginsburg (1991), Hargreaves (1991), and Cannon and Lonsdale (1987). Chapter Three, The Transition from the Imperial System to Modern Education and Institutional Experiments in the Early Republic Years, and Chapter Four, Institutional Experiment from the Republic Years to the Period Following, focus on Chinese educational practice and the change process of Chinese higher educational institutions. The primary sources of the historical facts of China used in Chapter Three and Four are drawn from the recognized, authoritative scholars both in the West and in China, such as Gao (1990), Shu (1978), Hayhoe (1984, 1986, 1987, 1989, 1992, & 1993), Liu (1990), Liu (1991), Zhu (1990 & 1992), Cleverley (1991) and a number of recent newspaper articles and reports in the China Daily, 1995. Chapter Five, Implications, summarizes and explores the causes, characteristics and interpretation of the institutional change.

Limitations of the Study

This study is designed to analyze the frequent changes in Chinese higher education, and to find implications from those changes, by applying a synthesized conceptual framework drawn by the author from a selected Western literature on educational change and reform. In other words, the first task of this study was to develop a conceptual framework of change and reform, from research

not readily available in China. This framework was then applied in explaining the phenomena of changes in Chinese higher education. For this reason, this study, although a comprehensive examination of the evolution of Chinese higher education, is not an in-depth analysis of its origin and evolution. Rather, it provides a broad overview of changes in higher education over the period between the end of the 19th century to the present. The sources used for this study are mainly from the recognized and authoritative scholars mentioned on the previous page and in the reference list.

Another limitation is related to the descriptive, analytical, and interpretive nature of the study. Since no empirical study has been conducted in this research, it would necessitate viewing cautiously the interpretations and conclusions made by the author, in order to minimize possible misinterpretations.

A final limitation is that the change issues in Chinese higher education are explained within the context of a synthesized conceptual framework of change and reform. As will be discussed in Chapter Two, owing to the complicated nature of educational change, each paradigm of educational change and reform introduced in the conceptual framework explains educational change with its own limitations. In this regard, the conclusions of this study are, in a strict sense, contextual within this specific context of research.

CHAPTER II

THE CONCEPTUAL FRAMEWORK OF THE PROCESS OF EDUCATIONAL CHANGE

The ideas of economists and political philosophers, both when they are right and when they are wrong, are more powerful than is commonly understood.

Keynes in Scott, 1984

Educational change is a theme that appears in literature from different perspectives. Within Western countries, the success or failure of specific innovations and a preoccupation with the change process itself (stages, factors) were the focus of research in the 60s and 70s. Reform and restructuring in the transition from modernity to the postmodern period were concerns in the 80s and 90s (Hargreaves, 1991). Much of the literature examined changes in all aspects of the education system, mainly for the purpose of improving the institutional efficiency of the school system. From the perspective of educational sociology and comparative education, educational change literature focused on reform and its close correlations with economic development and historical, social, ideological and cultural changes. Within this framework, the literature looks at the education system as a whole, and explores its function in social development as one of a number of social institutions.

Higher educational change is a less explored field than the

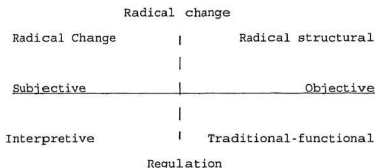
public school system. Altbach (1979) identified that university governance, university management, university and society, the academic profession, the university and the educational system, student problems and activism, and university reform are concerns of higher education research in comparative education. Although this gave rise to research directions into higher education and reform was recognized as one of the concerns, the reform process is still largely an issue to be examined. During recent years, though approaches to these issues changed, as can be seen in Altbach (1991), Trends in Comparative Education, the basic issues remain the same. There was no adequate theory specifically for changes in higher educational organizations, and theories for changes in organization in general are also lacking. Goodman and Kurke (1982) identified this point:

There is no neatly drawn theory of change. We do not see that the current state of knowledge as represented in the literature supports such an endeavour. Nor is it clear that such a theory could be constructed in the near future. (p. 1)

The later study by Cannon and Lonsdale (1987) reached the same conclusion that "There is no general theory of change in higher education" (p. 21). This situation has barely changed in the present time. However, at the same time, Cannon and Lonsdale (1987) suggested that owing to the nature of education, educational theory was usually derived from other disciplines, such as philosophy, psychology and sociology, and so would be educational change theory. On this basis, they agreed with Burrell and Morgan

(1987) that educational change theory, following researches on theories of education, should be built on the two major dimensions of social inquiry: "subjectivism and objectivism", and "regulation and radical change". Four paradigms stem from these two dimensions and are illustrated in Figure 1:

Figure 1. Major dimensions of social inquiry



(Cannon and Lonsdale, 1987, p. 26)

This matrix, though general, can help give direction to research on higher educational change. Cannon and Lonsdale (1987) commented that these theoretical perspectives are on education, not on educational change. However, these dimensions provide an alternative but complementary approach to the theoretical perspective on change, by suggesting a variety of ways to understand organizational models. These models are: an internal, purposive model; an environment model; a technological model; an emergent social system model; and an interorganizational model.

Though these models are useful in understanding changes in higher education, especially changes in form, the nature and process of higher educational change have not been fully explained.

In the Chinese context, although changes in higher education have been happening frequently, there is a lack of research on the change process. Based on a review of the research conducted respectively by Tao (1985), Liu, (1991), Zhou, (1993), Xiang (1994), Xu (1994), Tan (1994), and Wang (1994), it has been found that researchers are mostly attentive to policy change governed by ideology, new relations between education and other social sectors brought about by social and economic change, and strategies for implementation. There are no research studies on the theory of educational change.

Therefore, since this study will address changes in Chinese higher educational institutions and there is no ready literature in China pertaining to the higher education change process, this chapter will provide an integrated review of Western educational change literature as the conceptual framework for explaining the changes. The assumption of this review is based on the fact that higher education, though different from the K-12 school system in its function, is in essence one part of the educational system in a society. Higher educational change is subject to similar forces that compel changes in the education system as a whole, especially in its social, economic and political context. In this light, it is assumed that an examination of the research on the change process in the K-12 education system can help create insights which

also apply to the higher education change process.

A Distinction between Educational Change and Educational Reform

The words "change" and "reform", though synonyms, are different in meaning. Webster's Ninth New Collegiate Dictionary (1991) defines change in the following way:

(1) a: to make different in some particular, b: to make radically different, c: to give a different position, course, or direction. (2) a: to replace with another, b: to make a shift from one to the other... and, d. to undergo a modification. (p. 225)

The word reform is defined as, (1) a: to amend or improve by change of form..., b: to change into an improved form or condition. (2): to put an end to by enforcing or introducing a better method or course of action (p. 990). The comparison of these two words shows that change has a broader sense than reform, while reform means the change of form.

In the educational change context, though Fullan (1991) did not make a distinction between change and reform, it can still be observed that he used the word change in a broad sense which covered both change and reform. Indeed, in the change literature, change is a general term that can refer to a difference or replacement made to a system, an institution, an administrative style, a leadership style, a program, a curriculum, an applied educational technology, a methodology of teaching, a method of learning, or a classroom activity; while reform means more of a

change of form: a system, or an institution. This corresponds with Hargreave's (1991) statement that change was examined in the context of innovation in the 60s and 70s, but reform and restructuring in the 80s and 90s. It means that in Hargreaves' views, innovation, reform and restructuring are variations in the pattern of educational change. This study is concerned more with the broader reform aspects, with changes in the form of a national system of education.

The Causes, Purpose and Process of Educational Change

Fullan (1991 & 1993) has an elaborate exposition of educational change in The New Meaning of Educational Change (1991), and Change Forces: Probing the Depth of Educational Reform (1993). He explains change as a long, complicated process that involves not only stages of initiation, policy planning, implementation, continuation, and outcomes, but also the culture of institutions, and people who form the culture: instructors, students, parents, administrators, district administrators, community, and government officials at different levels. To look only at policy making, program production, and implementation strategies as change itself is obviously misleading, for these are technical aspects. The most important part of change, Fullan argues, is the interaction with culture and with people who constitute and are constituted by this culture. Failure to recognize this part can almost predict the failure of a change effort.

Fullan (1991) argues that pressure for change usually comes from three sources:

1. natural disasters such as earthquakes, floods, famines, and the like;
2. external forces such as imported technology and values, and immigration; and
3. internal contradictions, such as when indigenous changes in technology lead to new social patterns and needs, or when one or more groups in a society perceive a discrepancy between educational values and outcomes affecting themselves or others in whom they have an interest. (Fullan, 1991, p. 17)

This first stage in the change process, referred to as adoption or initiation, is triggered, then, by different situations and for different reasons. There is no definite explanation of what exactly causes the initiation, but Fullan (1991), Firestone and Corbett (1987), Clark, Lotto, and Astuto (1984), Huberman and Miles (1984), and others agree that "The uniqueness of the individual setting is a critical factor - what works in one situation may or may not work in another" (Fullan, 1991, p. 47). This means that since, under the pressure for change, different people in different situations react to the pressure from different perspectives, a particular initiation of a change reflects the time, location and historical context. It can also be inferred from this that, although change may be initiated due to the same source or pressures, different approaches to change produce different outcomes.

It is generally agreed that there are two other phases or stages in the change process: implementation and continuation.

Implementation is the most difficult phase, for it is the stage where institutional culture, culture in general and tradition begin their involvement. People's attitudes, namely, their support, indifference or resistance towards a change, are decided not only by the culture and tradition in which they live, but also by their values and ideology. Therefore, the success or failure of a change is decided by the vision of the change and how it is presented. Planning, leadership, and management are therefore very important, as well, people must feel that there is a change. These factors may change the direction of a planned change and lead to unexpected results.

From this viewpoint, momentum for educational change can be both top-down and bottom-up. Since change can also be from the bottom-up, initiators from the top should be aware of, and plan for, failures and unsolvable problems, as they attempt to implement policies and programs.

As to the purpose of educational change, Fullan (1991) writes within the context of change mechanism and process details. Thus, he lingers around the relations correlated with, and strategies for, improvement of institutional efficiency through some new structures and programs (p. 15). He agrees with Sarason (1990) who writes that new policies, legislation or new performance standards could all bring about educational change. However, Fullan (1991) does not ignore the fact that educational change is more often politically oriented:

...innovations get generated through a mixture of

political and educational motives. Writ large, educational reform is very much a political process... Politically motivated change is accompanied by greater commitment of leaders, the power of new ideas, and additional resources; but it also produces overload, unrealistic time-lines, uncoordinated demands, simplistic solutions, mis-directed efforts, inconsistencies, and under-estimation of what it takes to bring about reforms. (Fullan, 1991, p. 27)

This, considered with the earlier observations on the sources of change, indicates that the improvement of institutional efficiency is not the sole purpose of educational change or reform. Political motives do not function alone; instead, they are mingled with economic and ideological pursuits. For some, ideology is the most important motivation, and they pursue educational changes in the hope of bringing about social development. For such individuals, change is seen as a means of moving the society forward. The relations between political, economic and ideological factors and educational change will be further discussed in the following section.

Educational Reform and Social Change

In examining larger scale educational reform and social change, two orientations emerge. The first is the improvement orientation; the second encompasses economic, ideological and cultural aspects. Both will be discussed in a comprehensive examination of the topic.

The Improvement Orientation

In the current literature on educational reform, there are at least three distinct ways of understanding educational reform and reform orientations. For Hargreaves (1991), reform is a paradigm of educational change used in the 80's. It is in contrast to the "innovation paradigm" used in the 60s and 70's, and the "restructuring paradigm" he observes in the 90s. The innovation paradigm was heavily influenced by positivism in educational research and was supported by a functionalist approach to education typified by educational technology. The reform paradigm appeared after the emergence of the interpretive approach in sociology of education and a qualitative approach in educational research, around the 80's. The reform efforts were evident in the illuminative approach to educational evaluation, and the development mainly of curriculum and programs. The restructuring paradigm observed by Hargreaves (1991) is connected with the theory of postmodernism, and relates to tensions between bureaucracy and professionalism. It emphasizes professional development and individual involvement, especially teachers' involvement in the education process, in educational change and in decision making. In discussing the meaning of restructuring, he states: "While the specific components of restructuring vary from one writer to another, most seem to agree that what is centrally involved is a fundamental redefinition of rules, roles, responsibilities and relationships for teachers and leaders in our schools" (Hargreaves,

1991, p. 5).

It can be inferred from Hargreaves' observation that the innovation, reform, and restructuring paradigms are all orientations that look at educational reform as a way to improve efficiency, effectiveness and quality of educational systems. This is in line with the stance taken by Fullan (1991). Within this improvement orientation, researches are more concerned with the educational system itself and the interacting relations within this system rather than with changing the goals and basic structures. Educational contributions to society are considered from the point of view that efficient institutions produce more qualified individuals who will function more efficiently and innovatively, thus bringing about development in society.

The Economic, Ideological, and Cultural Orientation

Ginsburg (1991), an educational sociologist, considers reform more broadly in the context of the economy, ideology and the state. Education is considered to be one of the constitutive institutions of the state. Educational reform then is a reflection in education of the contradictions of economic, political, and cultural dynamics at both the national and international level. The purpose of educational reform is not only improvement within the educational system, but also social development. Educational reform aims at adjustment of the educational system to social transaction: the changes in the economy, political system, and culture. Therefore,

successful educational reform is always concurrent with the social change dynamics (Ginsburg, 1991; Simmons, 1983; & Merritt and Coombs, 1977), and educational reform theory is closely attached to social change theories.

Applebaum (1970) distinguishes four categories of social change theory. The first identifies with the Darwinian evolution theory. This perception is similar to organic evolution. Society is seen as changing in a linear, developmental way, from a simple form to a more complex one. Modernization is the highest indicator of evolution. Societies are labelled as underdeveloped, developing, and developed. The development is a matter of time and condition, and all societies are seen as heading toward modernization. The second category is the equilibrium theory, the keywords of which are homeostasis, stability, harmony, and balance of society existence. Social change is the result of loss of balance, and balance is restored from an effort of adaptation. The third category is the conflict theory which emphasizes irreconcilable contradictions in society. The fourth one is expressed as the "rise and fall" theory, which sees society changing in a nonlinear way, with some changes leading to progress while others leading toward backwardness. The economic, ideological and cultural orientation suggested by Ginsburg (1991) has drawn on two of these four categories of social change theories.

Educational reform, as was agreed by Ginsburg (1991), Ginsburg, Wallace, and Miller (1988), Simmons (1983b), Sack (1981),

and Merritt and Coombs (1977), focuses on all aspects of the educational system, as this list of aspects from Ginsburg (1991) illustrates:

- a) Size or number of students, teachers, administrators, and buildings;
- b) goals and objectives;
- c) policy-making and administrative/managerial system or power structure;
- d) financing and budget making process;
- e) level of funding;
- f) system organization: the types, statuses, and levels of as well as links and ages of transition between educational institutions;
- g) Curriculum: content and organization of what is taught;
- h) pedagogy: social relations of teaching and learning;
- i) selection, evaluation, and promotion criteria and procedures for students; and
- j) selection, evaluation, and promotion criteria for educational workers (teachers, administrators, etc.) (p. 5).

These aspects exhibit a concern for the kind of education a given society would like to provide, the kind of individuals this society wants education to produce, and the way in which educational institutions and personnel should function. This concern is obviously grounded in ideology, values and culture.

Since ideology and values are involved in the issue, researchers of the economic, ideological and cultural orientation do not conform with the improvement orientation, for they consider that understanding reform only in terms of improvement is actually exploring some possible positive outcomes while ignoring other aspects. Inequality has always existed in society and between societies, and the values held by different social groups are also

different. Accordingly, the achievement or the result of reform will be viewed differently by different social groups. From this critical position, reform goals generated from one perspective may help to strengthen the efficiency of a system, but at the same time it may also increase or reinforce the existing inequalities in education and society. In this sense, Ginsburg agrees with Altbach (1974) that "what is constructive change to some people may be seen by others as either tokenism or destructive or regressive change to others" (Ginsburg, 1991, p. 6). Ginsburg (1991) argues that there are two opposite paradigms of educational reform: the equilibrium and the conflict. The equilibrium paradigm is drawn basically on equilibrium theory, while the conflict paradigm derives from conflict theory, both of which are two of the four categories of social change theories identified by Applebaum (1970). Since both are important in understanding educational reform, both will be discussed fully.

The Equilibrium Paradigm

Within the equilibrium paradigm, it is assumed that society is on the whole functioning in a consensual way and developing stably within the consensual framework. All members of the society "implicitly agree what the functional necessities are" (Ginsburg, 1991, p. 8; Simons & Esping-Anderson, 1983). Functional integration of the concept of social existence, harmony and stability in society is at the core of societal existence. When

society develops, the balance of its harmony is lost. To restore the balance, society needs adaptation. To eliminate this imbalance and to help all members adapt to the ever-higher stages of social development, a new consensus should be achieved. It is assumed that the previous social consensus was the outcome of knowledge infused into individuals through education. Educational reform, then, is the means of adaption of society to achieve a new consensus.

Three fundamental views are observed in the equilibrium paradigm. First, education is an indispensable part of society, essential to the latter's evolution and continuation. Second, education serves to socialize individuals to adapt to the economic, political and social arrangement of a given society. Third, education passes basic economic, political and cultural values and norms to the educated who will then share these values and norms in their future functioning in society. In this light, the equilibrium paradigm can be seen as in line with functionalism. Furthermore, once education is recognized as a means of adaptation, then it is quite a natural next step to identify the effective ways of meeting the needs of adaptation. Therefore, though the rhetoric of Ginsburg's orientation is not targeted fundamentally on particular "problems" in education, if a further step is taken from this orientation, an effort to improve efficiency would still be perceived.

To understand educational reform within this paradigm, there are two approaches: the national level equilibrium approach, and

the world system level equilibrium approach. The former approach discusses educational reform with the concept of the nation-state, functionalism, and evolution. Concurring with the assumptions of the equilibrium paradigm, it explains that modernization, industrialization and urbanization in a given country disrupt social harmony and appeal for social adaptation. The existing educational system, which is responsible for transmitting new knowledge for a new social consensus, is not fulfilling its mission. This is the point from which educational reform starts. In this context, reform is a natural happening in the process of social evolution. Ginsburg (1991) remarks that "The education system, as part of a larger homeostatic and consensual social system, is seen to evolve as society evolves or to adapt as functional incompatibilities or dysfunctions arise" (p. 10).

The latter approach, the world system level equilibrium approach, while maintaining the same equilibrium assumptions, has an emphasis on "a relatively unified cultural system" of the world (Ginsburg, 1991, p. 13; Meyer and Hannan, 1979, p. 298). When the world community is progressing toward an upgraded stage of social development, some states are one or two steps ahead of others in modernization and industrialization. In terms of evolutionary societal development, the more industrialized states adapt themselves to the new development through the pressure of evolution from within, and the less industrialized states through imperatives from outside. In both cases, the global pressures are towards convergence. Explained in relation to educational reform, the less

industrialized states, in order to secure an economically competitive position in the global market which is becoming more and more technologically oriented, have to borrow educational models from the industrialized countries as a strategic procedure to achieve their goals. This is the cause of the emergence of the tendency, as was seen by Inkeles and Sirowy (1984), "for all national educational systems in the world to converge toward a common structure and set of practices" (Ginsburg, 1991, p. 13).

The Conflict Paradigm

The conflict paradigm based on conflict theory examines educational reform from an opposite point of view. Whereas equilibrium theory interprets that society, either at national or international level, is functioning in harmony and progressing through evolution, the conflict theory finds that society is progressing through conflict. The conflict theory falls under the heading of neo-Marxist theory. One of the orthodox Marxist concepts is the law of contradiction. This law maintains that each social form unavoidably has within itself the seeds of its own destruction, which is the source of basic social change. The explanation of this law is that social distribution of production material is uneven. Consequently, society forms classes in which some groups possess more production materials and benefit more in economy than others. Hence, there is a privileged exploiting class and an oppressed class, and contradictions thus originate. The

driving force in such a society is the unending struggle between different social groups to hold power and status. Social progress is the result of the conflict of values, resources, and power between different classes within a society. These contradictory aspects often explode into violent conflict, the outcome being a new configuration containing its own internal contradictions, and then the entire process begins anew. Another important concept of Marxism is the sense of time and history. Since nothing is unchanging, a progressive factor at one time may become stagnant and obstructive at another time. Understanding of any events should then be from a dynamic point of view. Therefore, "The political, legal, religious, and educational systems must be understood dynamically in terms of whether, in any given historical period, they serve to enhance or to hinder human development" (Feinberg & Soltis, 1992, p. 50).

In education, the conflict theorists hold that educational system, as one of the infrastructural institutions in a nation-state, "serves the dominant privileged class by providing for the social reproduction of the economic and political status quo in a way that gives the illusion of objectivity, neutrality, and opportunity" (Feinberg, & Soltis, 1992, p.43). This means that the norms and values transmitted in schools are those of the dominant class. Through schooling students develop attitudes and dispositions that are required for the continuation of the present system of domination. In this sense, since education contains contradictions from different social groups, the effort to improve

the efficiency of this system is actually strengthening inequality in society.

Educational reform is therefore understood against the background of conflict and time. First, it is the reflection of the contradiction or the on-going struggles between different social groups mainly in the economy. Second, according to the time concept, certain ideology is progressive at a given historical period, but becomes unproductive at a later time. Similarly, the educational system guided by an ideology serving a positive role may serve a negative function as time goes by. This is the starting point of educational reform.

There are also two approaches within this paradigm. The national level conflict approach sees that educational reform occurs " through conflict and competition between social class, ethnic, national, religious, and gender groups, whose interests are incompatible or when structural contradictions are not being successfully mediated" (Ginsburg, 1991, p. 9). It understands that education, together with nation-state and other super-structural institutions, is both the site of the class conflict and a cushioning medium to the social and economic contradictions. In the situation of economic crisis in the capitalist state, the power groups would utilize educational reform as a means of shifting the focus of the crisis away from the economy to the state and education (Ginsburg, 1991; Ginsburg, Wallace, and Miller, 1988; Carnoy and Levin, 1976). Habermas (1979) observes:

The origins of the crisis still lie in the economic

system in capitalism but... the Welfare State no longer allows the crisis to explode in an immediately economic form. Instead, ... the symptoms are displaced into strains within the cultural and social order... The result is a much bigger "ideological discharge" than in periods of capitalist development (cited in Ginsburg, 1991, p. 11).

Educational reform is motivated by economic demands or crisis and the corresponding politics, and in turn serves as a means of control of its motivating forces. This is the reason that at this level, educational reform often looks at the relations between education, the state, and the economy. These issues are expressed in concerns over financial resources, the control of education, type of workforce desired, and community involvement.

The world-system level conflict approach, while observing educational reform from the same orientation, has more emphasis on economic factors. It is thought that the world system is basically a capitalist system, incorporating nominal socialist societies. Within this system, there are "core", "peripheral" and "semi-peripheral" countries, regardless of types of society. In this context it is assumed that the class conflict between the dominant and the subordinate classes inside a nation-state are now complicated by international factors, especially by the international dominant "technocrats" and the economically dominant elite, which are often connected with local power. Thus, the sources of conflict become multidimensional: conflict happens between social groups within a given country, the technocracy and the less industrialized, and different ideology and culture. As the distribution of technology, economic resources and political

power is uneven, the production and production relations in the technocratic countries become very influential to the production patterns in the less industrialized countries. Their corresponding forms of education are also very influential to the education pattern of the less industrialized countries. When there is an economic conflict, technocrats domineer economic crisis through the state and education inside the country; whereas at the international level, the dominating effort is noticed in activities of state aid programs, universities research corporations, multinational business corporations, industrial investments, corporate foundations, bilateral aid agencies, and international organizations. These technocratic and economic elites have already shaped education in North America and Western Europe, and are forcing efforts to reform education in some of the peripheral countries (Ginsburg, 1991; Archer, 1979; Bowles and Gintis, 1976; Katz, 1975; & Katz, 1968).

Given these positions, educational reform is considerably conditioned by the above mentioned factors. It is also a means of power struggle among complicated international forces. In addition, educational reform in the periphery "must be explained in relation to social relations of domination and subordination characteristics of the world capitalist system" (Ginsburg, 1992, p. 16; Weiler, 1980). As the position of a country in the world system is in a dynamic state, both technocracies and the less developed countries do not necessarily have an unchanging status. Therefore, educational reform in core nations should also be analyzed in

relation to the dynamics of the world economic system.

Summary

To summarize, this chapter has presented the causes, purposes, and process of educational change and its relations to social change by different paradigms. It notes that the theory of educational change is not fully developed for higher education and is still one that awaits further elaboration. All the paradigms reviewed, whether they are from the perspectives of effectiveness, equilibrium or conflict, depict different aspects of national or international educational reform from different angles. It should be noticed that in conflict, there are efforts of harmonization and adaptation; while in harmony, conflicts appear now and then. In national or international wars, it can be difficult to understand a loss of balance as the only cause of war; class struggle sometimes may become an enigmatic term, for according to the conflict theory, class struggle happens between the exploiting class and the working class in a society where property and production materials are owned by private owners. In a society where the state owns all production materials, as in the case of China during the years when there were no private institutions, companies and enterprises, it would be difficult and unconvincing to define the struggling classes. Therefore, each of the paradigms explains educational change within its own limitations. Educational theory is therefore interdisciplinary in nature, and educational

change is a complicated process. No single approach is sufficient to explain all phenomena of the intricate reform mechanism. A particular reform in a particular area at a particular time may be explained by drawing on one of the paradigms, or some of the them. For example, the exceptionally numerous large-scale educational reforms in China present the symptoms of the effect of external pressure toward global convergence, the consequence of class struggle, the effort of gaining efficiency, effectiveness and quality, the desire to maintain a competitive position in the world economy, and a yearning to keep national identity. Therefore, in examining educational reform in different settings, it will be too limiting to apply one paradigm as an exhaustive explanation. The nature of the complexity of these phenomena requires an understanding from different perspectives. Hewton (1982) captures this as he explains that understanding different theoretical paradigms and explaining happenings with them are significant in educational change, for such a strategy can provide different angles to approach different issues. Concerning the theory of educational change, this study concludes that a combination of the improvement orientation and the economic, ideological and cultural orientation would be effective in explaining the complicated phenomena of educational change. Therefore, the next two chapters will analyze educational change and reform in China within this integrated conceptual framework of educational change and reform.

CHAPTER III

THE TRANSITION FROM THE IMPERIAL SYSTEM TO
MODERN EDUCATION AND INSTITUTIONAL EXPERIMENTS
IN THE BEGINNING REPUBLICAN YEARS (470 B.C.-1919)

Tradition is living... Confucius is living...
History co-exists with the present.
Ding Gang (1990, p. 6)

According to the concepts discussed in the previous chapter, the impetus for any major social movement originates from specific orientations within a clearly defined time frame, and socio-economic conditions combined with cultural values provide standards for changes and reforms. This point can be clearly observed in the changes in Chinese higher education.

Chinese education has experienced drastic changes since the transplantation of various Western educational structures or models from the beginning of the twentieth century. There have been experiments in introducing Japanese, German, American, and the Russian approaches to institutions of higher education. Each change brought with it changes in social customs and ideology. Each time the proposed reform usually fundamentally and completely negated the previous system. It would seem that no other country in the world has dared to change its system of higher education as frequently as China.

Since it is from the traditional institutions of education that the current form of Chinese education has developed, change issues cannot be discussed without reflections on China's tradition. Although various new forms of higher education have been tried, the influence of the earlier, traditional Chinese education has persisted. To understand what has occurred in Chinese higher education, it is necessary to reflect on the tradition and to trace the evolution of higher education therefrom. Chapter Three and Four will trace the reform efforts and show how influences of tradition have withstood the invasion of new ideology and customs. The sources of the historical facts of China and research findings used in these two chapters are drawn mainly from Gao (1990), Shu (1978), Guo (1987), Hayhoe (1984, 1986, 1987, 1989, 1992, & 1993), Liu (1990), Liu (1991), Zhu (1990 & 1992), Cleverley (1991) and a number of recent newspaper articles and reports in China Daily, 1995.

Confucian Philosophy: A Framework of Knowledge

It has been commonly agreed by Chinese scholars that in ancient China, Confucianism was the leading influence in education from the Spring-Autumn Period of around 470 B.C. to the end of Qing Dynasty in 1911. Confucianism is a term that represents the philosophy of the Confucian school (*rujia*) which was initiated by Confucius (551-499 B.C.) and developed by successive Confucian scholars, such as Meng Ke (372 B.C.-289 B.C.), Dong Zhongshu (179

B.C.-104 B.C.), and Zu Xi (1130-1200), to name a few major ones. The imperial court favoured this philosophy, and promoted it during the long years of the middle ages as "classic learning" (*jingxue*). The reasoning logic of this philosophy thus became the nucleus of the Chinese way of reasoning. Gao (1990) found that this classical philosophy had become an established style, or a "structure" of thinking (Hayhoe, 1989), of traditional Chinese reasoning which he defined as "the Confucian philosophy- based reasoning inclination". In the long Chinese history, this reasoning style was gradually entrenched in the culture, implicitly understood by the people, and decided all structures of ancient education. The core of this reasoning is the dialectical. In the view of Confucian philosophers, subjectivity and objectivity are of the same origin (*tiyong yiyuan*, or *tiyong buer*). Subjectivity and objectivity are not distinguished as two different ends of a continuum as they are in the Western subjective-objective dichotomy. According to this dialectical epistemology, nature and its phenomenon or structure and function are different but at the same time united, confronting each other instead of breaking into two parts. This is the decisive stance for all areas of education.

Having this dialectical prerequisite, Gao (1990) identified five major conceptions that share the same dialectical stance and shape the framework of education. The first is the concept of the universe and man. Grounded in that dichotomy, it was thought that the universe and man are united (*tianren heyi*), meaning that nature and man are interlinked instead of separated. In Western terms,

subjectivity is blended into objectivity, or objectivity is intermingled with subjectivity. This leads to a belief that since nature and man are an interlinked unity, natural law (*tian dao*) should be interrelated to social law (*ren dao*, which also means the laws of human ethics). According to this relation, social law originates from natural law, whereas natural law should reflect social law and human ethics, which is a subjective idealistic conception. Actually this is a personification and "ethicalization" of nature. As a result, the practice of moral reasoning partly substituted for the investigation of nature and the universe. When in a way natural law was understood from ethical law, ethics and morality gained a more than heavy portion of importance, and natural law of course lost its competitive importance. For this reason, ethics and morality became the main content of ancient education. The prime purpose of education became to promote the understanding of society, ethics and morality, the standards of which were talked about in the context of politics, for these were considered the inner consolidating forces of society.

The second conception proposed by Gao is the conceptual unity of epistemology and ethics (*renzhi tongyi*). In this context, epistemology means the study of the nature of society. The logic was that the study of social nature provides people with principles of reasoning. With these principles, people could follow moral codes, for moral behaviour was not arbitrary, but an action chosen from a principle that was accepted by an individual. As was

analyzed by Feng Qi (1983), "Ethical norms derive from principles of reasoning; the real moral behaviour is from consciousness; and this consciousness comes from rational knowledge" (cited in Gao, 1990, p. 15). Different from a pre-believed awareness of it-is-not-allowed-therefore-I-don't-do-it approach, this dialectical cognizance required an acquisition of social norms at the level of reason and knowledge so as to ensure a conscious behaviour. This corresponded with the accentuation of ethical and moral education, and provided an avenue of reason to achieve the aim. At the same time, it affixed moral factors to intellectual development and caged all academic activities in morality. The classical Confucian statement, "look not at scenes that are not rites, listen not to matters that are not rites, and utter no words that are not rites (*feili moshi, feili moting, feili moyan*)" (cited in Ding, 1991, p. 17) was virtually a biased notion that, favoured by the feudal emperor, excluded the possible evolution of opposite thoughts. What should be noted here is that the fundamental ethical norms were that the monarch is superior to the subject, the father is superior to the son, and the husband is superior to the wife (*junwei chengang, fuwei zigang, fuwei qigang*). These basic obligations are not violable, otherwise it would be immoral. Simple understanding of principles as such through reasoning was not sufficient; one had to mediate deeper in one's innermost being to erase his distracting thought of ego and human desire, and purify his mind.

The notion of unity of cognizance and practice (*zhixing*

xangji) is the third pair of dialectics included in Gao's major conceptions. This dialectics, on the one side, explains that activities of cognizance and practice are closely connected, implies that activities of learning and practice should be matched, and prescribes a pragmatic purpose of learning; on the other side, it understands that learning and practice are moral activities. To Confucianists, to learn is to learn morality or moral standard. Since morality is realized through practice or life, it is practical and practicable. Therefore, the dialectics of cognizance and practice are actually rooted in morality. Gao (1990) commented that the negative effect of this cognitive method was that it did not encouraging activities of seeking truth for truth's sake, or pursuing pure knowledge. In other words, this notion determined a pragmatic approach of learning through practice, but at the same time it did not support the development of pure academic study.

The fourth pair of Gao's dialectics is the unity of explaining the classics (*zhujing*) and creativity is a tradition that co-existed with the learning approach. The doctrine (*jing*), though concise and simple, was written by a sage and was thus unchangeable. It was honoured by the feudal rulers for political purposes as classics representing eternal principles of society and nature, and fabricated into scholarly thinking and the mainstream of Chinese culture. Having this premise, what was left to studying, teaching and learning was a choiceless explanation of the doctrines. Creativity was recognized only in finding new interpretations of the doctrine. The positive outcome, observed by

Gao (1990), was a strong uninterrupted cultural heritage which did not change even though dynasties changed recurrently, and an inner coagulability of the culture. The negative effects were seen in a monopolization of academia by the classics, and creativity seldom went beyond the classical value system.

The last dialectic conception observed by Gao (1990) is the ideal personality having both an inner intelligence combined with a dignity which was selfless, emotionless and desireless (*neisheng waiwang*), one that was as free as nature, with an ability to utilize externally this inner quality to the stability and prosperity of the country. Jin Yuelin (1985) explains that since

"the inner intelligence can externalize into enlightened arts of state management and governing, all philosophers would think that they were potential politicians. Their philosophical ideal could only be fully realized in state management and benefits it brought to the country".
(cited in Gao, 1990, p. 34)

Though unselfishness has always been a noticeable virtue of this culture, to what extent human beings could reach the highly idealized intelligence and dignity seems a puzzle, and is beyond the range of this thesis. Nevertheless, a strong political orientation was reflected in education. The purpose of education became to prepare candidates for official positions, and motivation to learn was to achieve officialdom. This, on the one hand, defined a strong sense of responsibility of Chinese intellectuals for the fate of the nation, but on the other, it led education further away from the pursuit of pure knowledge and the development of science, technology and business. It strengthened the pragmatic

aspect of knowledge; in other words, made knowledge purposeful. Besides, when the ideal personality coming from selflessness or egolessness was assessed in a moral and pragmatic way, individuals had no choice but an obligation which must be turned into a will to reach the ideal personality, and be persistent to this will. No room was left for an independent will, nor for an independent choice. Individuality was simply not in the vocabulary, for it could only be considered unethical and immoral.

To sum up, the unique dialectical epistemology has specified five corresponding conceptions which have, in a sophisticated way, defined the reasoning style in Confucian based philosophy, which in turn has selected the ethical, moral and political values of the society. Education, as a means of state control, exactly reflected these values, and served to strengthen them. For this reason, ancient education was morally and politically oriented, the influences of which can be observed in educational changes at a later time.

The Organization of Knowledge in the Feudal Period

It has always been a general notion in the dialectics that the function of content and form has a purpose; the content decides the form, and the form always fits the content but at the same time reacts to it. As has been noted in the previous section, the political need of the imperial court prescribed the political orientation of education. The Confucian ethical-moral oriented

social theories with their pragmatic principles of social-political order well served this purpose and, the Classic Learning, that is, the Four Books and the Five Classics dealing with practical principles of governing and managing a country under the guidance of morality, was thus enshrined as the only correct and appropriate content of education. This probably decided that knowledge was categorized as history, philosophy and literature, and excluded science and technology. The forms to fit the purpose were the Imperial Examination and educational institutions which aimed to prepare students for the examination, such as the *hanlin*, *guozixue*, *taixue*, and *simenxue*. These were learning institutions at a higher level, though not exactly higher educational institutions in a modern sense (Here only formal institutions, or government-controlled educational institutions are discussed; private institutions such as *shuyuan* are not included). The examination is also known as the Civil Service Examination, which was designed by the ancient educational administrators with the intention of selecting intelligent, talented and capable scholar-officials for the service of the Imperial Court. It required only literary articles on applied politics debated from the Confucian philosophical point of view and for this reason, it was also an expression of ideological control. Regarding the traditional Chinese government as the arbiter of, and a setter of standards for all social behaviours, Borthwick (1983) remarked that " This examination system was one expression of this concept of central power, for which ideological control was primary, administrative

secondary, and direct fiscal control - as opposed to a percentage of the take - relatively unimportant" (p. 65). The examination assisted to define educational institutions. Educational institutions were a means of state control, were centrally controlled in administration, were ideologically controlled by Confucianism, and transmitted the same knowledge structure: a constituent of ethical-moral oriented social theories and pragmatic principles all concerning the government and administration of a country. In fact the control was realized smoothly, for most educators at higher learning institutions were at the same time government officials at a distinguished rank. The knowledge structure or the content cooperated with the form and made the whole system well developed, powerful and systematic, neglecting, or perhaps ignoring, other equally considerably developed area such as mathematics, astronomy, medicine and engineering. Though technological institutions existed as early as during the Tang Dynasty (618-907), and science research and technological activities were very vigorous (Cheng, 1990), they never received sufficient attention from the state policy.

This section displays the frame of the pragmatic Confucian knowledge, a clear boundary between the classical knowledge which became "true" knowledge pursued by the intellectual elite, and other knowledge types mentioned above, which were treated as mere techniques inherited in the manner of apprenticeship. The consequences of this were determinant to the state in the long run.

The Impetus for Change and the Emergence of a Contradiction

The negligence of educational policy to pay equal attention to the development of science, technology and business would be tragic in the long run. In the Ming Dynasty (1368-1644), China's bureaucratic system with its particular way of management and human relations, was already a highly developed, effective and powerful one, as was its education system. But this system was also becoming stagnant, conservative and ossified, and gradually losing progressive function, due to the decay of power. Its contribution to prosperity had been turning into a hindrance. Between the Ming Dynasty (1368-1644) and Qing Dynasty (1644-1911), the strength of the government was decreasing, the economy was receding, and foreign trade was receding. The country's door was gradually closed. In such an environment as this closed stagnant society, there were fewer demands for the advancement of science and technology, and it became less important for such education to develop. In contrast, this was the time when Western civilization was struggling to emerge from the Middle Ages and striving toward industrialization. Science and technology, the decisive constituents of the modern relations of production, forces of production, and the subsequent form of state and education, were developing rapidly in the Western world.

The primitive accumulation of capital in the countries which were in the early stage of capitalist development was undisguisedly aggressive, and the country with a weaker economy was overpowered

by the strong. The humiliating Opium War of 1840 forced the China's door open, smashed the self-illusion that China was a powerful country, and awakened scholars' anxiety about their country's being. In comparing rifles with swords, engine-driven warships with sail boats, and the telegram with mail horses, some of the startled scholar-officials strongly felt their backwardness in science and technology (Huo, 1990). Their reaction was first reflected in the Modernization Movement (*yangwu yundong*), a series of activities made by the reformers to introduce techniques of capitalist production, initiated by comprador bureaucrats in the latter half of the 19th century in order to preserve the feudal rule of the Qing government. Such activities included importing foreign technology, establishing machine factories, and promoting commodity production, with a military emphasis. Soon afterwards, the reaction was seen in education reform, the prime aim of which was to save the country. Educational institutions that would transmit knowledge and technology for making military equipment that could resist foreign aggression were seen as an asset. The first new higher educational institution, *Jingshi Dongwen Guan* was set up in 1862, and the Fujian Ship and Management College (*Fujian Chuanzheng Xuetang*) in 1866. Other higher industrial institutions (*gaodeng shiye xuetang*), law institutions (*fazheng xuetang*), and women's teachers' colleges (*nuzi shifan xueyuan*) also came into existence. At the same time, private and Western-financed universities were also allowed to appear. Qilu University was founded in 1864, Yenching University in 1870, St. John's

University in 1879, Lingnan University in 1888, the University of Nanjing in 1889, Suzhou University in 1900, Nankai University in 1904, Fudan University in 1905 (Li, 1954, Table 1). These educational institutions, whatever types they were, paved the way for the first Chinese modern education system. As was noted by Li (1954), the introduction of modern education started with higher education: "Many higher technical schools were established to meet direct needs in technology. The lower schools existed not for themselves but for the purpose of preparing students for these higher schools and universities" (p. 5). The knowledge structure transmitted by all these institutions included not only science and technology, but also values along with them. In many ways, it sowed the seeds for the destruction of the feudal dynasty.

In 1898, the thrust of industrialization triggered a fervent debate among reformers such as Kang Youwei, Liang Qichao, and Tang Sitong on one hand, and the conservatives on the other, on whether a Western system should be adopted. The debate was not an academic one, but an effort of reform closely related to education. One of the major targets of the reform was the educational system: to abrogate the Imperial Examination and establish science and technology oriented modern schools in order to survive as a nation. This challenge touched the marrow of the feudal system for the value system brought by the scientific outlook was democratic in essence, and the Civil Service Examination represented the tradition of autocracy. Though the Reform Movement of 1898 was unsuccessful, it was not in vain. Finding no choice under the

pressure of the new world situation brought by industrialization, a compromise was extracted from the less obstinate conservatives. This was the idea of "Chinese learning as the principle and Western learning as the facilitating means" (*zhongxue weiti, xixue weiyong*), which meant to preserve Confucianism and the old system while importing technology to serve China.

This probably was the first emergence of the contradiction between Western and Chinese knowledge (Hayoe, 1989). The contradiction was practically a clash of values, rather than an obstacle of machinery or technology. It was a dilemma between applying the Western knowledge to serve economic development and keeping the social order based on the Confucian philosophy (Hayhoe, 1992). Explanation of this conflict might be multidimensional, but an important one was the historical stage of social development. China was then still a feudal society, while industrialization represents a transition toward an upgraded social form in the evolution history of civilization, and this is probably the reason that the term "industrialization" is quite often used as a synonym for "modernization". This was a time corresponding to the 18th-century Enlightenment of the Western world. Modernism, with positivistic rationality as its roots, was in a state of formation, and years later took the place of Romanticism which had a belief in theology and nature. Modern philosophies, new social theories, the positivistic concept of knowledge, the humanistic recognition of man, scientific rationality, the pursuit of materialism and capital, and the consequently changed form of the state, all

confronted China, a static feudal society. In this society, the sage's words were unchangeable, the ideal personality was selfless and desireless, and democracy and freedom were against ethics and morality. However, the historical perspective only partially captures the phenomenon of the persisting contradiction. The contradiction has remained, even if the imperialist dynasties governed by the Confucian ideology perished and society changed several times afterwards.

The Early Modern Higher Educational Institutions:

A New Form with Old Contents

The development of the initial modern higher education was the combined effort of the government, local gentry, and foreign missionaries which were mostly Christian churches from North America and Europe. The government's role in the initiation was to mandate the creation of a modern education system and later prescribed it to follow the Japanese model. During the Hundred Day Reform of 1898, the reform-minded Emperor Guangxu issued orders several times that it was the obligation of the local gentry to establish technological colleges. The technological colleges were efforts of the local gentry who were themselves government officials, such as Zuo Zhongtang, the creator of the Fujian Ship and Management College (*Fujian Chuanzheng Xuetang*). Li Hongzhang, Liu Kunyi, and Zhang Shusheng, with others, later founded the Artillery College of the Jiangnan Production Bureau (*Jiangnan*

Zhizaoju Fushu Caopao Xuetaang), Guangdong Technology College (*Guangdong Shixueguan*), Fuzhou Telegram College (*Fuzhou Dianbao Xuetaang*), and Shanhaiguan Railway College (*Shanhaiguan Tielu Xuetaang*) (Huo, 1990, p. 224). Graduates from these colleges were given important positions in newly organised government enterprises.

Though organized by government officials who were Westernizers, these colleges were subject to the central government in administration. In 1902, the government announced the legislated "Guidelines for Preparatory Colleges" (*Qinding Gaodeng Xuetaang Zhangcheng*). It showed an imitation of the Japanese educational system. Article Four states:

The Japanese preparatory college is divided into three sections. One is for law, human science and art; the other is for science, applied science and agriculture; and the third is for medicine. Therefore, universities should divide into sections and have the following curricula: politics, literature and arts, science, agriculture, technology, commerce, and medicine... (Shu, p. 538)

"Guidelines for Universities" (*Qinding Jingshi Daxuetaang Zhangcheng*), another legislature for higher education based on the Japanese system, was announced in the same year. The fundamental belief of these guidelines was the concept of preservation: "Chinese learning as the principle and Western learning as the facilitating means". The second section of the guideline states:

The Chinese classics teaches that ethics and morality precede activity; foreign schooling gives special emphasis on moral education besides knowledge and physical education. The foundation for Chinese and

foreign education is similar. Therefore, all universities and schools inside and outside the capital should pay more attention to Ethics and Morality than to other subjects, for these are the essentials for a qualified personnel. (Shu, p. 549)

This implies a purpose of maintaining "Confucian familial and state values" (Hayhoe, 1992b, p. 168) while promoting economic modernization and national self-strengthening. Both of these two guidelines also demonstrate an analogous concern: a control by the government of both content and form. They have detailed descriptions of goals and objectives, content area, division of subjects, institution size, number of students, the college proper, source of authority, and level of funding. They also detail the curriculum: the content and organization of what is taught, the selection of teachers and administrators. Loyalty to the emperor, honouring Confucianism, and practical and military purpose were emphasized. To put it simply, in curriculum there was a combination of the classic learning and scientific knowledge; while in organization there emerged an embryonic form of the modern university. This reformed educational system in China was considered by the public at that time to have only a modern form. However, though old contents were still emphasized and the traditional concept of organization still remained, in the legislature, Western subject areas, such as science, engineering, agriculture, commerce, medicine, law, and arts, for the first time entered into the curriculum. Therefore, the knowledge structure and the organization of knowledge had undoubtedly changed: content areas besides Confucian politics and history gained their

legitimacy in knowledge, and universities and colleges took the place of traditional-type higher learning institutions: the *guozijian* and the *daxue*. Besides, private universities founded by the local gentry, such as Nankai University, were also in their initiating stage. The universities mentioned in the previous section, Qilu, Yenching, St. John's, Lingnan, Suzhou and Nanjing were all Christian universities. According to Li (1954), before the downfall of the last dynasty, there were 12 denominational Christian universities in China. In administration, financing, and belief, these universities functioned more in their own way, and the knowledge they transmitted was without much Confucianism.

At this time the Imperial Examination was still functioning as a means of preserving Confucian value and order. The official degrees, *Xioucai* (budding talent), *Juren* (recommended person), and *Jinshi* (advanced scholar), were still granted by the government on the traditional track. Obtaining a government degree and position was still very attractive and influential, not only to the conservative traditional scholars, but also to some of the graduates from technological colleges who had already prominent achievements in their own field, for pride did not come from the scientific schooling. But this did not last long. The abolition of the Imperial Examination was soon announced in 1905.

The introduction of modern knowledge transmitted through various forms of modern schooling had an undeniable role in accelerating the downfall of the Manchu Qing Imperial Dynasty in 1911. Along with the collapse of the imperial system, state

Confucian values disappeared at least in form, and there arose the need of a new value system which would be closely connected with the new form of the country: the nation-state. The "republic" as a nation-state was a completely new concept, for people at that time were used to the idea "dynasty" or "imperial court" (*chaoting*). The value of the first form of the nation-state was defined by Sun Yatsen in his Three People's Principles (*Sanmin Zhuyi*) which included nationalism, people's livelihood, and people's rights. These political principles were the initial Chinese version of the democratic experiment. With this background, what confronted education was to modernize it by changing educational goals, creating a suitable institutional system, and reforming curriculum. In this way, education would conform with the new form of the state, and serve the task of modernization by developing the economy, expanding national capitalism, and strengthening national unity.

The first appointed Minister of Education of the Republic, Cai Yuanpei, who had studied in Germany, made an effort in 1912 to abolish the state-controlled Confucianism-oriented educational system. He declared that "Loyalty to the emperor is contradictory to the republican idea and worship of Confucius is contradictory to liberty" (cited in Tian, 1990, p. 212). He initiated state-army-civilian education, pragmatic education, moral education for civilians, world outlook education and aesthetic education, which were new strategies of educational adaptation. These five strategies, combining political and non-political aspects of

education, showed a pragmatic orientation for schooling. But his concept of the university differed from what was already established. In Cai Yuanpei's view, the university should be an ivory tower based on the hierarchical German university tradition. When explaining the reasons for his reform of the university, he stated that "Compared with the European higher educational system, the German university is the most proper" (Cai, cited in Shu, 1978, p. 5). In the knowledge area, pure science, either science or social science, would be better if distinguished from applied science, hence in form, universities of pure science would be better if distinguished from colleges of applied science. This idea was practiced in Beijing University at his time. What was most significant was his definition of the university in relation to knowledge areas. He regulated that a higher institution "had to have one of the three following combinations: arts and science; sciences combined with engineering, agriculture, or medicine; arts combined with law or commerce" (Hayhoe, 1992b, p. 54). Classical schools at universities were closed. This not only meant that science was legitimized as true knowledge, but also showed a firm abolition of the traditional knowledge structure. This reform, though its implementation suffered from the restoration of the notorious Yuan Shikai imperial court in 1912 which reintroduced Confucianism, was a milestone for the modern higher institutions. In the intellectual sector, the restoration of the ancient ideology triggered a nation-wide cultural discussion on the conflict between Confucianism and modernization, which reached its climax in the May

Fourth Movement of 1919.

**The Cultural Debate in the May Fourth Movement:
Evidence of an Effort to Forge a New identity**

The May Fourth Movement is usually defined as an anti-imperialist, anti-feudal, political and cultural movement. It occurred in 1919 when the country was more or less under the warlords' control. In its initiate stage, it was known as the New Culture Movement which was virtually an academic debate with political and educational concerns. Scholars such as Cheng Duxiou, Li Daozhao, Cai Yuanpei, Lu Xun, and Hu Shi discussed the contradiction between China and the West, the traditional and the foreign, the conventional and the unorthodox, freedom and feudalism, and democracy and tyranny. According to Liu Qi (1990), these scholars first considered the contradiction as one between different geographical ethnic cultures, that is, the Eastern and the Western, but soon realized the discrepancy was between the ancient and the modern. Cheng Duxiou pointed out, in his famous work, The French and the Modern Civilization, that the Chinese-Indian civilization, "appearing modern, is actually ancient, for its quality has not distinguished itself from that of the ancient civilization" (cited in Liu, 1990, p. 247), admitting that the Chinese civilization was falling behind at this stage. The introduction of Marxism provided another vision that the contradiction was also a conceptual dissension between

industrialization and a stagnant agricultural economy. The scholars realized that the Confucian ethics and morality were the core of Chinese culture and did have a confining effect on thinking and creativity. But at the same time, in examining factors that caused the decline, they discovered that it was lopsided to consider Confucianism and feudal tyranny as the only obstructing force impeding development. The type of economy in China was also a decisive factor. Li Daozhao remarked that "the economy is a fundamental condition of life" (cited in Liu, 1990, p. 255). In Thought on National Education, Yun Daiying observes:

The generally understood Western culture actually implies the Westerners' psychological life in the background of machinery production and mass production... The natural and poised Chinese culture is a production of a stable, simple micro agriculture and micro industry for thousands of years. (cited in Liu, p. 256)

From this understanding, it was subsequently thought that industrialization grounded on science could make a stronger economy, which in turn would promote new social activities, and produce a new social form based on a new social contract. The essence of this contract was democracy, which China did not have. Since modern Chinese civilization had not produced science and industrialization and its subsequent societal form and democracy, it must learn. Cai Yuanpei commented that "The absorption of another culture is like a human body breathing air and taking food. If a man cannot do this, he cannot maintain his health" (cited in Liu, 1990, p. 249). Here, precious aspects in foreign culture were compared to new nutrition for the blood. Chinese culture needed

them to revitalize itself. This implied a stance of "discarding the dross and selecting the essence" (a Chinese proverb), one that was ready to inherit the quintessence of Chineseness and that of the foreign culture. These scholars did not totally deny the Chinese culture.

On the other hand, the Movement also tried to criticize all values in the existing Chinese culture, wishing to see the emergence of a completely new value system. Zhu (1990) commented:

They [The scholars in the May Fourth Movement] dared to criticize, oppose, and struggle against every kind of authority, all forces that they saw as preventing China's progress toward implementing democracy and science, whether it be that of the dead or of the living, of warlords or of bureaucrats... Before they became divided into different groups, they brought about a shaking of the foundations of Chinese society more fundamental than that of either the Hundred Day Reform or the 1911 Revolution" (p. 196).

No matter if they tried to absorb or criticize, their venture of preserving the tradition, selectively preserving the tradition or shaking the base of the tradition revealed an effort shared by conservative, progressive and radical scholars: to find a way for the survival of the nation. In this light, it can further be understood as an endeavour to try to find a new identity in the formation of the nation in a new sense. The existing cosmological totality of the Chinese was bounded by the dialectical understanding of universe and man and its reflection in the political system, shared social values, the traditional ethical codes, the language, the myth of origin, the habit of customs, and the sense of history of "Huaxia" of which "Hua" was a general sense

of "Chineseness" emanating from the Xia Dynasty of 21-16 B.C. (Chun, 1994). This totality was broken along with the disappearance of the Qing Dynasty, by the invasion and "domination of Western imperialism and the sense of political humiliation and cultural degradation suffered as a result" (Chun, p. 53). Now the hierarchically stratified values of heaven and divine kingship and those previously shared social values disappeared or changed. Brought in by power, religion, or science and technology, the Western cultural involvement in Chinese society affected, together with the disappearance of the previous polity, the sense of identity. The necessity of forging a renewed national identity was apparent. In the context of national politics, the identity issue was identified in nationalism in the formation of a nation-state which was a modern concept that did not exist before. In the context of academic discussion, it was seen in the discussion of culture during the May Fourth Movement. Selectively preserving or critically inheriting and critically absorbing were the evidence of the venture by forging a new national identity of integrating the Chinese "essence" (*guocui*) and the essence of Western culture.

These scholars felt that education needed a thorough change for it was a critical means of shaping a new identity. It should also be remembered that traditionally, education had a political orientation. A new identity needed the "true spirit" of Western culture, that is, the essence of modernization, which was thought to be science and democracy, and the "precious essence of tradition" (*guocui*). The avenue to approach this new identity did

not seem to be transparent, for Western theories and "isms" poured in, each suggesting a different way. Under this situation, the scholars realized that no theory should be considered an absolute approach to modernity and become tyrannical. Cheng Duxiou (cited in Liu, 1990, p. 259) maintained that since no theory was perfect and no theory could cure all diseases, it was imperative to learn from all heritage that was precious, whether it belonged to China or another culture. Therefore, Cai, with his broad definition of curriculum in mind, practiced his policy of academic freedom and embracement of all theories in Beijing University, starting from 1917. His attempt was also thought to have contributed to the freedom of debates in the May Fourth Movement. Marxism was introduced and studied in universities with the outbreak of the Russian October Revolution. Rousseau, Pestalozzi, Montessori, and Washburne were read. Dewey was invited to lecture first in 1919, and his influence in education became strong in the following years. Liberation of individuality was sought. Liang Shuming, who was thought to try to preserve Confucianism, later went to the countryside to experiment with civilian education; and Mao Zedong experimented in Hunan Self-taught University in Hunan Province, inspired by the independent, private Chinese *shuyuan*¹ where academic freedom and autonomy were established as a tradition.

¹. Shuyuan, "Shu" means books and "Yuan" means institution, was the name for private educational institutions. This form of education came in to being in the early Song Dynasty (960-1127), and changed at the end of Qing Dynasty (1644-1911) into schools (Wang, 1987, p. 486).

These experiments meant that changes happened not only in the curriculum of education, but also in the idea of types of higher educational institution, the continuation of which would be seen decades later.

Summary

This chapter has shown that during the long years of the Chinese feudal society, Confucian philosophy was favoured by the rulers of each dynasty and was enshrined as the classical learning, which in turn prescribed the framework of Chinese knowledge and the form of educational institutions. Toward the end of the nineteenth century, science and technology imported from the West broke the relative balance of the ossified society. As a result, conflicts appeared. On the one hand, the government wanted to restore social order through education and tried to modernize the organization of knowledge; but on the other hand, the transmission of modern knowledge made the controversy of values between the modern and the traditional even more uncompromising. The transmitted modern knowledge became one of the important causes of the collapse of the feudal imperial system. However, the conflict did not vanish with the feudal system but remained. Restoration of Confucianism was attempted, though it was not successful.

The Western-type university was introduced to China through the government, local gentry and missionaries. The official form of the university was patterned on the Japanese education system.

During this period, Cai Yuanpei, an outstanding Chinese educator, applied, at the prestigious Beijing University, his influential ideas on higher education based on the German university tradition. Missionary universities functioned mainly on their own. Therefore, in the official educational system based on the Japanese pattern, there was an German influence and a lingering trace of missionary involvement in the early higher education system.

In the intellectual sector, the conflict of values generated the debate on the Chinese culture in the May Fourth Movement. The criticism of the cultural weakness and backwardness at this historical stage theoretically cleared the way for the continuation of modernization and modernizing the organization of knowledge. The movement had an open attitude toward various forms of modern knowledge, which implicitly enabled a new experiment on the American education pattern in the following period. In this light, it can be said that this is a period of transition from the traditional organization of knowledge toward the succeeding experimentation of modern education.

CHAPTER IV
INSTITUTIONAL EXPERIMENTS FROM THE REPUBLIC
YEARS TO THE PRESENT (1912-1995)

Change is ubiquitous and relentless, forcing itself on us at every turn. At the same time, the secret of growth and development is learning how to contend with the force of change - turning positive forces to our advantage, while blunting negative ones.

Fullan (1993, p.vii)

The initial borrowing of modern education patterns from the west (primarily Japan and German) changed at least the form of Chinese education. It started the long journey of experimentation of making Chinese educational institutions better suit the content of modern knowledge structure, or modern subjects. In this long journey, tradition, or the "Chineseness" has always been in contradiction with the "foreign experience". This is probably the reason that changes in Chinese higher educational institutions have been so frequent. Already there had been experiments with Japanese and German educational models. In the period from 1912 to the present, there have been five identifiable stages in the development of higher education in China: the American stage (1912-1951), the Russian stage (1952-1966), the revolutionary Chinese stage (1977-1984), the restoration stage (1977-1984), and the

current reform efforts (1985-present). All these experiments show an effort of adaptation to economic needs, political demands, and a continuous endeavour to forge a new identity. This chapter will review and analyze these reform efforts.

Deweyian Pragmatism and the American Influence: Pursuit of Modernization

The 1912 American-linked educational reform, though related to the fact that the State Education Committee then was constituted mostly by returned overseas students from the America, was a choice consciously made. According to Cheng (1987), though the system was revised several times afterwards, it was in function till shortly after 1949 when there was a change of ideology and social structure. An important revision along American lines occurred in 1922, by legislation of the Federated Educational Association. The outcome of this reform was again observed more in the curriculum area. Seven objectives were standardised in the curricula for secondary and higher education: education for social change, democratic education, individuality, economic livelihood, universal education, local adaptation, and education for life (Cleverley, 1991, p. 52). These objectives were to be covered in six curriculum areas which were: language and literature, social sciences, natural sciences, mathematics, fine arts and physical education. Compared with the objectives and contents defined in the initial experiment based on the Japanese and German educational

system, the definition of knowledge was broadened. Hayhoe (1992c) commented that "In contrast to the artificial introduction of supposedly 'modern' subjects in an earlier period, this was a time when educators tried to work out knowledge patterns suited to China's own context" (p. 55). Indeed, this change showed more awareness and perception of what should be done, and even today, it is not meaningless.

To look for the motivation for this change, one must note the fact that the Japanese experience did not appear as efficient as was expected by the Chinese borrowers, though practically this was correlated with internal problems such as the conflict with tradition or an inadequate understanding of modernity. The other was the situation in the country: domestic modern industrialization was in its embryonic stage, foreign intervention was threatening, and the economy was weak. The vision of forging a new identity perceived in the May Fourth Movement was still a vision, for it still remained in discussion. Since the demand from the country for modernization was compelling, to look for something more efficient in education naturally became a necessity. The progressive Deweyan educational philosophy, with a clear orientation of pragmatism and a ready educational system which was influenced by, or perhaps produced, this philosophy, was welcomed to China. The most attractive idea was probably Dewey's view of the relation between democracy and education. In his book Democracy and Education, Dewey (1946) stated his philosophy that the growth of democracy proceeds with the development of sciences and

industrial reorganization. This fitted well with the main idea from the May Fourth Movement that the underdevelopment of China had been caused by the lack of democracy and science, and the consequent desire to have them. As well, to some extent, it fitted the Three People's Principles which were composed of nationalism, people's livelihood and people's rights. Likewise, in a time when societal members considered that forging a new national identity was crucial for survival, and national survival was not a topic for casual talk, Dewey's ideas became very helpful. Particularly appropriate were Dewey's explanations of life and education, such as "Life is a self-renewing process through action upon the environment", "Continuity of life means continual re-adaption of the environment to the needs of living organism", and "Education, in its broadest sense, is the means of this social continuity of life" (Dewey, 1944, p. 2). Additionally, the concept of "education is life" (ibid) implied that education was not a series of sophisticated political tactics, neither was it a means for an official position as most of the pursuers of education at the time thought, but a tool of life and a means of societal continuity. This view certainly admitted the opportunities provided by education for all members of society, a fact already considered a must for social development, as shown in "people's livelihood".

At the same time, while practising his idea of free, pure academia, and embracement of all theories in Beijing University, Cai, 1992, called for university autonomy in his On Educational Independence. He advanced his principle that "Education should be

given to educators and independent of political parties and religion" (cited in Cheng, 1987), the influence of which was thought to come from the German university tradition. This, together with his idea of pure theoretical studies in universities and technology or techniques in special colleges, was only partially implemented due to the political confusion of the time (Yuan Shikai's restoration of the imperial court). His effort, according to Hayhoe (1989a), was that "on the one hand, the basic and applied fields were integrated in the American tradition. On the other hand, attempts were made to maintain an academic standardization that reflects European models " (p. 64).

Sun Yatsen's blueprint for a new China (elimination of warlords, education of the masses for democracy, and establishment of a democratic state based on local government), was attempted after the Nationalist Government overcame the warlords in the late 20's. From 1928 to 1937, detailed regulations were continually prescribed for all government, private and denominational primary and secondary schools, colleges and universities. The Three People's Principles were the foundation of education, and became a compulsory course. Meanwhile, a highly centralised organization was adopted by the Nationalist Government. The aims of education were revised to stress national purpose and professional education including work skills, the training of body and mind, scientific education and military training. Higher educational institutions were also required to apply these practical aims. The 1929 legislation rationalised tertiary education. It decreed that higher

educational institutions must have at least three colleges, and one of these would be in basic or applied science, agriculture, or medicine. It also mandated that an educational institution with a narrow professional curriculum would be defined as a college. Following this, prescriptions of university enrolment intake rate between social science and science were given, and the geographical re-distribution of higher educational institutions was started.

The value conflict remained. It was difficult to bring the American and Chinese values together. Applied science and pragmatic education were useful for economic development, but the liberal and progressive concept of knowledge introduced from America was not deemed by the government leaders as secure for maintaining social order. As a result, the Nationalist government invited European educators from the League of Nations Commission to assess the whole education system. The reason seemed to be that in appearance, the European hierarchical system of university had some similarity to the hierarchical order of traditional Chinese society and Chinese institutions of higher learning. The result of the investigation showed that the system had not satisfactorily satisfied its rationalization of geographical distribution, finance and curriculum. Most of the universities were in big cities or richer areas such as Beijing and Shanghai, while sometimes there were none in inland or outlying districts. The ratio between social sciences and science was unbalanced and suitable domestic curriculum materials were lacking. University graduation requirements were not standardised and academic standards were inadequate; and teaching

and research were separated. Recommendations were made by the European educators to improve these defects, such as the establishment of a national university council for the rationalization of geographical distribution, strategies selected for finance, and approaches for curriculum balance. Many of these recommendations were adopted and the improvement was obvious especially in academic standards, and some in geographical distribution. Although the system itself did not change, the ratio between pure science or theoretical studies and applied science was changed with an emphasis to the latter. This may be viewed as a strategy of the Nationalist government to deal with the conflict between modernization and maintaining traditional social order.

It must be noted that during the Nationalist era, state universities coexisted with private and missionary ones. On the one side, state universities were adjusting themselves to modernization requirements; on the other hand, private and missionary universities functioned independently and contributed to the modernization of knowledge structure through their participation in higher education. In 1948, of the total of 207 universities, 79 were private and denominational. During the Sino-Japanese War, most of them moved to the inland districts such as Sichuan and Yunnan to ensure the continuity of education. The private and Christian universities differed from the state universities in that the former was independent from the government in finance and had autonomy in its administration and curriculum. Many of the private and Christian universities were American in

form, for they were usually run by churches from North America or educators who had studied in the United States.

It is observed that during this period, there was one phase during which universities had more freedom in academia and administration. This phase was during the political diffusion caused by the war fought between the warlords. After that, in the process of pursuing modernization and efficiency, the rationalization of education done by the Nationalist government, though contributing to the foundation of modern higher education, brought strict political control over not only administration but also teaching and research. Cleverley (1991) observes that the rationalization was also a measure employed especially to deal with colonization, since missionary universities were seen as agencies of colonization. This point might be understood as a result of imposing a visionary identity in the process of forming a nation-state. According to Chun (1994), after China lost its old form of society, that is, the feudalist imperial system, the primary task of the Republic was to construct

a bound polity drawn together by a set of master symbols, shared beliefs (or myth) and moral consciousness; that is to say, a set of horizontally universal values that could replace the hierarchically stratified values of Heaven and divine kinship that buttressed a previous culture order. (p. 52)

The new values were prescribed in the Three People's Principles and were different from the statement made famous in Lincoln's speech at Gettysburg in 1863 that the government is "of the people, by the people and for the people" (World Book, 1979, vol. 20, p. 77). The

main difference between the two statements is that the former is adapted to a feudal society where feudalist tyranny had been the tradition and national survival in a changing world has become crucial rather than a statement of democratic principles. The approach used to achieve the new values was hasty and old. It became a series of ideological campaigns, and reaffirmed a stronger political orientation of education, as was the case in the feudalist dynasties. The later New Life Movement (1927-1949, a social education campaign launched by Chiang Kai-shek who was the second president of the Nationalist government) showed a clearer intention of keeping the Confucian values and traditional social order, and suppressing independent, critical thinking. A trace of one set of thoughts, one belief, under one emperor was still sensed. Though a new identity was intended to be shaped, and was tried at least in form, the reasoning style based on Confucian philosophy, or the structure, was still the mode of thinking and conduct of most people.

The Imitation of the Russian Model:

Another Form of Modernization

The duplication of a foreign model worked well in the beginning of the nation's modernization and showed the aim of pursuing efficiency of economy and industrialization which had already been seen in the Nationalist era. Surprisingly, the endeavour of social adaptation seemed to go to extremes and left a

contradiction that was barely reconcilable. Before 1949, although education did try to reach the lower class sectors, a big gap still existed between the uneducated and the intelligentsia. Both parties had little understanding of each other's wants. In other words, the pursuit of modernization was still, to some extent, a luxury which existed merely in academic discussion among intellectuals and in materialism enjoyed by the privileged class which was defined by socialists as big landlords, state capitalists and compradors. It had little benefit for the majority of people who lived in poverty in city slums and rural areas. In this light, modernity had not been achieved in many ways and the national identity quest was not even applicable when most people, especially the poor, were not even conscious of it. Social justice and social equality were largely ignored, the result of which was a serious social conflict between the rich and the poor. The Chinese Communist Party (CCP) represented the demand of the oppressed majority for justice and equality, in a society which pursued freedom of development only for a small elite. These ideological and social conflicts accounted in part for the total abandonment of the American educational model after 1949.

After the founding of the People's Republic by the Chinese Communist Party in 1949, the task of modernization to make China one of the economically strong nations still remained. The highest priority for the People's Republic was to restore the country's economy and social base which had been half-paralysed by the Sino-Japanese War (1937-1945) and the Civil War (1946-1949). Ideological

differences between the new government and the West caused an international economic and diplomatic barricade of the new government, making the nation's economic development more difficult. A partial result of this barricade was that the new government was more eager to rely closer on its neighbour and comrade in arms, the Russians. In education, the ideological differences between the new and old governments and between the new government and the West generated a belief that the universities of the "old society" represented all decadent thoughts and thus were only fitting for serving imperial, capitalist and feudal ends. However, the revolutionary model (created during about 1936-1949 in Yanan, the headquarter of the Chinese Communist Party during the Nationalist period), which followed immediately after this period, was not considered suitable for the complicated process of construction of the socialist society at this time. The lack of knowledge or experience of modern higher education urgently demanded an example that could be directive; and the want of a large number of specialists and trained technicians for socialist economic construction underlined the need for an effective educational system. Consequently, the close relationship with the Soviet Union, although mainly ideological, invited Soviet assistance with education, and also with industry and agriculture.

Most of the private and missionary universities were nationalized during 1949-1951. In 1952, the newly established Ministry of Higher Education started a reform of the entire higher education system. Extensive consultations with Soviet educators

produced conclusions that: the distribution of universities was uneven, with few universities in inland and remote area; that the types of university of the old system were too limited to meet the great demands in engineering, medicine, agriculture, forestry and teacher training; and that the majority of subjects were in the social science instead of applied science. According to Cleverley (1991), the Russian opinion was that "Chinese universities should turn out not abstract scholars but practical specialists" (p. 129). The Ministry of Higher Education realized that the task was to adjust higher education to economic construction instead of having knowledge for its own sake.

This time, reform occurred again in both institutional structure and knowledge structure. It was also large-scale and nation-wide, taking several years to implement. The reformed higher education became a duplication of the Soviet structure. Universities were categorized as comprehensive university, polytechnical university, and the single-purposed specialized college. Comprehensive universities were devoted to pure science and theoretical studies, and to training specialists for research and university professors teaching theoretical knowledge. Polytechnical universities were required to offer disciplines in applied science and technology; and the single-purposed colleges would specialize in professional fields such as medicine, teacher training, foreign languages, physical education, mining, and forestry. The first category supplied the elite needs, seen in the assignment of jobs in prestigious government institutions, while

the latter two categories were for the direct purpose of economic development. Comprehensive universities were cut in number from 65 to 14, in order to reduce the amount of theoretical as opposed to applied knowledge. Many departments were eliminated in universities, and replaced by the Soviet-type specialties, or more narrowly defined discipline areas. The aim was to produce personnel who would remain all their working lives in the profession for which they were trained. The purpose was to produce trained personnel to meet the demands of economic development and industrial construction in China in the fastest way. To accomplish this, programmes and curricula became centrally planned. Curriculum guidelines for each course were prescribed in order to guarantee the implementation of centrally prescribed educational programs which consisted of 103 majors. The length of programs was reduced to four years, along the Russian line, and the former teaching materials were replaced by translated Russian textbooks.

The strategy of reform for this restructuring was unique. For example, the comprehensive West China University in Sichuan Province gave most of its faculties, such as English, law, and history to other universities such as Sichuan University. It itself changed into a small college of medicine, the single disciplined Sichuan Medical College. Beijing Normal University took over the Department of Education from the Chinese People's University, Yenching University, and Furen University in Beijing. Shanghai Communication University saw half of its staff reassigned to form a subdivision Xian Communication University in the remote city of

Xian, while the remaining part went to Shanghai Shipbuilding College. Xinjiang Medical College and Inner-Mongolia Medical College in the border area were set up by the government as new universities; and the comprehensive Lanzhou University and Inner-Mongolia University were strengthened by support from other universities (Liu, 1991).

The reformed system was radically different from the previous one and reflected a total abandonment of the American model. The centrally planned pattern turned out again to be hierarchical and suited the Chinese ideal of social order. There was also an exceptional increase in the number of universities and colleges, from 207 in 1949 to 1251 in 1961 (Liu, 1991, p. 2 & p. 56) leading to state funding problems and a decline in standards. Scholars have different opinions about this change. Yao (1984) applauded the change, and commented:

China has founded an education system which suited the demands of construction and development, and there were improvement in both quality and quantity. The system produced many specialists needed urgently in the developing economy, and thus satisfied the requirement of educated personnel for the first five-year plan. It had also established the base of manpower for developing science, technology and the economy. (cited in Liu, 1991, p. 25)

But Hayhoe (1989a) argues that the universities founded during the Nationalist years were well established, modern, scholarly institutions that were China's own choice and should not be considered as connected with foreign political, economic and

military involvement. She felt that it was a mistake to have abandoned them:

Probably one of the most serious mistakes of the new Communist regime in 1949 was to turn their backs on the heritage left to them in the Nationalist universities, condemning them as semi-feudal and semi-colonial rather than seeing in them patterns that had nourished a new generation of scholars, many of whom had been supporters of progressive and even radical causes. (Hayhoe, 1989, p. 67)

These differing opinions illustrate the gains and losses of the reform. The biggest gain was the rationalization of the geographic distribution of higher education, the consequent enlargement of the scale of higher education, and increased educational opportunity. This was a national priority and had not been realized by previous reforms. During the period between 1949-1957, universities and colleges were distributed to every province; higher learning institutions increased from 207 to 229 (Zhu, 1990); and higher education enrolments increased nearly four times to 441,000 (Cleverley, 1991). However, the blind, wholesale imitation of another foreign model was more thorough than it had been in previous reforms, and the past traditions, either the original Chinese or the moderately modernized ones, were completely forgotten. The neglect of past traditions revealed a thirst for modernization, a negative perception of tradition, a thinking style or structure that was not truly scientific, and an ignorance of the inner laws of academic development and especially of education's interrelation to culture.

Although the Soviet Union had the same socialist ideology as

China and the Soviet model matched China's quest for modernization, the desire within China for an independent Chinese national identity did not disappear. Mao re-emphasized the CCP's policy in 1956:

Our policy is to learn all merits from all countries, but the learning is not blindly imitating, copying or mechanically transplanting, instead it should be analytical and critical... the same stance should be taken toward learning from the Soviet Union and other socialist countries. " (cited in Liu, 1991, p.29)

Mao concluded that Chinese education had duplicated foreign models for the first eight years of the People's Republic, but it was not until his On the Ten Relations was published in 1965 that China started to find its own way (Mao, 1986, p. 246). This was probably influenced by the fact that ideological similarity and political alliance could not substitute for the true desire for a national identity, or "Chineseness". The desire for a national identity comes from the facts that China had its own strong civilization; that this civilization is different from the Western civilization; and that its philosophy, social science, administration system and economy had developed to a high degree. On one hand, these facts were a source of strong national pride, for its citizens recognized its long history and great accomplishment; but on the other hand, the sense of pride makes this nation feel lost in its backwardness in the modern times. It is the sense of pride and the sense of loss make the desire strong for a new national identity. Therefore, Communist ideology led to a different concept of national identity, but the sense of "Chineseness" remained. In examining the issue of

national identity, it is clear that territorial integrity and ethnic identification were not a problem for the nation at this stage. There was a sense of origin and habits of custom. However, after the Nationalist ideology had been negated by the Communist, a new political boundedness or totality and shared social values along the vision of the Communist Party of China were still being formed. Citizens expected to have a sense of identity by means of a political agenda which will make the nation strong again.

Higher educational institutions, again, were responsible for adapting themselves to a social change through a reform. Implementation of an educational reform this time was even more compulsory than previous reform efforts had required. At the same time, it should also be noted that the persistent belief that China could and should have a new and unique Chinese identity attracted intellectuals' concern and support which went beyond political ideology and power struggles.

**The Revolutionary Model and Yanan Experience:
An Alternative Idea of Identity**

The experiment with the revolutionary model during the "Cultural Revolution" actually had its prelude after the reform based on the Soviet model. A fear that China could become dominated by the Soviet Union was felt before the Soviets' unilateral withdrawal of all its experts and technical assistance in 1957. The after effect was a strong desire for self reliance in

all areas, including higher education. Another fact that led to the resistance of foreign educational models, which has been neglected by researchers, is that education had not satisfactorily reached the vast majority of the poor people, despite the fact that by 1960 there were 1289 universities and colleges. Neither did the education system satisfy the ideal of absolute equality which had been produced by an agricultural economy and awakened by the promise of the proletarian revolution. Though historical factors such as foreign invasions, civil war and subsequent slow economic development are considered the major reasons for this inequity, an education system which was based on a foreign model remained a target of criticism and blame. It was believed that such a system could not serve well the political ends of China.

Mao announced in 1958 his basic conception on educational aims which has been familiar to every educator and used ever since: "Our educational policy must enable everyone who receives an education to develop morally, intellectually and physically and become a labourer with both socialist consciousness and culture" (cited in Liu, 1991, p. 40). Following this in 1958, in the policy area, the government announced the party's educational policy to be that "education should serve proletarian politics, it should be combined with production and labour, and for this reason, education should be led by the party". (cited in Liu, 1991, p. 42). In scale, the 229 universities and colleges of 1957 increased to 1289 in 1960, an increase of 462.8% (Liu, 1991, p. 44). Together with this, educational revolution started. Faculty and students went to

plants, factories and the countryside to integrate theory with practice. Meanwhile, workers and peasants came to universities to give lectures, and theories in various disciplines were challenged or denounced, from a political point of view. The revolution, however, representing an alternative vision of modernity (Hayhoe, 1992a), was not very successful, and was criticized afterwards as directed under leftist ideology, ie. the extreme's ideology.

Adjustments were made again in 1961. Universities were quickly reduced from 1251 to 845 (Liu, 1991, p. 56). Departments, specialties and disciplines were again reintegrated, separated, cancelled, or added in order for higher education to keep a pace appropriate with economic development. Administratively, a strategy of decentralization was used. A decision was made in the same year that the new policy was an integration of central government and local government management. Provincial governments were granted the right to have a say in the number of educational institutions, cooperation with other provinces, enrolment rates, and textbooks. The Sixty Articles of Higher Education, an educational policy, was issued by the Ministry of Education. This policy emphasized the task of producing various kinds of experts and specialized personnel for socialist construction through higher education, promoting pure science research as well as applied science research, ensuring quality; and integrating teaching with practice and production. It was probably the first carefully planned policy on education independently made by the new government, which was in line with, and re-affirmed, productivity, quality and efficiency

(Liu, 1991).

However, a conflict arose between two visions of modernity expressed in terms of a political power struggle (Hayhoe, 1992a). One vision was modernization through science and technology, and the other was the notion that the working class was master of the country. A subsequent idea was that working class members should be the leaders of education, that education should be integrated with productive labour and scientific research related to production, and that worker-peasant-soldier students should be the major force in reforming education. These ideas appealed to a large segment of the uneducated Chinese population, though many of them did not fully understand what was meant by such higher education.

This vision of education, a revolutionary model, was pursued during the Cultural Revolution (1966-1976). An embryonic form of this model can be traced back to the Yanan period. During 1936-1949, Yanan and the border regions in northwest China were communist areas, and had a society that was different from the free capitalist Nationalist one. The Yanan society aimed at equality and good life for all poor civilians. This aim was also reflected in its universities. The Anti-Japanese Resistance University (*Kangda*) and Yanan University were producing personnel who would pursue the aims of this society. In contrast to the universities in the regions ruled by the Nationalist government, Yanan universities had a less formal approach to teaching-learning activities, more student involvement in university administration

(many of them were worker-peasant cadres in the army or local government), and an emphasis on the relevance of knowledge to revolutionary practice. This pattern, according to Hayhoe (1986), was closer to the informal traditional Chinese education outside the official education system. It was:

an effective integration of education with the bureaucratic system, the commitment of all to the study and application of the principle, and techniques of good government, the informal lively patterns of teaching and learning in Shuyuan. (p. 35)

An even earlier clue to the application of this informal form of university might be relevant to Mao's experiment of Hunan Self-taught University, highly praised by Cai. It should be pointed out, however, that this lively form was restricted to teaching, learning and practicing only one "right" theory, the theory of Marxism, Leninism and Mao Zedong thought.

If the Yanan experiment was looked at as Utopian, as a temporary means in a temporary place and time, it probably would not have been taken as a model about twenty years later when China tried to sever links with everything that had a trace of foreign influence. However, estimation of the value of Yanan experience has been very optimistic. This was at least taken advantage of by factions in power struggles. The Yanan model seemed to promise an opportunity of education for all members of the labouring class, in a form of education which integrated theory and practice.

Aside from the Yanan experience, education system between 1949 and 1966 was completely negated by the leftist faction in power

struggles: it was now criticized as a capitalist educational system. All professors and instructors working for this system were labelled as bourgeois intellectuals. This resulted in a complete shut-down of all universities for five years (1966-1970) with no enrolments, and a continuation of being half-paralysed for another five years with few enrolments (1971-1976). During the ten years' experiment toward an ideal of working people's own higher education, universities experienced termination, amalgamation, reforming, reallocation, or partial change of structure. The aims of education stressed producing successors of revolution, and so class struggle and production labour became the central attention of curriculum. The expected knowledge structure was Marxism and Mao Zedong philosophy, class struggle tactics and work experience. Theoretical study was treated as only a means of class struggle or production where necessary. Consequently, university entrance examinations were considered a means of blocking members of the labouring class, and the enrolment standard was changed into a combination of recommendations from colleague workers, peasants and soldiers, the requirement of work experience, and official ratification. Most graduates had to return to their previous posts, with a small number assigned to some state-needed positions. Unfortunately, this conceptual framework was virtually illusional instead of scientific, and a transformation toward that "ideal" system did not happen but instead, an un-precedented catastrophe manifested itself: 434 universities and colleges in 1965 decreased to 392 in 1976; universities and colleges which were relocated

several times had a regretful loss of their personnel, library books and facilities; five years of zero enrolment and five years of inadequate enrolment meant the loss of more than 1,000,000 graduates (Liu, 1991, p. 90), and the loss of a continuing supply of university faculty, research personnel, and staff forces. Loss was also found in workforces in the industry, agriculture, forestry, and all other trades of the country. Academic standards deteriorated tremendously, for the revolutionary model could not define academic disciplines besides practice and production. Many of those worker-peasant-soldier students only had primary education before coming into the revolutionary patterned university. According to Liu (1991), one third of a class of the prestigious Fudan University in 1971 did not even know what percentage 0.01 equalled. Students in the Department of History did not know Chinese history except for the history of class struggle. The retrogression of higher education added one more presentation to the failure of the alternative view of modernization at work in China.

The Restoration from the Revolutionary Model

The Cultural Revolution is considered the worst recession and disaster in China's history. The effort to restore higher education was first made in 1977, by terminating the enrolment approach used in the revolutionary model and restoring the National University Entrance Examination. Soon the number of universities and colleges

increased, from 392 in 1976 to 409 in 1977 (Zhou, 1990).

Following this, the Third Plenum of the Eleventh Central Committee of the Chinese Communist Party was held in 1978. Deng Xiaoping called for economic reform and socialist construction for modernization, termination of the ultra-leftism and its "class struggle", and the open-door policy. Deng thus prepared a vital turning point for China's modernization in China's contemporary history. Higher education again was affirmed as the most important means of mastering advanced science and technology for economic development. This probably was a "liberation" of education in the context of the following points: (1) the restoration of educational achievements between 1949-1966 which had been negated by the leftist fraction; (2) unjust cases of personal persecution were re-examined and their verdicts reversed, and (3) the clarification of a concept that the key to socialist modernization was the modernization of science and technology, the foundation of which was education. It was commonly understood that China had fallen further behind the developed countries in modernization. Accordingly, thousands of students and visiting scholars were sent overseas to North America, Europe and Japan to study and do research. The academic degree system was also restored to ensure academic standards and the decision was made to adjust the proportion of specializations, some of which were too narrow for the country's developmental demands. Universities and colleges increased again from 392 in 1976 to 598 in 1978, 675 in 1980 and 704 in 1981.

In 1982, the Twelfth National Congress of the Communist Party of China further affirmed Deng's reform policies and took education and science as a strategic emphasis of economic development. Efficiency of industrialization became the aim of education once again. While formal universities were making improvements on the existing system which had been established in the 1960's on the Soviet model, adult higher education started to expand, too. University distance education and university night schools were restored. The China Broadcasting and Television University was founded and had subdivisions in 28 provinces and autonomous regions. A system of standard examinations for self-study courses, also known as self-study universities, was set up. Professional universities, teachers' retraining colleges, peasants' universities, and administrator management colleges all started to function. To the present day, these adult higher learning institutions have basically been providing three-year college level training, with a tiny proportion of graduates granted four-year university diplomas, but no degrees have been granted. The situation shows that the approaches to the organization of knowledge have been broadened.

October 1984 witnessed another significant step toward modernization: the economic reform. The Chinese Communist Party Central Committee announced the decision to abandon the planned economy and redefined socialist economy as a planned market economy. The socialist market economy has been considered by the policy makers as typically Chinese in style, for the reason that

planning has not been totally abandoned, and the combination of planning and free market has not been attempted elsewhere. Pursuit of efficiency through science and technology became the prime purpose. Whether or not this was a new version of socialism or "Chineseness", it firmly supported the pragmatic open-door policy for attracting foreign science, technology and capital, and also decided a corresponding form of science, technology and education. Toward 1985, universities were still based on the models of the 60s. Everything was still centrally planned: the approach of enrolment, number of enrolment, proportion of enrolment for each specialty, finance, and assignment of jobs. The structure, based on the previous rigidly planned economy, decided the methods of management and financing, proportion of specialties, and qualification of faculty. These were no longer in accord with the changed type of economy and concurrent economic development.

Accordingly, the "Decision on the Reform of the Education System" was declared by the government in 1985. Concerning higher education, the main rationale of the decision was to grant universities autonomy:

to change the management system from the excessive government control of the institutions of higher education; to expand decision making in the institutions under the guidance of unified educational policies and plans of the state; to strengthen the connection of the institutions of higher education with production organizations, scientific research organizations and other social establishments; and to enable the institutions of higher education to take the initiative and ability to meet the needs of economic and social development. (Liu, 1991, p. 120)

This policy also changed the methods of enrolments and student assignments on graduation. At this time, besides the state planned enrolment (*guo jia ji hua*), there was added the unit sponsored (*wei tuo pei yang*), and the self sponsored (*zi fei*). The first category means that the student is sponsored by the state for free university education and therefore must accept the job assigned by the state on graduation. The second category means that the student is sponsored by the enterprises, companies or institutions for which the student will work after graduation. Self-sponsored students are those who will find their own funding for university education and do not have obligation to working for any particular employer after graduation. University presidents were granted the right to appoint and remove vice presidents, to cooperate with other institutions and undertake cooperative research, to take part in international academic activities, to adjust departments or specialties, to organize their own textbook writing, and to assign some of their graduates to various working posts.

By 1987, universities and colleges increased to 1063. In terms of levels of education, a rationalized proportion of different levels of higher education was beginning to manifest itself. There were programmes for doctorate, master's, four-year undergraduate, three-year college students, and the number of those receiving doctorate and master's degrees increased. In form, formal universities with degree programmes coexisted with informal higher learning institutions with non-degree programs, such as the professional colleges and adult universities mentioned in the

previous section. To this stage, a system that seemed to suit the Chinese environment was in its budding form.

The open-door policy brought subsequent intensive and extensive economic contacts with capitalism. Along with the broadening of university autonomy, more academic freedom, and more frequent interaction with the Western ideology, the desire for the capitalist Western-style modernization once again appeared. This desire was once again in conflict with China's long classical tradition of maintaining social order through the regimentation of knowledge (Hayhoe, 1992c). An effort to mitigate the contradiction was partly seen in the ideological campaign against "bourgeois liberalization" and also in the later radical conflict in 1989. However, the desire for modernization remained intensely high in the wake of the deepening reforms toward a socialist planned market economy. In the years after 1990, the country soon renewed the economic reform, and the reform has been carried out till the present. The Chinese economy is improving, and less attention is being paid to ideological concerns. The increase of the already countless ties with the world economy and culture has become an influential motivation for modernization which is thus proceeding on and continuing to motivate higher education.

Contemporary Educational Reform: A Gradual Transition

Reforming higher education in accordance with the policy of the 80's continued during the early and mid 90's. At the National

Higher Education Conference, a 211 Project was decided by the government. This project regulates that 100 Chinese comprehensive universities were to be selected with the aim of being transformed into advanced world-class universities (Geng, 1995, p. 3). The state has assumed responsibility for these universities, and those that have not been chosen will depend financially on provincial or local governments. "The Guidelines for Chinese Education Reform and Development", promulgated by the CCP Central Committee and the State Council in March 1993, as a strategic step in reforming the whole education system, turned out to be a strong support for the implementation of the 211 Project. The principal rationale of the guidelines was development through restructuring and reforming the management system, and through a decentralizing approach. This rationale was later written into Article 25 of "the Education Law of the People's Republic of China", promulgated in March, 1995. Concerning higher education, the Guidelines intended to further harmonize in education issues the relations between the government and universities, the central and local governments, and the Central Education Commission and each central government department, for the purpose of facilitating government macro-management, local governmental or societal support, and university autonomy.

Competition among Chinese universities is now under way as they attempt to be selected for the 211 Project and become more comprehensive. For example, the prestigious Beijing University, a comprehensive university with faculties of social science, science,

law and language, has incorporated Beijing Medical University. It also founded Guanghua College of Management (financed by external sources), and is now trying to integrate Beijing University of Aviation and Space Technology (Zeng, 1995, p. 4). The comprehensive Sichuan University which used to be strong in theoretical studies has now been reinforced by joining with the strongly specialized Chengdu University of Science and Technology to become Sichuan United University. Beijing College of Economics and Beijing College of Trade and Finance have been amalgamated into the Capital University of Economics and Trade, with 15 departments or faculties in economics, law, science, engineering and medicine (Liu, 1995, p. 3). The comprehensive Hubei University impresses the competition with its interdisciplinary six-year undergraduate-graduate program in Chinese language, history and philosophy, with a sub-requirement of courses in science and social science (Xong, 1995, p. 3). Qing Hua University declared its Cooperation Committee with Enterprises, aiming to transfer results of scientific research into production (Jiang, 1995, p. 3). Jilin University has successfully experimented with a united system of institution management. It has obtained support from all levels: provincial government, city government, other universities, research institutes, enterprises and international organizations, and has significant achievements in department and specialty development, scientific research, services to the local economy and benefit to the university (Zhang, 1995, p. 3). Its College of International Exchange was established in October 1995, a joined effort of Jilin University and the Japan-

China Relation Promotion Association. This effort is seen as an advanced vision, for it aims to produce graduates who understand foreign culture and possess the ability to function internationally (Zhang, 1995, p. 4).

Universities and colleges increased from 1075 in 1994 to 1080 in 1995. Adult higher educational institutions increased to 1200. Specialties decreased to 504 in 1993 from the previous 813, which means a tendency to interdisciplinary studies. Universities altogether have 1631 research centres for natural science and 1191 for philosophy and social science, undertaking 100,000 research projects each year: a sign of equal treatment to natural science and social science (Gao, 1995, p. 3). In 1995, 3000 high-tech enterprises are run by universities, and the state has set up 52 large scale high-tech campuses for the application of research results (Huang, 1995, p. 1).

This time, change is gradual and stable. It proceeds deeper into inner-structure adjustment than change of form only, and a clear direction is being followed rather than mere experimentation. This probably means that the system is more established. Hayhoe (1993) contends that "with the present maturity gained through learning from the past and from the West, the approach to change is likely to be a gradualist one rather than a radical one" (p. 424). The government has promised that this approach of change will be supported by the Law of Higher Education which is being written (Zhu, 1994, p. 12). Policies identical to this approach is in the government's strategic decision of "prospering the state through

science and education", promulgated May, 1995, in which science and technology have been recognized as the number one important productive force (Xinhua, 1995, p. 1). The strategic decision is again observed in the ninth "Five-year Plan" made in September, 1995. It became one of the eight important guidelines for the implementation of the plan. This indicates that the determination of ameliorating education remains firm.

If the present endeavour can be maintained as was planned, when the 211 Project is completed, China's higher learning will have a system constructed in the following form: (1) One hundred universities will be large sized, advanced comprehensive universities with top research laboratories, like any comprehensive universities in the capitalist West, having curricula in both natural science, applied science, philosophy, humanities, social science and arts, financed mainly by the state; (2) some universities will be polytechnical or specialized universities, financed mainly by provincial or local government with one or two advanced specialties, mainly serving pragmatic purposes; (3) the short-cycle 3-year-program colleges, financed by the provincial and local government, will continue to serve the local needs for technology and teacher training; and, (4) adult higher education, such as Central Television University, Peasant Universities and Self-Study Universities, will serve several purposes including in-service training for various professions.

In its inner structure, the university will be an entity headed by a president, partially independent and autonomous under

government control, like universities in the Japanese system. The central government will provide macro-management through "establishing laws, providing finance, making macro-plans, providing information and relevant policies" (CCP Central Committee & the State Council, 1993). Thus, the central government will supervise a certain aspect of higher education to satisfy needs from the central government level, while provincially controlled universities will closely trace the demands from local production and serve local economic development. The structure seems to have been enabling the organization of knowledge to head in a multidimensional direction. The system is adapting its knowledge structure to a synthesis of theoretical and applied disciplines in science, humanity, social science, arts, and applied science, distributed among comprehensive universities, specialized universities and colleges, and adult universities. Though distinction of tasks between types of universities will not be as obvious as before, hierarchy is still vaguely shown in that the short-cycle and adult universities are productive purpose oriented. However, it is apparent that more people can have access to higher education.

Summary

This chapter has demonstrated the process of five major educational reforms following the first Chinese experiment with the Japanese and German educational models. These reforms include the

acceptance of the American experience, the imitation of the Russian model, the experiment with the revolutionary model, the abandonment of the revolutionary model, and the contemporary reform of integration. The altogether six educational reforms all occurred against the background of the economic development and China's change of form into a nation-state. This is to say that although each reform brought a different higher educational system and the systems were in contrast with each other, the sources for all the reforms were identical with both external forces of imported technology and cultural values, and internal contradictions caused by new social patterns, as were stated by Fullan (1991). The recurrence of borrowing and abandonment of educational models also presents the anguish of having foreign knowledge serve China's need to modernize. This is demonstrated in the experimentation of the Japanese, German, American, Russian and the Chinese revolutionary models. It supports Fullan (1991) that the culture and the people who constitute the culture are decisive factors of educational reform. All the reform efforts focused on all aspects of the educational system identified by Ginsburg (1991), and showed a desire to harmonize with the economic growth of the world through improvement of educational efficiency. The strategies used in the experimentation of the Russian model and the Chinese revolutionary model show a clear intention to change the higher educational system into one that would not serve the social reproduction of the economic and political status quo of the privileged class. They also show the concept of time from the conflict paradigm, that is,

the educational system guided by an ideology serving a positive role may lose this role along with social development. On the whole, the uneven path of development in Chinese higher education is a reflection of society's desire to harmonize with the world's economic development, to improve the efficiency of its institutions, and to upgrade itself to a higher stage of civilization.

The educational reform initiated in 1985 is still in an experimental stage, and it provides different approaches to the organization of knowledge. It seems that the reform is leading the society to a new development. This study finds that this reform and all the occurrences and phenomena described in this and the previous chapter have implications, and will discussed them in Chapter Five.

CHAPTER V

IMPLICATIONS

But the newer universities cannot repeat the history of the old; they must trace out their own way boldly but surely with reference to the wants, real or supposed, of an emergent society, especially in their region, so that they may constantly suffuse it with fresh thought, thought relative, not to a departed order of things, but to life as it is lived here and now.

Bonhomme Dobree, 1943

Only through a process of self-conscious criticism, profound critical thinking, conscientious selection and prudent acceptance of whatever is valuable can a culture become mature and develop.

Abstracted from Ding Gang, 1990

This study has synthesized the literature on the process of educational change and educational reform, and from this developed a conceptual framework to examine the changes which have taken place in Chinese higher educational institutions. This, then, is an examination of the sociopolitical, economic and cultural contexts of Chinese higher education, from the early Confucian era to the present. The historical overview demonstrates that changes in Chinese education are caused both by external forces generated from imported technology and values as China struggles to modernize, and by internal contradictions between the earlier feudal form of society and the later forms of the nation-state

which have been created to meet the demand for progress. Fullan's perception that educational reform is basically a political and cultural process has been observed in all changes which occurred in Chinese higher education. As change theory (discussed in Chapter Two) warns, the adoption of new educational forms by national leaders, a top-down reform effort, has led, over the twentieth century, to simplistic solutions, misdirected efforts, inconsistencies, unrealistic time-lines, and under-estimations of consequences.

The uneven path of progress with occasional retrogression in Chinese higher educational reforms is apparently the result of the concurrent socio-political, economic, and cultural change dynamics, as explained by Ginsburg (1991). Ginsburg's point is that large scale reform must consider the system of knowledge organization, institutional size and personnel numbers, goals and objectives, power structures, financing processes, curriculum and pedagogy, and the criteria for selection, evaluation, and promotion of faculty, staff and students. These are the interest areas in all the reforms of the Chinese higher institution. The reforms reflect the society's desires and efforts to adjust to, or harmonize with, the global modernization trend, as are described by Ginsburg's equilibrium paradigm. In all the various attempts at reforms within China, educational reform has consistently been viewed and undertaken as one of the most important means to solve social incompatibility and regain social stability in the nation-state. Ginsburg's emphasis on the need for consensus has always been a

target of reform, too, and can be seen in the Three People's Principles and the socialist consciousness, though strategies utilised to achieve it were different from those expressed in Ginsburg's equilibrium paradigm. It should also be noted that the improvement of the system's efficiency, a prime goal for educational change in Western countries, has consistently been a simultaneous objective within the effort of adjustment and harmonization in China's educational reforms.

The dilemma of planting Western scholarly tradition into the Chinese soil presents not only cultural dissimilarities, but also value conflicts and political struggles. From the position of Ginsburg's conflict paradigm (at both the national and international levels), the acceptance and rejection of a number of foreign models for higher education illustrates that higher education has been a site of internal and external socio-political and economic contradictions. During the Nationalist period, the contradiction was between feudalistic and capitalist values, for economic efficiency was pursued through freedom of capital accumulation and this freedom did not exist in feudal society. During the socialist period, the contradiction is multidimensional. it is between feudalistic and capitalist values, feudalistic and socialist values, and capitalist and socialist values. The reasons are that socialism aims to pursue simultaneously and hastily both economic efficiency and equality and justice for all in a capitalist international environment. All these contradictions are reflected in higher education and are sufficient to cause

resistance to the types of knowledge introduced and their correspondent organizational forms. Since higher education is the medium and site of those contradictions, changing the types of knowledge and the forms in which it is organized become the decisive strategy for solving the socio-political and economic contradiction or crisis. The Marxist sense of time-frame and history, that is, the idea that a progressive factor at one time may become stagnant and obstructive at another time has been an important notion in Marxist Philosophy and Political Economics (both of which have been compulsory courses in the national curriculum). In this light, the sense of time and history is probably one of the directing agents of the frequent changes in Chinese higher education.

From the above understanding of the process of higher educational change and reform, the transition from predicament toward maturity in the recent reform of Chinese higher education may anticipate a closer move towards global development. It could also be explained as a solution which resulted from both national or international socio-political and economic conflicts.

The history of frequent, wholesale educational changes also obliges one to proceed one step further, still along the economic, ideological and cultural orientation, to examine the ways in which Confucian reasoning style functions in Chinese thinking. To do this, it is necessary to consider the characteristics of the changes, the area in which changes have taken place. It is also crucial to remember the importance of a scientific, critical, and

inheriting attitude toward both native and non-native traditions in the process of intermingling foreign heritage with the Chinese one, as they are both heritages of mankind.

The Confucian Values Reflected in the Change Process:

A Political Orientation of Education as a Cause of Frequent Institutional Changes

As has been described in the third chapter, a unique dialectical epistemology defined the Confucian philosophy-based reasoning style which in turn specified the ethical, moral, and political values of the feudal society. In the process of progress, over time, governments have changed, and ideologies have been substituted. Through it all, however, the Confucian style of thinking remained at the core of thinking. It seems to have been inherited by succeeding generations in a sophisticated way.

The externalization of the inner intelligence into the enlightened arts of country governing and management showed that Confucian orientation of study was not study for study's sake, that is, not for the pure purpose of seeking the truth of nature. For this reason, this orientation had a pragmatic purpose. Owing to the leading position of Confucianism, it prescribed not only a political purpose of education, but also a pragmatic orientation of education. During the dynasties, the aim of education was to produce feudal officials with the Confucian philosophy-based ideology, world outlook and politics. After the imperialist court

was overthrown, though the aim of producing officials with only political expertise did not exist, the connotation of pragmatism has remained.

Pragmatism is a neutral term, for it can yield both favourable or unfavourable results. For example, the value of scientific research is that it is an effective way of obtaining truth: objective truth that is proven through experiments and is not aimed to serve any religious or political purposes, at least at the time of research. A scientific theory has to be strictly proven through practice numerous times before it is considered valid. Philosophically, this is pragmatism. This scientific pragmatism has facilitated Dewey's pragmatism philosophy, which hypothesizes that truth is impermanent, developing and relative, the proof of which must be through practical results and its benefit to society (Dewey, 1944). This pragmatism was successfully applied to American education, in a social background in which the state has always been pursuing efficiency in industrialization. It also helped to form an attitude that supported the development of both pure and applied science, including social sciences. By adding graduate schools and research centres to colleges and universities so that both pure academic research and the applied sciences could coexist, the American higher educational institutions avoided upside-down changes (Cheng, 1987). Thus the pragmatism absorbed both the modern applied sciences and German pure academic tradition, transformed the American higher institutions in the way of combining theory with market practice, made them strong within

a hundred years, and brought great benefit to the country's economic development. If the pragmatic American higher education is to some extent motivated by market needs and politics, then in this context, if ideological form does not change, changes brought by market needs are usually framed in fields of study, enrolment, and finance. In this situation, the university form and the state form are not in conflict.

Chinese pragmatism in education was connected with politics exclusively from the beginning, hence Chinese education has been monitored more by political changes, though economic demands were one of the motivations. In the decades of industrialization, connections of education with science, technology and economy were established, but those with politics were not weakened by this establishment. In the modern history of China, ideology and its corresponding forms of polity and economy have changed frequently. Education has been regarded as serving political ends, and the production of a certain type of personnel has been one of its primary purposes. Academic study has unfortunately not been separated from such a view of education. The ideal of the academy as a place where scholars can conduct free study and pure academic research, has never been accepted, though academic freedom and citizen liberty and rights belong to a different category. The result of this is that every change of ideology or politics in the country would bring educational changes both in the form and the content. When education is built more on pragmatic purposes, it relies on them; and change of purpose will often change the basis

on which that education exists. This seems to be one of the reasons that Chinese higher educational institutions have been restructured so many times and a number of different models have been tried and rejected. In the historical sense, it is difficult to assess the result of trying so many models. It is clear, however, that pure academia, either in the sciences or social sciences, contributes to society in an indirect way. The fruit or the destruction of academia may not be seen in a short term. They may also not be seen in one aspect of social life, but all walks of life.

The unity of epistemology and ethics is, in fact, subject to the standard of ethics in the feudal times. According to the Confucian dialectics, nature represents moral principles and at the same time is subject to them. This is probably a source of political orientation within education. Following this prerequisite, it is clear that however wonderful the cognizance system developed, it has to be dominated by ethics and morality. Then, in the knowledge areas, when Confucianism was enshrined by emperors who represented ethics, it had to be accepted by the intelligentsia as the right theory which had to become the only content in curriculum. Thus, "both educators and learners were placed in a value system of tyrannical Classics" (Gao, 1990, p. 30). As educational change theory and Chinese educational history both reveal, once a value system is formed, it will not disappear easily, for both the formation and dissolution take a long time. In China, when standards of the traditional morality faded away

with the emperor, the inertia of the habitual way of thinking did not stop instantly. The standard of traditional morality seemed to be replaced by other standards. During the periods that followed, ideological standards were seen to function forcefully, and there were times when the activity of cognizance and rationality was subjected to the authority of other sources. An extreme example was the educational reform during the Cultural Revolution. The negation of all past institutional types and the rationale of reform were not grounded on the scientific proof of a needs assessment, a prepared theory, rational knowledge, or informed debates among experts, but on a sense or preference of a political faction. Despite these facts, rationality was seen to give way to the political sense, and in a complicated way the intelligentsia were involved, sometimes consciously and willingly, in that reform. Thus, political sense together with the pragmatic purpose seemed to easily take the place of rationality and brought destruction to academia. However, from the point of view of human history, the change of value and culture does not happen overnight, no matter what advanced theory may lead the way. An awareness of this is essential for further development. In this context, this study agrees with Gao's (1990) observation:

The review of the relations between education tradition and ancient culture may give us a vision of the factors that are uncompromising to modernity. But one point is clear that the present Chinese education is eliminating the feudal elements of traditional education. (p. 38)

**National Identity in the Conflict of Values:
Another Cause for Frequent Changes of Structures**

If the lingering effects of Confucianism accounts for one of the internal reasons for the frequent changes in Chinese higher education, modernization could be the external cause. Modernization refers to "the stages of social development which are based upon industrialization, the growth of science and technology, the modern nation state, the capitalist world market, urbanization and other infrastructural elements" (Featherstone, 1988, p. 195). For China, modernization meant a different form and a set of different values which conflicted with traditional or feudal social order and values. Therefore, with science and technology came a value system that articulated a new economic form and a corresponding form of state. The essence of this value was human liberty or freedom, and the social contract of democracy, all of which were reaffirmed by scientific principles established in the modern era. At the time of the importation of such new ideas, Chinese society was still a highly developed, mature and successful feudal society which had lasted longer than any other civilization, and there was no evidence of this society changing into the modern form. Feudal as it was, its philosophy, educational methodology, and social sciences were distinctly developed in a direction that was not categorized in the branches found in the Western categories of knowledge. These factors meant that China had an established and strong value system.

Values in a modern society is earned through painful struggles against old values, and often are unreconcilable to the old. Regardless of the early development in China, society reached the point where advanced forms of social and economic development was seen as an advantage or as progress. A value clash between the old and the new was unavoidably tempestuous and uncompromising. Given this condition, although the feudal imperial dynasty perished and a modern form of state was established, traditional values did not vanish. Instead, they resisted the intrusion.

Beside the value conflict, the fact that the new values came about violently through war, rather than through a more gradual introduction, made the acceptance of the new value system even more difficult. The reaction to the invasion and domination of the Western imperialists turned out to be a strong sense of political, cultural humiliation and degradation, which has never faded away. The issue of Westernization has been extremely sensitive ever since, and the revival of a powerful nation with a new national identity has been the desire of both the Nationalist and the socialist ideology. Relatedly, in constructing a new form of the state, the concept of the nation-state as a social-political infrastructure has conceivably been given more meaning. In the Nationalist period, nationalism was attached with the meaning of the principles of common people; and in building a new boundedness, there was an effort to heighten 'social consciousness' (minzuyishi). Thus,

The struggle of nationalism which began with the collapse

of the Chinese imperial system and has continued to be fought to the present day essentially involved the construction of a set of conscious ideological...beliefs which could be used to cultivate a sense of societal self-esteem as a form of resistance to the West. (Chun, 1994, p. 53)

Against this background, the effort of forging a new national identity has from its very beginning a political agenda and the identity issue has thus had different expression in each ideology.

Awareness of this historical background seems to have provided another clue for understanding changes in Chinese education. The sense of national identity and an ideological-political agenda combine to steer the direction of higher education. Ideological and political differences help determine the concept of identity. Education, especially higher education, with a strong political orientation, is an important means of forging the identity. This could be another reason for the frequent changes in Chinese higher educational institutions. The expectation of "Chinese learning as the principle and the Western learning as facilitating means" and the cultural debate on Westernization during the May Fourth Movement resulted in the pursuit for modernization through industrialization and free capital accumulation, through which one type of identity was intended. The identity issue was addressed in reaffirming the Confucian value. Chiang Kai-shek, the second president of the Nationalist government, states:

To be a true Chinese, one must above all observe the canons [Confucian classics] of propriety, righteousness, integrity, and sense of shame...This is education in human behaviour - the education of the Chinese. (cited in Epstein & Kuo, 1991, p. 174)

This Confucian value was then blended with the Western value. Chiang realizes that "modernization is synonymous with science development, the spirit of which is to seek the facts and achieve perfection through refining processes" (cited in Epstein & Kuo, 1991, p. 174). The motivation for this synthesis was seen in the following:

As science progress, competition to reap its benefits becomes more hectic. If we fail to keep pace with progress and refrain from incessant research and development, we will not only be left behind but eliminated in accordance with the law of natural selection. (cited in Epstein & Kuo, 1991, p. 174)

This was written into the Constitution of the Republic in 1947. Article 158 of it states:

The nation's educational and cultural services shall have as their aim the development among the citizens of national characteristics, democratic spirit, traditional morality, good physique, scientific knowledge, and the ability to earn a living. (cited in Epstein & Kuo, 1991, p. 174)

Modernization along this line emphasized freedom of economic competition and capital accumulation, but did not address the issue of equality and warfare. Economic contact with the capitalist countries brought more involvement with Western values and more interference. This was in disagreement with the alternative political vision which had an aim of egalitarianism and social justice for all, as well as modernization through industrialization and economic efficiency. The disagreement between the two political visions on the identity issue and ideology was

strengthened by the Western support of the Nationalist government and block of socialist government. This led to not only the change of the form of the state, but also rejection of the American educational model.

The alternative vision of the national identity invalidated the Confucian value. Article 41 of the Policy for Culture and Education of the People's Republic of 1949 states that "The education of the People's Republic of China is new-democratic, that is, nationalist and scientific, which belongs to the broad mass of the people..." (Lei, Yu, & Huang, 1991). Article 42 states that the purpose of education is "To promote the social morality of the citizens of the People's Republic of China, which is the morality of loving the motherland and its people, loving physical labour and science, and taking care of public property" (Lei, Yu, & Huang, 1991). The new-democratic was new, for nationalism, which used to be "Chineseness", now was assigned a more concrete meaning of belonging to the people, especially the broad masses of the population. Emphasis on science and technology remained unchanged.

The rejection of the Soviet model was also related to the alternative political vision of modernity and national identity. But this time, the rejection came from one version of this political vision. This version was the revised vision of modernization, held by the leftist faction. This leftist vision seemed to be based more on enthusiasm and passion than on rationality and rational knowledge. On the one hand, the leaders were impatient to achieve equality and good life for the general

populace, and less concerned about the goals related to science and technology; and on the other hand, a fear of the Soviet domination, as was the case of the Eastern Europe, reinforced the leftist vision. Therefore, although Soviet socialism produced a socialist form of industrialization which conformed with the goals of constructing Chinese socialist economy, and though it provided a matching hierarchical knowledge pattern for the Chinese higher education, the threat of domination only stimulated a stronger sense of self-reliance among some Chinese leaders.

Nevertheless, modernization in this historical era is realized through industrialization and economic development which are correlated with scientific data. China has to benefit from international economic, scientific and technological exchanges. These were perceived again by reformers who resumed pursuing modernization through industrialization. The present new session of educational reform has been in this line. The reform effort could be traced back to 1982, in a grand project of quantitative and qualitative investigation of the past, present and future system of education. The findings of the project is presented in Chinese Education toward the 21th Century: State Conditions, Needs, Plans and Strategies (Zhou, 1990), and demonstrates a more mature approach to educational reform. The identity issue is again observed in the first Education Law of the People's Republic of China, promulgated in 1995, without any worry about the nature of identity and problem of identification. Article 6 and 7 state:

The states will conduct patriotism education,

collectivism education, socialist education, and the education of ideal, morality, discipline, legality, national defence and national unity. Education should selectively inherit and develop the fine historical tradition of the Chinese nationality, and absorb all outstanding achievements of human civilization. (The Eighth People's Congress, 1995)

This design seems a synthesis of the scientific spirit, the value of a modern nation-state, an ideological outlook, and the moral values of Confucianism. This design shows characteristics which are distinctive.

Science, technology, and the concept of freedom, equality, socialism, capitalism, market economy and planned economy are all products of modernization. Although these can be considered to belong to mankind, in the process of modernization, value conflict is still practically unavoidable. Human civilization has not achieved the stage when all nationalities share a common value system or accept foreign values without selection. The conflict will not disappear with the introduction of certain ideological or political visions unless the issue of identity is shared by different ideologies and political views. The point here is that since the fault found with higher educational institutions is usually a reflection of political or economic crisis, ideological and political differences may not be absolute and effective criteria for assessing and criticizing educational practice. If they are, the consequence is likely to be a complete negation of previous experiments and retrogression instead of progress. In this light, there seems to be a necessity to embrace in the practice of pragmatism the European tradition of pure academic

study, of pursuing "pure knowledge". Such a tradition allows pure academic study to be completely irrelevant to practice. The possession of such an environment of pure academic study in institutions of intellectual elite can provide a background of stable development of knowledge which will benefit pragmatic purposes in the long run.

Centralization and Decentralization: A Recurrence

The frequent changes in Chinese higher educational institutions demonstrate characteristic alternative strategies between centralization and decentralization. These strategies are directly associated with economic policies of the same orientation, which demonstrates the pursuit of different types of modernization. The disparity between planned economy and market economy has led to a condition of "tug-of-war" (Chen, 1994) since the Nationalist period. This tug-of-war is also observed in the socialist period between the pragmatic line and the alternative vision of modernity. During the Nationalist period, the free market economy coexisted with the decentralized educational system. Universities and schools were run by the government, private organizations, and religious institutions. Among 205 universities of 1949, 60% were run by the government, 30% were privately owned and 10% were owned by the Christian churches (Liu, 1991, p. 3). During the early socialist period, the planned economy decided that universities and schools were 100% owned by various bureaus of the central

government. The whole system was highly centralized: institutional structure, way of finance, salary scales, promotion, programs, enrolment, assignment, curriculum guidelines, and course materials were all controlled by the government. At the present, the pragmatic-line economic reform towards planned market economy prompted the decentralizing strategy in educational reform. According to the 211 Project, only 100 out of the present 1080 universities and colleges, that is, about 10% of the universities will be financed by the central government while the rest will be sponsored by the local government, enterprises or other sources.

This further shows a difference in the degree of centralization and decentralization in education. The difference seems to correlate with both the economic type and political viewpoints. The difference is also in the degree of autonomy given to the university. As was discussed in the previous section, the market economy of the Nationalist period was associated with the decentralization of education, since 40% of higher institutions were not owned by the government. During the early years of socialism, the newly established planned economy decided that the educational system was centralized, and all universities were to be run by the central government. In the early 60's, the pragmatic effort of higher production through discipline and efficiency in order to achieve modernization brought about the attempt to decentralize funding and management down to the local government. However, the undertaking was soon overcome by the leftist strategy of social upheaval through class struggle and the Cultural

Revolution. During the Cultural Revolution, universities, though not operating normally, were again controlled by the central government, not only in finance, but also in curriculum, extra curricular activities and ways of thinking. With the present planned market economy, the educational policy prescribes that higher education will be owned by the central government, local government, enterprises which may be both government-run or private, and other none-government sources. The percentage of ownership is not clear yet, but the degree of decentralization is shown to be different from the previous ones. The above phenomenon shows that centralization and decentralization of education are not only technical adjustment to enhance efficiency of achieving goals, but also "political strategies to implement certain curricula" (Ginsburg, 1991, p. 383), which co-functioned with economic types.

Ginsburg (1991) examines that the real issue to universities "may not be the degree of centralization or decentralization but the extent to which the governance structure enables and encourages participation by citizens in real decision making" (p. 384). In the Chinese context, the present economic reform is unprecedented both in form and content, and the present degree of decentralization which has emerged from this economic reform is higher and does seem to promise a higher degree of university autonomy. According to a report by Zeng (1995, p. 3), the prestigious Tongji University has a new president elected by the university faculty. Shengzhen University made its own decision of cooperating with several overseas universities and setting up its own curricula (Wang, 1995,

p. 8). Beside the above two examples, benefits of decentralization are found in the more frequent interaction and exchange between universities and international scholarly communities, and in universities' more frequent contact with enterprises. The increase in enrolment and the alternative approach of assigning graduates are also credited to the decentralized financing and administrative system. This system seems to indicate a more efficient form of university and promise a better academic environment.

The Organization of Knowledge: Toward Transformation

One approach to examining the frequent changes of higher educational institutions is Hayhoe's (1989) "organization of knowledge" (discussed in the third and fourth chapter). Hayhoe found that there has been a contradiction between having Western knowledge serve Chinese modernization through economic development and maintaining the structure of the right social order viewed in the Confucian way. This contradiction of knowledge structure is a key point for the recurrent educational reform.

In the feudal society, the Confucian knowledge structure was a hierarchical one. The legitimized knowledge was Confucian philosophy and the applied social science based on the Confucian philosophy. Other knowledge categories, such as science, engineering and medicine, were regarded as techniques. There was a distinct boundary between Confucian knowledge and other categories and the latter had no status in the hierarchical

legitimate knowledge system. Supported by the feudal system, the most important purpose of the legitimate knowledge was to maintain social order, again with a political ethical orientation. The imported Western type of knowledge had a dissimilar definition and classification of knowledge, in that science and technology and the other ignored knowledge areas in China were legitimized and ratified in the curriculum. This again returns to values conveyed in the knowledge structure. On the one hand, the knowledge which had enabled Western civilization to modernize was demanded by the Chinese modernization for the same purpose. On the other hand, the ideal of society, social order, and morality embodied in this knowledge structure was opposite or different, and hence contradicted the Chinese one.

The contradiction seemed importunate, for both the desire for modernization and Confucian values seem to be equally insistent. Therefore, in the process of imitating the models for the organization of knowledge from Japan, Germany, the America, and Russia, there was a recurrence of encouraging science and applied science and a restriction of the development of philosophy, humanity, and social sciences. Explanation of this could be that it took thousands of years for the Confucian knowledge to be shaped and legitimized, and it would also take time for a substitute to be accepted and obtain a fully recognized position. Since Confucianism was denounced both as a knowledge type and a value system, there have been several substitutes for the value aspect, each of them being in a formative stage. In the Nationalist

period, it was the Three People's Principles, one with a democratic spirit, embracing socialist ideas. In the People's Republic, it is the principles of socialism and socialist democracy which are based on Marx's economic and social theory, though there are disagreements over the definition of these principles. The sources of these principles are not Chinese in origin, though they are applied to Chinese soil. These principles have been in the process of being accepted, either by common people or the people who introduced them, over a long period. At the same time, the traditional thinking style and culture are experiencing a state of inertia, and resistance to a new value system is both conscious and unconscious. When a new social order is not stable, one way to avoid confusion is to restrict the knowledge of other possible concepts of social order. This is the action taken by some who adhere to traditional views.

The revolutionary model of the Cultural Revolution had a special connotation. According to Hayhoe (1992a), in rhetoric but not in reality, this model suggested that it would solve the contradiction issue through changing the content and organization of knowledge. However, at the same time, the approach itself revealed more Confucian values: obeying an absolute power and the "supreme instruction" on the issue of knowledge. That is to say, rationality had to succumb to insurmountable subjective and ideological values. Under the revolutionary educational system, different opinions about education and knowledge were persecuted, as also were opinions about other issues. In this context, the

result was that a feasible vision of change was twisted with an ancient approach.

In contrast, the economic reform by the pragmatic faction showed more evidence of embracing the modern type of knowledge and social order. In the first decision of the pragmatic reform in 1961, there was a cautious initiation of decentralization of educational administration, in the endeavour to strive for economic development. The 1985 economic reform integrated the market into the state-planned economy. At the same time, it brought again the intention of decentralized structure to higher education, which, as has been explained previously, promises more autonomy for universities. Hayhoe (1989) observed three major changes in the organization of higher curriculum: (1) the increase of social science enrolments including political science, law, economics, and finance. (2) the resumption of interdisciplinary approach to knowledge categories and, (3) the increase of the ratio of the short-cycle programs (p. 40). These changes have still to be maintained. The increase of university autonomy in administration, curriculum and finance is a further step and a sign of welcoming a new knowledge structure and value (p. 29-59).

Changes along this direction continues in "The Guidelines for Chinese Educational Reform and Development" of 1993. This document reaffirms the integration of various knowledge areas, through decentralized approaches of organizing knowledge. It suggests sufficient autonomy to universities "in enrollment, adjustment of specialties, institution set-up, the appointment and removal of

administrators, finance, granting of academic titles, salary distribution and international exchange" (CCP Central Committee & the State Council, 1993). Compared with the situations of the 50's, 60's and 70's, these guidelines grant the university much more power, and promise a broader vista for the free development of knowledge. One hundred comprehensive universities and advanced specialties can ensure the development of theoretical knowledge, both in science and social science, while other types of higher educational institutions of different levels will satisfy different practical demands from different social sectors. The high-tech enterprises run by universities reveal the application of theory into practice. What is encouraging is that changes in the guidelines are consistent with each other and with the reform decision of 1985. The strategy of integrating the state-mandated enrolment ratio and the adjustment enrolment ratio will enable the university to adjust some of its curriculum to the market. The approach of united management structure will enable enterprises, companies and other national and international social sections to take part in the operation of universities. The coherent policy of supporting studies abroad and encouraging overseas Chinese scholars and students to have a long or short term lecturing period back in China will broaden contacts with the world's scholarly communities and continuously transport Western knowledge and value into China. Therefore, the current reform is heading toward a multidimensional organization of knowledge, trying to realize the objective rationality of knowledge distribution. It is striving in the

direction of becoming effective in pursuing knowledge, rationality, productivity, efficiency, equality of educational opportunities, and perhaps freedom of academic study. All these indicate that the current reform will ensure knowledge serving market and other social requirements. They also indicate that a transformation toward the modern world trend for the organization of knowledge is in process. The type of autonomy aiming to be achieved, the entrance examination system, and the targeted system of one hundred comprehensive universities coexisting with a large number of assorted adult universities and specialized universities with a variety of specialties, contain the elements of the Russian, American and Japanese influences and Chinese tradition. Since many models have been experimented with, the modern higher educational system may have some distinctive features compared with higher educational systems in different countries. That is a feature of amalgamation of foreign experiences and the Chinese own.

If each change of knowledge structure would more or less bring about a beneficial social change, and if the renewal of knowledge would betoken the progress of society, this transformation may well foreshadow a change toward modernization, though partial drawbacks will be expected. As the world community has already experienced the epochal shift to "postmodernity" based on new forms of technology and information, the Chinese universities will have another journey to travel.

Conclusion

The phenomena of the six experiments and abandonments of both foreign and domestic educational models in Chinese higher education stimulated the design of this study. Through a research of the relevant literature, the study identified two major research questions which formed the purpose of the study. One question led to the inquiry into the reasons that Chinese higher educational institutions had changed so frequently and radically; the other is a research for the ways that the literature on educational change and reform can help in the understanding of the change issues of Chinese higher education.

The study of the change literature resulted in the development of a conceptual framework (in Chapter Two) which was based mainly on the paradigms suggested by Fullan (1991), Hargreaves (1991), and Ginsburg (1991). These paradigms were invaluable in providing the intellectual tools for understanding the complex process of changes and reforms in Chinese higher education. With these paradigms, changes in Chinese higher education are examined, beginning with the imperial system and Confucian philosophy, and ending with the present reform. By applying these paradigms, this study explained the causes, purposes and process of the six major educational reforms in Chinese higher education, and found implications from all the change efforts. The major Western influences were also identified and their influences analyzed.

The implications found in this study reveal that political,

ideological, economic, cultural, and social factors were important sources of the frequent and radical changes in Chinese higher education. Among these sources, it was observed that Chinese education demonstrates a strong political orientation, partly due to the influence of Confucian values. The strong political orientation in Chinese education decides that educational changes are always initiated from top down by political-ideological demands and concurrent economic development pressures. The political orientation and desire for economic development were identified as the major causes of the repeated changes. It was also observed that the ideological ideals of the nation-state produced the centralizing or decentralizing approaches to the educational system. In addition, it was found that the effort of forging a new national identity in the process of a nation-state formation was a critical factor of the frequent changes in Chinese higher education. The identity issue was expressed in different ways by different ideological orientations through not only culture but also higher educational institutions. Finally, the contemporary educational reform was observed to be undergoing a renewal of the knowledge structure. The renewed knowledge structure may predict new social progress in the near future.

The implications found in this study are significant in that an original conceptual framework has been developed to analyze educational change and reform in higher education, and as well, the interpretation adds to the current literature on educational change and reform. At the same time, however, these findings are

contextual, descriptive and analytical. Therefore, this study would suggest a critical way of viewing the conclusions deduced by the author. A further understanding of the change issues in Chinese higher education can be reached by both empirical studies and further studies into the Confucian tradition.

The examination, explanation and implications of the reforms support the views held by Fullan and Ginsburg of educational change and reform. Therefore, this study contends that educational change is a complex process in which educational institutions, required by social changes, try to adapt themselves to the changing societal demands by improving their systems' efficiency. However, strategies for improvement may not always be flawless, for the change process is not fully understood. Fullan (1993) warns that although research is shedding some light on the change process and reform efforts, there is still much to learn:

What we don't know is how to achieve these [educational] goals for all students locally, let alone nationally and internationally. The reason that this is difficult is that it requires a prodigious and mobilized effort and collaboration among a number of constituencies - parents and community, business and industry (labour and management), government and other social agencies, and the education system. The education system cannot do it alone. (p. 136)

Indeed, educational change is a social process, it reflects changes in economy, ideology and cultural values. Educational institutions cannot improve themselves alone.

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